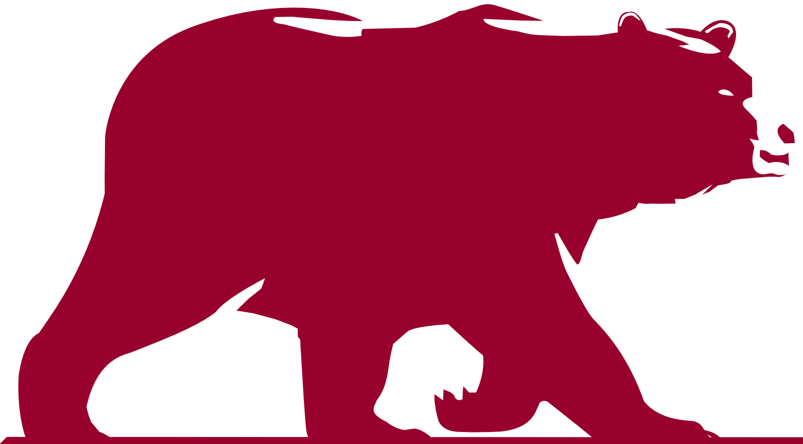
ABTech
Community College
Emergency Services
College

AB Tech
Community College

Catalog 2025-2026



Trailblazer Success

ASHEVILLE • MADISON • ENKA • WOODFIN
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Changing Lives • Strengthening Communities

Asheville-Buncombe Technical Community College

Catalog of Courses
Day and Evening College
Volume 63
2025-2026

Main College Contact Information

828-398-7900
www.abtech.edu

Asheville Campus

340 Victoria Road
Asheville, NC 28801

Phone: 828-398-7900
Email: info@abtech.edu
Fax: 828-281-9696

A-B Tech Police:

828-398-7125

A-B Tech Enka

1465 Sand Hill Road
Candler, NC 28715

Phone: 828-398-7950
Fax: 828-281-9842

A-B Tech Madison

4646 U.S. Hwy. 25-70
Marshall, NC 28753

Phone: 828-398-7700
Fax: 828-281-9859

A-B Tech Woodfin

Buncombe County Public
Safety Training Center
A-B Tech Emergency
Services Division
24 Canoe Lane
Asheville, NC 28804
828-398-7900

Governed by: Asheville-Buncombe Technical Community College Board of Trustees

Asheville-Buncombe Technical Community College is accredited by the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) to award associate degrees. Asheville-Buncombe Technical Community College also may offer credentials such as certificates and diplomas at approved degree levels. Questions about the accreditation of Asheville-Buncombe Technical Community College may be directed in writing to the Southern Association of Colleges and Schools Commission on Colleges at 1866 Southern Lane, Decatur, GA 30033-4097, by calling (404) 679-4500, or by using information available on SACSCOC's website (www.sacscoc.org).

Recognized and approved by:

- **North Carolina State Board of Community Colleges**
- **N.C. State Approving Agency for the Use of Veterans Military and Educational Benefits**

Specific Program Accreditation/Certification

(Contact information for each of the accrediting agencies is located in the respective program descriptions):

Accreditation

Culinary Arts Technology Program Accreditation
The Baking and Pastry Arts and Culinary Arts programs are accredited by the Accrediting Commission of the American Culinary Federation Education Foundation.
American Culinary Federation Education Foundation Accrediting Commission (ACFEF)
6816 Southpoint Pkwy, Suite 400
Jacksonville, FL 32216
Phone: (904) 824-4468
www.acfchefs.org/ACF/Education/Accreditation/ACF/Education/Accreditation

Cardiovascular Sonography Program Accreditation
The Diagnostic Medical Sonography Program is accredited in Abdominal-Extended, Obstetrics & Gynecology, Vascular Sonography and Adult Cardiac Concentrations by the Commission on Accreditation of Allied Health Education Programs (CAAHEP), upon the recommendation of the Joint Review Committee on Education in Diagnostic Medical Sonography.
Commission on Accreditation of Allied Health Education Programs (CAAHEP)
9355 - 113th St. N, #7709
Seminole, FL 33775
Phone: (727) 210-2350
Fax: (727) 210-2354 www.caahep.org

Joint Review Committee on Education in Diagnostic Medical Sonography (JRC-DMS)
6021 University Boulevard, Suite 500
Ellicott City, MD 21043
Phone: (443) 973-3251
www.jrcdms.org

Dental Assisting and Dental Hygiene Programs Accreditation

The Dental Assisting and Dental Hygiene programs are accredited by the American Dental Association, Commission on Dental Accreditation (CODA).

American Dental Association Commission on Dental Accreditation (CODA)
211 East Chicago Avenue
Chicago, IL 60611
Phone: (800) 232-6108
coda.ada.org

Emergency Medical Science Accreditation

The A-B Tech paramedic program is accredited by the Commission on Accreditation of Allied Health Education Programs upon the recommendation of the Committee on Accreditation of Educational Programs for the Emergency Medical Services Professions (CoAEMSP)

Commission on Accreditation of Allied Health Education Programs
9355 - 113th St. N, #7709
Seminole, FL 33775
Phone: (727) 210-2350

Committee on Accreditation of Educational Programs for the Emergency Medical Services Professions (CoAEMSP)
8301 Lakeview Parkway Suite 111-312
Rowlett, TX 75088
Phone: (214) 703-8445
FAX: (214) 703-8992
Website: CoAEMSP

Medical Assisting Program Accreditation

The Medical Assisting program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP), upon the recommendation of Medical Assisting Education Review Board (MAERB).

Commission on Accreditation of Allied Health Education Programs (CAAHEP)
9355 - 113th St. N, #7709
Seminole, FL 33775
Phone: (727) 210-2350
Fax: (727) 210-2354
www.caahep.org

Medical Assisting Education Review Board (MAERB)
2020 N. California Ave., #213 Suite 7
Chicago, IL 60647
Phone: (312) 392-0155
www.maerb.org

Medical Lab Technology Program Accreditation

The Medical Laboratory program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS).

National Accrediting Agency for Clinical Laboratory Sciences (NAACLS)
5600 N River Rd., Suite 720
Rosemont, IL 60018
Phone: (773) 714-8880
www.naacls.org

Medical Sonography Program Accreditation

The Diagnostic Medical Sonography Program is accredited in Abdominal-Extended, Obstetrics & Gynecology, Vascular Sonography and Adult Cardiac Concentrations by the Commission on Accreditation of Allied Health Education Programs (CAAHEP), upon the recommendation of the Joint Review Committee on Education in Diagnostic Medical Sonography.

Commission on Accreditation of Allied Health Education Programs (CAAHEP)
9355 - 113th St. N, #7709
Seminole, FL 33775
Phone: (727) 210-2350
Fax: (727) 210-2354
www.caahep.org

Joint Review Committee on Education in Diagnostic Medical Sonography (JRC-DMS)
6021 University Boulevard, Suite 500
Ellicott City, MD 21043
Phone: (443) 973-3251
www.jrcdms.org

Nursing (ADN) Accreditation

The Associate Degree in Nursing Program at Asheville-Buncombe Technical Community College is accredited by the National League for Nursing Commission for Nursing Education Accreditation (NLN CNEA) located at 2600 Virginia Avenue, NW, Washington, DC 20037. 202-909-2487.

The Asheville-Buncombe Technical Community College Associate Degree Nursing program is approved by the North Carolina Board of Nursing (NCBON).
North Carolina Board of Nursing
PO Box 2129
Raleigh, NC 27602
Phone (919) 782-3211
www.ncbon.com

Occupational Therapy Assistant Accreditation

The Occupational Therapy Assistant program is accredited by the Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association (AOTA).

Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association (AOTA)
7501 Wisconsin Ave, Suite 510E
Bethesda, MD 20814
(301) 652-6611
www.acoteonline.org

Radiography Program Accreditation

The Radiography program is accredited by the Joint Review Committee on Education in Radiologic Technology (JRCERT).

Joint Review Committee on Education in Radiologic Technology (JRCERT)
20 N. Wacker Drive, Suite 2850
Chicago, IL 60606-3182
Phone: (312) 704-5300
www.jrcert.org

Surgical Technology Program Accreditation

The Surgical Technology program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) upon recommendation of the Accreditation Review Council on Education in Surgical Technology and Surgical Assisting (ARC/STSA).

Commission on Accreditation of Allied Health Education Programs (CAAHEP)
9355 - 113th St. N, #7709
Seminole, FL 33775
Phone: (727) 210-2350
Fax: (727) 210-2354
www.caahep.org

Accreditation Review Council on Education in Surgical Technology and Surgical Assisting (ARC-STSA)
19751 E. Main Street, Suite 339
Parker, Colorado, 80138
Phone: (303) 694-9262
www.arcstsa.org

Veterinary Medical Technology Accreditation

The Veterinary Medical Technology program is accredited by the American Veterinary Medical Association (AVMA) Committee on Veterinary Technician Education and Activities (CVTEA).

American Veterinary Medical Association (AVMA) Committee on Veterinary Technician Education and Activities (CVTEA)
1931 North Meacham Road, Suite 100
Schaumburg, IL 60173-4360
Phone: (800) 248-2862
Fax: (847) 925-1329
www.avma.org

Certification

Basic Law Enforcement Training (BLET) Accreditation Certification

The Basic Law Enforcement Training (BLET) program is certified by the:

North Carolina Criminal Justice Education and Training Standards Commission
PO Drawer 149
Raleigh, NC 27602
Phone: (919) 661-5980
www.ncdoj.gov

Approved

The Aviation Management & Career Pilot Technology program is approved by:

Federal Aviation Administration
800 Independence Avenue
Washington, DC 20591
Phone: (703) 230-1664
www.faa.gov

Charlotte Flight Standards District Office (FSDO)
3800 Arco Corporate Drive, Suite 233
Charlotte, NC 28273
Phone: (704) 319-7020
www.faa.gov/about/office_org/field_offices/fsdo/clt/

Practical Nursing approved by

The Practical Nursing Diploma Program is approved by the:
North Carolina Board of Nursing (NCBON)
PO Box 2129
Raleigh, NC 27602
Phone (919) 782-3211
www.Ncbon.com

Cosmetology, Cosmetology Instructor, Esthetics Technology, Esthetics Instructor, Manicuring/Nail Technology, and Manicuring Instructor Approval

The Cosmetology, Cosmetology Instructor, Esthetics Technology, Esthetics Instructor, Manicuring/Nail Technology, and Mancuring Instructor programs are approved by the:

North Carolina Board of Cosmetic Art Examiners
121 Edinburgh South Drive, Suite 209
Cary, NC 27511
Phone: (919) 736-6123
Fax: (919) 678-3012
www.nccosmeticarts.com

For information about graduation rates, the median debt of students who completed the program, and other important information on federally-designated gainful employment programs, visit abtech.edu/about/consumer-information. For information regarding student achievement and success, visit abtech.edu.

A-B Tech is currently a member of NCSARA. NCSARA – the State Authorization Reciprocity Agreement – is an agreement between member states, territories and districts of the United States of America. States apply to their relevant regional education contact for membership in NCSARA, and they agree to deal with the distance education offerings of out-of-state NCSARA-participating institutions in accord with NCSARA's national policies, rather than applying the state-specific policies they used prior to joining NCSARA – policies they still apply to out-of-state institutions that do not participate in NCSARA.

After being approved as a NCSARA member state, NCSARA states invite the NCSARA-eligible institutions located in their state to participate. (Institutional participation, like state membership, is voluntary.) Institutions that meet NCSARA requirements and are approved by their NCSARA member state may, with some limitations, offer their distance education programs to students in other NCSARA member states without going through those states' normal, pre-NCSARA procedures and paying the states' normal fees to obtain authorization/approval to provide such offerings. Currently, California is the only U.S. state not a member of NCSARA.

Catalog changes:

The official and most current version of the Asheville-Buncombe Technical Community College catalog is posted on the College website at **abtech.edu/catalog**. Neither the online version nor the print version of the catalog should be considered a contract between Asheville-Buncombe Technical Community College and the student. Adjustments in program or course content, sequence, schedule, and faculty may be made as necessary. A minimum enrollment may be required to offer a course or continue a program. Charges for tuition and fees are subject to change. The College Calendar dates or events may change because of inclement weather or for other reasons.

Contents

Main College Contact Information....1
Asheville Campus....1
A-B Tech Enka....1
A-B Tech Madison....1
A-B Tech Woodfin....1
A-B Tech Police:....1
Specific Program Accreditation/Certification....1
Accreditation....1
NCSARA....4
Curriculum Programs....8
A-B Tech Online....10
Directory of College Services and Offices....11
College Calendar 2025–2026....15
Campus Maps....18
Administration....20
History....20
Organization....20
Curricula....20
Asheville-Buncombe Technical Community College Foundation....21
Location....21
Current Status....21
College Vision, Mission and Values....21
Campus Facilities....21
Mission....21
Values....21
Vision....21
Costs....22
Community Enrichment Programs....22
Economic & Workforce Development....22
Economic & Workforce Development/ Continuing Education....22
Programs & Services....22
BioNetwork....22
Emergency Services Programs....23
NCWorks Career Center Asheville....23
Skills Training Employment Program (STEP)....23
Small Business Center & Business Incubation....23
General Admission for Curriculum Students....24
Workforce Continuing Education Programs....24
Admissions Policy....24
Admissions Procedure....25
New Student Orientation....27
Dual High School Enrollment....27
Overview of Placement and Assessment of College Readiness....28
Selective and Limited Admission Programs....28
Scheduling an Assessment....29
Transfer Credit, Credit-by-Exam, Articulated Credit, CLEP and Advanced Placement Credit, Continuing Education and Licensure Credit....29
A-B Tech ID Cards....29
Tuition....31
North Carolina Residency....31
Tuition and Expenses....31
International Applicants....31
Matriculation Fee....32
Student Accident Insurance....32
Tuition and Fee Refunds....32
Consumable Supply Fee....32
CAPS Fee....32
Printing Fees....32
Transcript Fee....32
Additional Costs....32
Computer Use and Technology Fee....32
Student Activity Fees....32
Financial Aid....33
Tuition Refund Process....33
BankMobile....34
Financial Aid Satisfactory Academic Progress (FASAP) Policy....34
FASAP Status....35
Education Tax Credits....37
Scholarships and Other Financial Aid Information....37
Veterans' Educational Benefits....38
Scholarships....38
Non-Discrimination and Harassment Policy....39
Student Rights and Responsibilities....39
Non-Discrimination and Harassment Procedure....39
Privacy of Student Records....44
Student Complaints....46
Code of Classroom Conduct....50
Code of Student Conduct....51
Student Rights of Due Process....54
Threat Assessment....55
Sexual Misconduct Policy (Title IX)....57
Sexual Misconduct Procedure....58
Title IX Sexual Harassment....62
Drug and Alcohol Policy....68
Weapons On Campus Policy....72
Workplace Violence Prevention Policy and Procedures....72
Students with Disabilities....72
Vaping, E-cigarettes, and Tobacco Free Campus....72
Animals on Campus....72
Free Speech, Distribution of Materials and Assembly....74
Communicable Disease and Occupational Exposure to Blood-borne Pathogens....74
Internet and Campus Network Acceptable Use Policy....75
Classification of Students....77
Academic Procedures....77
Class Attendance....77
Intellectual Property....77
Introduction to College Courses for Degree-Seeking Students....78
Prerequisites and Co-requisites....78
Course Substitutions....78
Schedule Adjustments....78
Final Examinations....79
Use of Artificial Intelligence....79
Course Repetition....79
Grading System....80
Transcript Codes....81
Quality Points....81
Work-Based Learning....82
Maximum Course Load....82
Standards for Academic Progress....82
Independent Study....82
Honors and Achievements....83
Academic Fresh Start....83
Transfer of Credit to Other Institutions....84
Requirements....84
Academic Advising....85
Counseling Services and Career Services....85
Academic and Student Support Services....85
Services to Students with Disabilities....85
Center for Academic Achievement....86
Developmental Studies....86
Transitional Studies Program....86
Student Services for Distance Learners....87
Parking Regulations....88
A-B Tech Police Department....88
Child Care....90
Honorary Societies....90
Dental Clinic....90
Other College Services and Information....90
Bookstore....90
A-B Tech Police....90
Access to Achievement....90
College Closing or Delayed Opening....90
College Events....90
Health Clinic....90
Food Options on Campus....90
College Services....90
Intramurals....90
Parking Locations....91
Mountain Tech Spa....91
QEP: PEAK Performance A-B TECH Success Coaching....91
Placement Service....91
Don C. Locke Library....91
Student Lounge....92
Student Housing....92
Student Accident Claims....92

Student Clubs and Societies....92
Study Abroad Program....92
The RESET room. 92
Small Business Center. 92
Student Business Incubation....92
Vet Café 92
A-B Tech's Assessment of Student Achievement....94
2024 Performance Measures Summary Report....95
A-B Tech Student Retention and Completion Data....96
Curriculum Programs 97
University Transfer Degrees....98
Associate in Arts (AA) Degree....99
Transfer Pathways....99
General AA Pathway....100
Associate in Arts (AA) Pathways....100
Accelerated AA Pathway....101
Business, Accounting, and Finance Pathway - Appalachian State University....101
Business, Accounting, and Finance Pathway-
UNC Asheville, Western Carolina University, and Mars Hill University....101
Communication Pathway....102
Construction Management Pathway - Appalachian State University....102
Construction Management Pathway - Western Carolina University....102
Creative Arts Pathway....103
English Pathway....103
Foreign Language Pathway....104
Information Systems Pathway - Appalachian State University....104
History Pathway....104
Nutrition Pathway - Appalachian State University and Western Carolina University....105
Philosophy Pathway....105
Political Science Pathway....105
Psychology Pathway....106
Social Work Pathway....106
Pre-Health Pathway....106
Universal General Education Transfer (UGETC) Component....107
Sociology Pathway....107
Associate in Fine Arts in Visual Arts (AFA) Degree....107
Associate in Fine Arts in Visual Arts -Interior Design Pathway....109
Associate in Fine Arts in Visual Arts - Graphic Design Pathway 109
Associate in Fine Arts in Visual Arts - Film Pathway....109
Associate in Fine Arts in Visual Arts - Studio Art Pathway....110
Associate in Engineering (AE) Degree....110
Associate in Engineering - General Pathway....111
Associate in Science (AS) Degree....112
Associate in Engineering - Chemical Engineering Pathway....112
Associate in Engineering - Civil Engineering Pathway....112
Biology Pathway - Appalachian State University, Mars Hill University, and Western Carolina University....114
General AS Pathway....114
Architecture Pathway....114
Computer Science: Computer Systems Concentration Pathway - UNC Asheville....115
Chemistry Pathway....115
Biology Pathway - UNC Asheville....115
Environmental Science Pathway - Appalachian State University....116
Computer Science - Appalachian State University Western Carolina University and Mars Hill University....116
Environmental Science Pathway - UNC Asheville....116
Math Pathway....117
Physics Pathway....117
Pre-Dental Pathway....117
Pre-Med Pathway....118
Pre-Pharmacy Pathway....118
Pre-Engineering Pathway....118
Pre-Veterinarian Pathway....119
Pre-Physical Therapy Pathway....119
Pre-Physician's Assistant Pathway....119
Associate in Arts In Teacher Preparation (AATP) Degree....120
Associate in Arts in Teacher Preparation....121
Associate in Science In Teacher Preparation (ASTP) Degree....122
Associate in Science in Teacher Preparation (ASTP)....123
Associate in General Education Degree....124
General Education for the Associate of Applied Science....126
Associate of Applied Science Degrees, Diplomas, and Certificates....127
Accounting and Finance....129
Air Conditioning, Heating & Refrigeration Technology....130
Associate in General Occupational Technology Degree....132
Automotive Systems Technology....133
Aviation Management & Career Pilot Technology....134
Basic Law Enforcement Training....136
Biomedical Equipment Technology....137
Brewing, Distillation and Fermentation....138
Business Administration....141
Cardiovascular Sonography....144
Computer Engineering Technology....145
Computer-Integrated Machining....146
Construction Management Technology....148
Cosmetology....150
Cosmetology Instructor....152
Culinary Arts....153
Dental Assisting....156
Dental Hygiene....157
Diesel and Heavy Equipment Technology....158
Early Childhood Education....159
Electrical Systems Technology....162
Emergency Medical Science....164
Electronics Engineering Technology....164
Esthetics Instructor....166
Esthetics Technology....167
Geomatics Technology (Surveying)....167
Health and Fitness Science....168
Hospitality Management....169
Information Technology: Artificial Intelligence....170
Information Technology: Information Systems....171
Information Technology: Network Management....173
Information Technology: Software and Web Development....174
Information Technology: Systems Security....176
Manicuring Instructor....178
Manicuring/Nail Technology....178
Mechanical Engineering Technology....179
Mechatronics Engineering Technology....180
Medical Assisting....180
Medical Laboratory Technology....181
Medical Office Administration....182
Medical Sonography....184
Nursing....185
Occupational Therapy Assistant....191
Office Management....192
Radiography....194
Social and Human Services....195
Surgical Technology....199
Surgical Technology Bridge Program....200
Veterinary Medical Technology....201
Welding Technology....202
Course Descriptions....205
Board of Trustees....270
Administrative Offices....272

Test for Divergence

Curriculum Programs

Program	Credential	Location
Accounting and Finance	AAS Degree	A/O
Accounting and Finance	Certificate	A/O
Foundations of Business and Financial Literacy	Certificate	A/O
Foundations of Economics and Financial Literacy	Certificate	A/O
Air Conditioning, Heating & Refrigeration Technology	AAS Degree	A
Air Conditioning, Heating & Refrigeration Technology	Diploma	A
Cooling	Certificate	A
Heating	Certificate	A
Automotive Systems Technology	AAS Degree	A
Automotive Systems Technology	Diploma	A
Automotive Systems Technology - Certificate I	Certificate	A
Automotive Systems Technology - Certificate II	Certificate	A
Aviation Management & Career Pilot Technology - Aviation Mgt	AAS Degree	A
Aviation Management & Career Pilot Technology - Career Pilot	AAS Degree	A
Aviation - Instrument Rating	Certificate	A
Aviation - Private Pilot	Certificate	A
Basic Law Enforcement Training	Certificate	W
Biomedical Equipment Technology	AAS Degree	A
Biomedical Equipment Technology	Diploma	A
Biomedical Equipment Technology	Certificate	A
Brewing, Distillation and Fermentation: Brewing or Distillation Pathway	AAS Degree	E
Brewing Methods and Operations	Diploma	E
Distillation Methods and Operations	Diploma	E
Craft Beverage Lab	Certificate	E
Business Administration: General Business Administration	AAS Degree	A/O
Business Administration: Marketing & Retailing	AAS Degree	A/O
Business Administration: Sports Management	AAS Degree	A/O
Business Administration	Certificate	A/O
Entrepreneurship	Certificate	O
Essentials to Social Media Marketing	Certificate	A/O
Essentials of Sports Management	Certificate	A/O
Retail Marketing	Certificate	A/O
Associate in Arts	A.A. Degree	A/O
Associate in Arts in Teacher Preparation	A.A. Degree	A
Associate in Science in Teacher Preparation	A.S. Degree	A
Associate in Engineering	A.E. Degree	A
Associate in Fine Arts in Visual Arts	A.F.A. Degree	A
Associate in General Education	A.G.E. Degree	A
Associate in Science	A.S. Degree	A/O
Cardiovascular Sonography	AAS Degree	A
Computer Engineering Technology	AAS Degree	A
Computer Engineering Technology	Diploma	A
Computer Engineering Technology	Certificate	A
Computer Integrated Machining	AAS Degree	A
Computer Integrated Machining	Diploma	A
Advanced Machine Operator	Certificate	A
CNC Machine Programmer	Certificate	A
Quality & Lean Six-Sigma	Certificate	A
EDM & Fixture Specialist	Certificate	A
Robotics & Multi-Axis Machining	Certificate	A
Construction Management Technology	AAS Degree	A
Building Construction Science	Diploma	A
Construction Management Technology	Certificate	A
Construction & Millwork	Certificate	A
Green Building & Carpentry	Certificate	A
Residential Design	Certificate	A
Sustainability	Certificate	A
Sustainable Agriculture & Construction	Certificate	A
Cosmetology	AAS Degree	A
Cosmetology	Diploma	A
Cosmetology Instructor	Certificate	A
Criminal Justice Technology	AAS Degree	W
Criminal Justice Technology	Certificate	W

Locations:
A - Asheville/Victoria Rd.
E - Enka
W - Woodfin
O - Online

Program	Credential	Location
Culinary Arts	AAS Degree	A
Baking and Pastry Arts	Certificate	A
Culinary Studies	Certificate	A
Practical Meat Cutting	Certificate	A
Therapeutic Baking	Certificate	A
Therapeutic Culinary	Certificate	A
Dental Assisting	Diploma	A
Dental Hygiene	AAS Degree	A
Diesel and Heavy Equipment Technology	AAS Degree	A
Diesel and Heavy Equipment Technology	Diploma	A
Diesel and Heavy Equipment Technology	Certificate	A
Early Childhood	AAS Degree	A
Early Childhood: Licensure Transfer Track	AAS Degree	A
Early Childhood: Non-Licensure Transfer Track	AAS Degree	A
Early Childhood	Certificate	A/O
Early Childhood Administration	Certificate	A/O
Infant/Toddler Care	Certificate	A/O
Electrical Systems Technology	AAS Degree	A
Electrical Systems Technology	Diploma	A
Advanced Electrical Wiring	Certificate	A
Building Instrumentation & Control	Certificate	A
Electrical Construction	Certificate	A
Electrical Wiring	Certificate	A
Electrical Fundamentals	Certificate	A
Solar Photovoltaic Energy Technology	Certificate	A
Electronics Engineering Technology	AAS Degree	A
Electronics Manufacturing	Certificate	A
Emergency Medical Science	AAS Degree	W
Emergency Medical Science Bridge	AAS Degree	W
Basic Emergency Medical Science	Certificate	W
Esthetics Technology	Certificate	A
Esthetics Instructor	Certificate	A
General Occupational Technology	AAS Degree	A
General Occupational Technology	Diploma	A
General Occupational Technology	Certificate	A
Geomatics Technology	AAS Degree	A
Geomatics Technology Land Surveying Fundamentals	Certificate	A
Health and Fitness Science	AAS Degree	A
Group Fitness Instructor	Certificate	A
Hospitality Management	AAS Degree	A
Food Truck Operations	Certificate	A
Hospitality Management	Certificate	A
Online Hospitality Management	Certificate	O
Restaurant Management	Certificate	A
Information Technology: Artificial Intelligence	AAS Degree	A
Information Technology: Artificial Intelligence	Certificate	A
Information Technology: Information Systems	AAS Degree	A
Information Technology: Computer Fundamentals	Certificate	A/O
Information Technology: GIS Fundamentals	Certificate	A/O
Information Technology: PC Installation & Maintenance	Certificate	A
Information Technology: Network Management	AAS Degree	A
Information Technology: Network Systems Administration	Certificate	A
Information Technology: CCNA Preparation	Certificate	A
Information Technology: Software and Web Development	AAS Degree	A
Information Technology: Front-end Developer	Certificate	A/O
Information Technology: Back-end Developer	Certificate	A/O
Information Technology: Database Management	Certificate	A
Information Technology: Systems Security	AAS Degree	A
Information Technology: Systems Security	Certificate	A
Information Technology: Cyber Forensic Analyst	Certificate	A
Manicuring/Nail Technology	Certificate	A
Manicuring Instructor	Certificate	A
Mechanical Engineering Technology	AAS Degree	A
Mechanical Engineering Technology: Automation & Robotics	Certificate	A
Computer Aided Drafting	Certificate	A
Solid Modeling	Certificate	A
Mechatronics Engineering Technology	AAS Degree	A
Mechatronics Engineering Technology: Maintenance & Reliability	Diploma	A
Mechatronics Engineering Technology: Basic Industrial Maintenance	Certificate	A

Program	Credential	Location
Medical Assisting	Diploma	A
Medical Laboratory Technology	AAS Degree	A
Medical Laboratory Technology: Accelerated	AAS Degree	A
Medical Office Administration	AAS Degree	O
Medical Office Administration	Diploma	O
Medical Office Administration: Medical Coding	Certificate	O
Medical Sonography	AAS Degree	A
Nursing - Associate Degree	AAS Degree	A
Nursing - RIBN	AAS Degree	A
Nursing - LPN to ADN Advanced Placement Option	AAS Degree	A
Nursing - Paramedic to ADN	AAS Degree	A
Nursing - Practical Nursing	Diploma	A
Occupational Therapy Assistant	AAS Degree	A
Office Management: Finance	AAS Degree	O
Office Management: General Office	AAS Degree	O
Office Management	Diploma	O
Office Management	Certificate	O
Office Management: Virtual Office	Certificate	O
Radiography	AAS Degree	A
Social and Human Services: Addiction & Recovery Transfer Track	AAS Degree	O
Social and Human Services: Addiction & Recovery Career Track	AAS Degree	O
Social and Human Services: Mental Health Career Track	AAS Degree	O
Social and Human Services: Mental Health Transfer Track	AAS Degree	O
Social and Human Services: Child Advocacy Studies Career Track	AAS Degree	O
Social and Human Services: Child Advocacy Studies Transfer Track	AAS Degree	O
Social and Human Services: Generalist Track	AAS Degree	O
Social and Human Services	Diploma	O
Social and Human Services: Addiction & Recovery Studies	Certificate	O
Social and Human Services: Mental Health Studies	Certificate	O
Surgical Technology	AAS Degree	A
Surgical Technology Bridge	AAS Degree	A
Veterinary Medical Technology	AAS Degree	A
Welding Technology	AAS Degree	A
Welding Technology	Diploma	A
Basic Welding I	Certificate	A
Robotic Welding	Certificate	A

Locations:
A - Asheville/Victoria Rd.
E - Enka
W - Woodfin
O - Online

A-B Tech Online provides flexible learning opportunities that allow students to complete classes in Online (both synchronous and asynchronous), Hybrid, and HyFlex formats. The college also offers a variety of programs available entirely online. Fully Online programs are:

Associate Degrees:
Associate in Arts
- Accelerated Pathway
- Business, Accounting, and Finance Pathway
- Communication Pathway
- Construction Management Pathway
- English Pathway
- Foreign Language Pathway (French)
- General Pathway
- History Pathway
- Information Systems (WCU)
- Philosophy Pathway
- Political Science Pathway
- Psychology Pathway
- Social Work Pathway
- Sociology Pathway

Associate in Science
- Computer Science (UNCA)
- General

Business Administration
Medical Office Administration
Office Management
Social and Human Services

Diplomas
Medical Office Administration
Office Management
Social and Human Services

Certificates
Early Childhood
Early Childhood Administration
Essentials to Social Media Marketing
Essentials of Sports Management
Foundations of Business and Financial Literacy
Foundations of Economics and Financial Literacy
Infant/Toddler Care
Information Technology: Back-End Developer
Information Technology: Computer Fundamentals
Information Technology: Front-End Developer
Information Technology: GIS Fundamentals
Medical Office Administration: Medical Coding
Office Management
Office Management: Virtual Office
Online Hospitality Management
Retail Marketing
Social and Human Services: Addiction & Recovery Studies
Social and Human Services: Mental Health Studies

Directory of College Services and Offices

All telephone listings begin with 828 area code.

Business and Finance . . . . **Vice President, Operations & CIO**
Simpson Administration Building, Asheville Campus, 398-7304

- Bookstore. . . . . Director
  K. Ray Bailey Student Services Center, Asheville Campus, 398-7200
- Business Services . . . . .Associate Vice President of Buisness & CFO
  Roberson Building / 93 Victoria , Asheville Campus, 398-7542
- Campus Police and Security. . . . . Chief of Police and Security
  A-B Tech/Mission Health Conference Center, Asheville Campus, 398-7870
- Student Parking Permits. . . . . Police Dept.
  A-B Tech/Mission Health Conference Center, Asheville Campus, 398-7125
- Facilities. . . . . Director, Plant Operations, and Director Facilities Support
  Chestnut Building, Asheville Campus, 398-7482 or 398-7150
- Tuition, Payments, Refunds (Access Card), Student Accounts . . . . Business Office
  Roberson Building / Asheville Campus, 398-7152, 398-7156
- Student Accident Claims . . . . .Director Facilities Support
  Chestnut Builidng, Asheville Campus, 398-7168

College Advancement

- A-B Tech Foundation. . . . . **Executive Director**
  Ivy Building, Asheville Campus, 398-7176
- Scholarships. 398-7177
  Ivy Building, Asheville Campus

College Services & Information

- A-B Tech Police 398-7125
  Mission Health/A-B Tech Conference Center, 16 Fernihurst Drive
- Health Clinic. 398-7570
  Ferguson Center for Allied Health and Workforce Development, Asheville Campus, room# 115
- Help Desk 398-7550
- Information Center 398-7900
  K. Ray Bailey Student Services Center, Asheville Campus
- Job Placement . . . . .Career Services, 398-7209
  NCWorks Career Center, 251-6200
  Madison County Career Center, 782-2632
- Mountain Tech Lodge . . . . Manager
  Magnolia Building, Asheville Campus, 398-7248

Community Relations and Marketing. . . . . **Executive Director**
Simpson Administration Building, Asheville Campus, 398-7117
Print Shop Manager
Simpson Administration Building, Asheville Campus, 398-7116

Instructional Services . . . . Vice President, Instructional Services
Simpson Administration Building, Asheville Campus, 398-7633

- A-B Tech Online & Academic Support . . . . Dean
  Simpson Building, Asheville Campus, 828-398-7716
- Academic Related Instruction (ACA 115, ACA 122) . . . . Chair
  Ferguson Building, Asheville Campus, 398-7649
- Library . . . . Director
  Locke Building, Asheville Campus, 398-7307
- Center for Academic Acheivement . . . . Director
  Locke Building, Asheville Campus, 398-7228
- Allied Health . . . . Dean
  Ferguson Center for Allied Health and Workforce Development, Asheville Campus, 398-7188
- Arts and Sciences . . . . Dean
  Elm Building, Asheville Campus, 398-7650
- Emergency Services . . . . Dean
  Public Safety Training Center, A-B Tech Woodfin, 782-2123
- Engineering, Transportation, and Applied Technology . . . . Dean
  Dogwood Building, Asheville Campus, 398-7220
- A-B Tech Madison . . . . Director
  Ramsey Building, Marshall, 398-7701
- School of Nursing . . . . Jack and Carolyn Ferguson Endowed Chair
  Ferguson Center for Allied Health and Workforce Development, Asheville Campus, 398-7264
- Transitional Studies . . . . Director
  Hemlock Building, Asheville Campus, 398-7488
- Wellness, Hospitality & Public Service. . . . . Dean
  Locke Building, Asheville Campus, 398-7885

Economic and Workforce Development/Continuing Education . . . . Vice President
Ferguson Center for Allied Health and Workforce Development, Asheville Campus, 398-7937

- BioNetwork . . . . Director
  Technology Commercialization Center, A-B Tech Enka, 792-2323
- Small Business Center and Business Incubation . . . . Executive Director
  Small Business Center, A-B Tech Enka, 398-7949
- Community Enrichment Programs . . . . Director
  Ferguson Center for Allied Health and Workforce Development, Asheville Campus, 398-7134
- Emergency Services . . . . Dean
  Public Safety Training Center, A-B Tech Woodfin, 782-2395
- Workforce Continuing Education . . . . Director
  Ferguson Center for Allied Health and Workforce Development, Asheville Campus, 398-7925
- Economic & Workforce Development . . . . Director
  Advanced Manufacturing Center, Asheville Campus, 398-7923

Human Resources & Organizational Development	**Executive Director**	Sunnicrest Building, Asheville Campus, 398-7178
ADA Compliance & Benefits	Benefits Specialist	Sunnicrest Building, Asheville Campus, 398-7170
Employment	HR Director	Sunnicrest Building, Asheville Campus, 398-7167
Employee Parking Decals	HR Front Office	Sunnicrest Building, Asheville Campus, 398-7114
Payroll	Director	Sunnicrest Building, 398-7187
Professional Development	Director	Fernihurst Building, Asheville Campus, 398-7538
Information Systems Technology	**Vice President/CIO**	Roberson Building, Asheville Campus, 398-7929
Help Desk	Technicians	Locke Library, Asheville Campus, 398-7550
Learning & Design	Director, Elm Building	Asheville Campus, 398-7538
Research & Planning	**Executive Director**	Simpson Administration Building, Asheville Campus, 398-7175
Student Services	**Vice President, Student Services**	K. Ray Bailey Student Services Center, Asheville Campus, 398-7484
Admissions	Admissions	K. Ray Bailey Student Services Center, Asheville Campus, 398-7886
Advising	Advisors	K. Ray Bailey Student Services Center, Asheville Campus, 398-7900
Career and College Promise	Director of Student Advising and Educational Partnerships	K. Ray Bailey Student Services Center, Asheville Campus, 398-7164
Career Services	Career Counselor	K. Ray Bailey Student Services Center, Asheville Campus, 398-7209
Childcare Assistance	Executive Assistant	K. Ray Bailey Student Services Center, Asheville Campus, 398-7143
Counseling	Counselors	K. Ray Bailey Student Services Center, Asheville Campus, 398-7900
Disability Services	Support Services	K. Ray Bailey Student Services Center, Asheville Campus, 398-7141
Emergencies and A-B Tech Police	398-7125 or 9-911	A-B Tech/Mission Conference center, Asheville Campus
Enrollment Services	398-7585	K. Ray Bailey Student Services Center, Asheville Campus
Financial Aid	Financial Aid	K. Ray Bailey Student Services Center, Asheville Campus, 398-7900
Grade Changes	Class Instructor	
Graduation Application	Records and Registration	K. Ray Bailey Student Services Center, Asheville Campus, 398-7900
Intramurals	Department Chair, Physical Education	Coman Student Activity Center, 398-7843
International Student Services	Student Advising and Educational Partnerships	K. Ray Bailey Student Services Center, Asheville Campus, 398-7900
Scholarships	398-7177	Ivy Building, Asheville Campus

Student Academic Records. . . . . Records and Registration
K. Ray Bailey Student Services Center, Asheville Campus, 398-7900

Student Life and Development . . . . Director
Coman Student Activity Center, Asheville Campus, 398-7900

Student I.D. Cards. . . . . Information Desk
K. Ray Bailey Student Services Center, Asheville Campus, 398-7900

Testing Center . . . . Coordinator
K. Ray Bailey Student Services Center, Asheville Campus,, 398-7583

Title IX Office . . . . Director
K. Ray Bailey Student Services Center, Asheville Campus, 398-7932

Transcript Request . . . . Records and Registration
K. Ray Bailey Student Services Center, Asheville Campus, 398-7900

Transfer Credits . . . . Records and Registration
K. Ray Bailey Student Services Center, Asheville Campus, 398-7900

Veterans' Services . . . . Coordinator
K. Ray Bailey Student Services Center, Asheville Campus, 398-7206

Visiting the Campus . . . . Enrollment Services

Address correspondence to the appropriate office in care of:

Asheville-Buncombe Technical Community College, 340 Victoria Road, Asheville, NC 28801

Tel: 828-398-7900 • www.abtech.edu

K. Ray Bailey Student Services Center, Asheville Campus, 398-7578

College Calendar 2025–2026

All dates in this calendar are subject to change.
For a full listing of College dates, visit abtech.edu/calendar

Fall Semester – 2025

Registration Begins for Current/Returning Students	March 31
Registration Begins for New Students	June 16
First Payment Deadline	August 14
Second Payment Deadline	August 21
Classes Begin	August 25
8-Week Term I	August 25 – October 20
Labor Day Student Break	August 30 - September 1
Labor Day (College Closed)	September 1
Professional Development Day (No Classes for Students)	October 21
8-Week Term II	October 22 – December 20
Thanksgiving Student Break (No Classes for Students)	November 26 - November 29
Thanksgiving Holiday (College Closed)	November 27
College Closed	November 28
Last Day of Class	December 20
Winter College Break (No Classes for Students)	December 22 - January 10
College Closed	December 24
Winter College Holiday (College Closed)	December 25, 26, 29, 30, 31, January 1, 2

Fall 16-week term contains 15 Saturdays

Spring Semester –2026

Registration Begins for Current/Returning Students	March 31, 2025
Registration Begins for New Students	June 16, 2025
First Payment Deadline	December 11, 2025
Second Payment Deadline	January 8
Classes Begin	January 12
8-Week Term I	January 12 – March 9
Martin Luther King Jr. Student Break	January 17 - January 19
Martin Luther King Jr. Day College Holiday (College Closed)	January 19
Professional Development Day (no classes for students)	March 10
8-Week Term II	March 11 – May 12
Student Spring Break (No Classes for Students)	April 6 - April 11
Last Day of Class	May 12
Spring Commencement	May 16

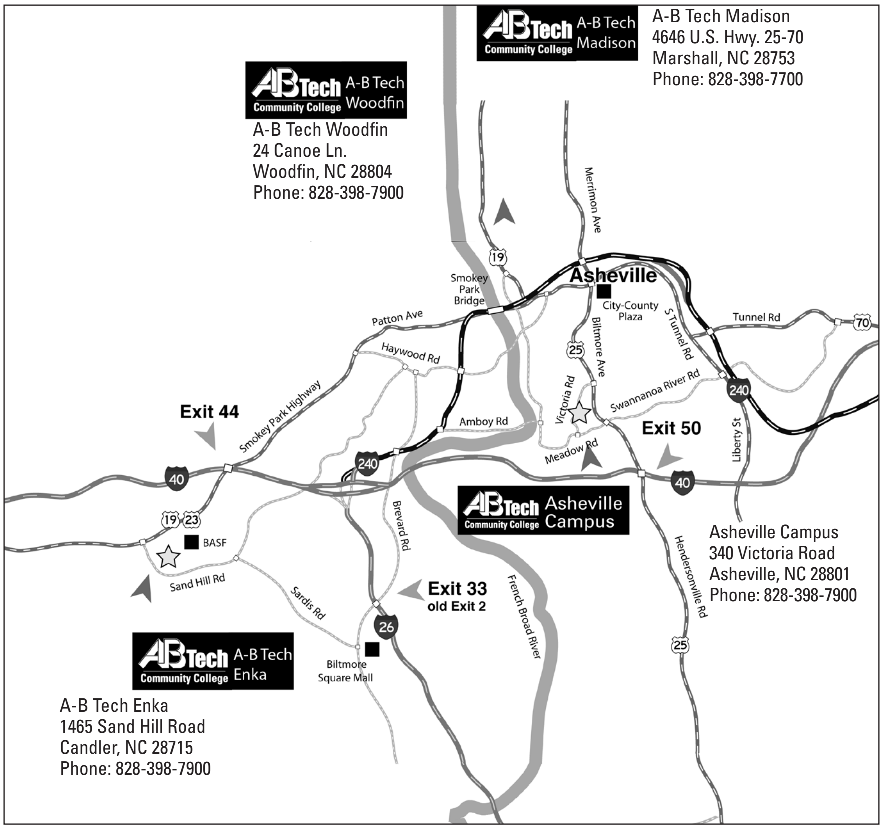
Spring 16-week term contains 15 Saturdays

Summer Semester – 2026

Registration Begins for Current/Returning Students	April 13
Registration Begins for New Students	April 20
Payment Deadline	May 14
10-Week Term	May 22 – Aug. 3
Memorial Day Holiday	May 25
8-Week Term	June 5 – July 31
Independence Day (Student Break)	July 3
Independence Day College Holiday (College Closed)	July 3
8-Week Term Last Day of Classes	July 31
10-Week Term Last Day of Classes	August 3

Campus Maps

*Maps are not to scale



A-B Tech Madison
4646 U.S. Hwy. 25-70
Marshall, NC 28753
Phone: 828-398-7700

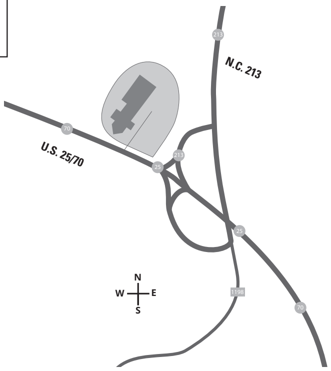
A-B Tech Woodfin
24 Canoe Ln.
Woodfin, NC 28804
Phone: 828-398-7900

Asheville Campus
340 Victoria Road
Asheville, NC 28801
Phone: 828-398-7900

A-B Tech Enka
1465 Sand Hill Road
Candler, NC 28715
Phone: 828-398-7900

AB Tech Community College A-B Tech Madison
AB Tech Community College A-B Tech Woodfin
AB Tech Community College Asheville Campus
AB Tech Community College A-B Tech Enka
Merrimon Ave
19
Smokey Park Bridge
Asheville
City-County Plaza
Patton Ave
Haywood Rd
Biltmore Ave
S Tunnel Rd
Tunnel Rd
70
25
Victoria Rd
Swannanoa River Rd
240
Exit 44
Smokey Park Highway
Amboy Rd
Exit 50
Liberty St
Meadow Rd
40
240
40
19
23
BASF
Brevard Rd
Sand Hill Rd
Sardis Rd
Exit 33
old Exit 2
French Broad River
Hendersonville Rd
26
Biltmore Square Mall
25

A-B Tech Madison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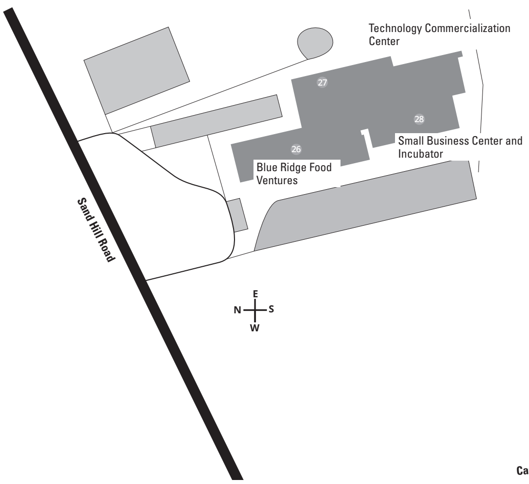
A-B Tech Enka


US 19-23
Technology Commercialization Center
27
28
26
Small Business Center and Incubator
Blue Ridge Food Ventures
Sand Hill Road
E
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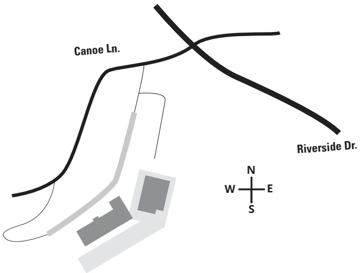
W

A-B Tech Woodfin


Canoe Ln.
Riverside Dr.
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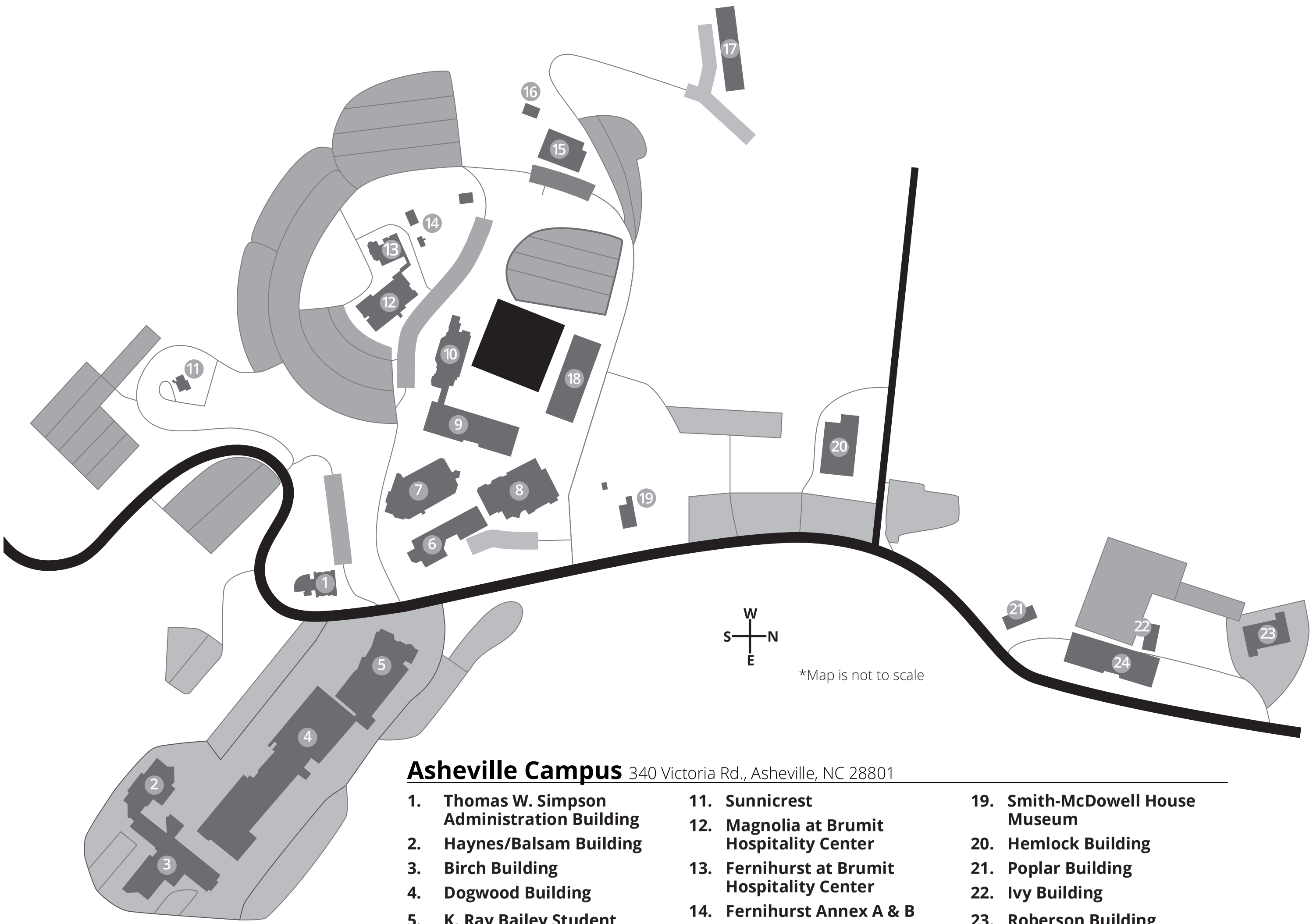

*Map is not to scale

Asheville Campus 340 Victoria Rd., Asheville, NC 28801

1. **Thomas W. Simpson Administration Building**
2. **Haynes/Balsam Building**
3. **Birch Building**
4. **Dogwood Building**
5. **K. Ray Bailey Student Services Building**
6. **Locke Library**
7. **Ferguson Building**
8. **J. Herbert Coman Student Activity Center**
9. **Elm Building**
10. **Sycamore Building**
11. **Sunnicrest**
12. **Magnolia at Brumit Hospitality Center**
13. **Fernihurst at Brumit Hospitality Center**
14. **Fernihurst Annex A & B**
15. **Advanced Manufacturing Ctr./Maple Building**
16. **Maple Building Annex**
17. **Chestnut Building**
18. **A-B Tech /Mission Health Conference Center, A-B Tech Police Dept.**
19. **Smith-McDowell House Museum**
20. **Hemlock Building**
21. **Poplar Building**
22. **Ivy Building**
23. **Roberson Building (93 Victoria Road)**
24. **Ferguson Center for Allied Health and Workforce Development**

Organization

History

Asheville-Buncombe Technical Community College is one of 58 community colleges in the North Carolina Community College System and is dedicated to serving Buncombe and Madison counties. Originally funded by a bond election, the institution was established on April 3, 1958 as the Asheville Industrial Education Center and began serving students on September 1, 1959.

The name was changed to Asheville-Buncombe Technical Institute on January 9, 1964, after the N.C. General Assembly approved legislation creating the N.C. Community College System. This legislation enabled the College to confer the Associate in Applied Science degree for the first time at graduation ceremonies in August 1964.

The Board of Trustees approved a third name change to Asheville-Buncombe Technical College on August 6, 1979. A final name change occurred November 2, 1987, when the Board of Trustees approved Asheville-Buncombe Technical Community College, an action that became official when endorsed by the Buncombe County Commission on November 3, 1987.

In October 1988, the College received approval to offer associate degree programs. In September 1989, the College enrolled its first class for the Associate in Science degree. The Associate in Arts degree was first offered during summer quarter 1990-91.

On January 18, 1990, A-B Tech officially opened a site in Madison County. The College had served the county out of temporary quarters at the Marshall Elementary School since December 12, 1984.

By the fall term of 1997, the College had re-engineered all programs and converted to the semester system.

On October 23, 2000, BASF Corporation donated nearly 37 acres and several buildings to A-B Tech to establish a satellite site in Enka, which now houses the College's Small Business Center, Business Incubation Program, the Craft Beverage Institute of the Southeast, the N.C. BioNetwork, Blue Ridge Food Ventures, and other organizations dedicated to serving small businesses. The College's Continuing Education and Economic and Workforce Development programs were relocated from Enka to the main campus in 2015.

A-B Tech Woodfin, which houses the College's Emergency Services Department, was opened in October 2014. It is co-located with the Buncombe County Training Center.

In 2021, A-B Tech opened a location at ABCCM Transformation Village.

In 2024-2025, A-B Tech played a crucial role in Hurricane Helene recovery efforts in Buncombe and Madison counties.

Administration

The College initially was administered by the Asheville City Board of Education. Following the creation of the North Carolina Community College System, control passed to an independent Board of Trustees that was appointed by the Governor, Buncombe and Madison County Commission, Madison County Board of Education, and Asheville City/Buncombe County Boards of Education.

In 2024, the NC General Assembly enacted a law changing the makeup of community college boards. Under the new law, eight trustees are appointed by the NC General Assembly, four by Buncombe County, and two by Madison County.

From the beginning, prominent Asheville and Buncombe County business and community leaders have helped to guide the College. In addition, each academic program has an advisory committee comprised of local professionals. Several hundred local citizens provide guidance for the educational programs of the College.

Curricula

The first program offered by A-B Tech was Practical Nursing. Electronics Engineering Technology and the Machinist programs were started in 1960. Today, the College offers more than 150 degrees, diplomas and certificates. University Transfer Degrees include: Associate in Arts, Associate in Science, Associate in Engineering, Associate in Fine Arts in Visual Arts, Associate in General Education, Associate in Arts in Teacher Preparation, Associate in Science in Teacher Preparation. The College also offers an array of Associate in Applied Science degrees, diplomas, and certificates.

Transfer degrees are offered through the Division of Arts & Sciences. AAS degrees are offered through the Allied Health, Emergency Services, Engineering, Transportation & Technology, School of Nursing, and Wellness, Hospitality & Public Service divisions.

The Division of Economic & Workforce Development/Continuing Education offers workforce education and training for business, industry and the general public. Courses in healthcare, business, hospitality, technology, industry, trades and employability skills are available. Training can be customized to meet the unique needs of small, mid-sized, and large businesses and can be tailored for delivery on demand. Community enrichment classes, such as art, languages and practical skills are offered year-round at each campus location throughout the College's service area.

Both curriculum and Economic & Workforce Development/Continuing Education programs are supported through activities of the Transitional Studies Department, Center for Academic Achievement and the Locke Library.

Classes meet on campus and at various off-campus sites. Course requirements are the same without regard to meeting times, formats, or locations.

Campus Facilities

A-B Tech now serves students from four locations, including the main campus in Asheville, A-B Tech Madison, A-B Tech Enka, and A-B Tech Woodfin. The College also provides instruction at ABCCM's Transformation Village, Goodwill, and area high schools.

On March 15, 1961, the Industrial Education Center moved into two new buildings off Victoria Road in Asheville. Over the years, the Board of Trustees has acquired land that today totals more than 144 acres.

Located on the Asheville Campus are the historic Smith-McDowell House, the oldest brick structure in the region, Fernihurst Mansion, Sunnicrest, the only remaining lodge constructed by George Vanderbilt, and Ivy Hall, built as a gymnasium and auditorium for St. Genevieve-of-the-Pines school. Buncombe County Commissioners purchased property for A-B Tech belonging to St. Genevieve/Gibbons Hall, a private school that merged with Asheville Country Day School to form Carolina Day School. The Board of Trustees acquired the title to these 12.77 acres and four buildings on September 23, 1987. In 1990, the Commissioners purchased 16.75 acres contiguous to the west boundaries of the campus, which included Sunnicrest.

Over the years, a combination of special funding has provided for campus expansion. Since 1985, the North Carolina General Assembly has approved $5 million in special legislation for campus construction. In statewide bond referendums, voters approved $5 million in 1993, $14 million in 2000, and $5.4 million in 2016 for capital projects at A-B Tech.

Since 1987, Buncombe County voters have approved $13.5 million in bonds to be used for campus additions and renovations. In 2011, Buncombe County voters also approved a ¼-cent sales tax dedicated to A-B Tech for construction and major renovations. The sales tax funded construction of the Ferguson Center for Allied Health and Workforce Development, dedicated in 2015, and the Mission Health/A-B Tech Conference Center and a 650-space parking garage, both dedicated in 2016. It also funds funds annual building maintenance and special projects, such as the installation of solar roof panels.

Asheville-Buncombe Technical Community College Foundation

The Asheville-Buncombe Technical Community College Foundation was established in 1996 as a separate 501(c)(3) non-profit corporation. Its sole purpose is to provide financial support for the students and programs of A-B Tech. The A-B Tech Foundation meets critical needs that cannot be addressed in the College's normal operating budget. All gifts are tax deductible as allowed by law.

Current Status

A-B Tech, with strong local support, has expanded to four locations in Buncombe and Madison counties, expanded its curriculum and workforce training offerings, and provides numerous services to the community. The College has the largest total headcount enrollment of any institution of higher education in Western North Carolina, serving more than 23,000 students annually.

Location

The Asheville campus is located on Victoria Road in Asheville, North Carolina, a scenic mountain city repeatedly named one of the most livable cities in America. Situated near major interstates and on local transit routes, the College is convenient to the citizens it serves.

A-B Tech Madison is located in Marshall. A-B Tech Enka is located in the Enka-Candler community. A-B Tech Woodfin is located in the Woodfin community just off of I-26. For more information, see **abtech.edu/locations.**

College Vision, Mission and Values

Mission

Dedicated to the success of students and communities, Asheville-Buncombe Technical Community College provides meaningful teaching and learning in a curriculum, continuing education, and workforce development environment committed to Respect, Integrity, Support, and Equity (RISE). We welcome everyone to join us.

Vision

Changing Lives. Strengthening Communities.

Values

- Excellence
- Learning
- Supportive Environment
- Innovation
- Inclusiveness
- Continuous Improvement

Economic & Workforce Development/ Continuing Education

Economic & Workforce Development/Continuing Education offers training and services to support economic development and lifelong learning in the community. Needs for higher professional education, employment skills, job training, personal growth and development, and business and economic development are continually identified through a variety of assessments.

A variety of instructional approaches are offered to meet community needs such as traditional classroom instruction, online or hybrid instruction, computer-assisted learning, community-based learning centers, on-site training for entrepreneurs, business and industry, internships and apprenticeships. Assessment and training consultation is also available for individuals, businesses, and agencies.

Offerings are built on the concept of lifelong learning and economic workforce trends. Classes and training are provided at a variety of times and at locations where the needs of students can conveniently be met. Students enrolling in workforce programs may be eligible for financial aid through training assistance programs such as Workforce Investment and Opportunities Act (WIOA), grants and scholarships.

Training and course work may earn Continuing Education Unit (CEU) credit applicable to certain professions, state and national certifications and credentials.

Programs are designed for adults age 18 or older. Minors ages 16 and 17, may enroll in classes, if space allows.

Costs

Registration fees for Economic & Workforce Development/Continuing Education courses vary. Additional fees may be charged for books, materials, supplies, and accident insurance depending on the course.

Programs & Services

Economic & Workforce Development/ Continuing Education needs are addressed in eight primary areas:

1. BioNetwork
2. Community Enrichment
3. Economic & Workforce Development
4. Emergency Services
5. NCWorks Career Center
6. Skills, Training & Employment Program (STEP)
7. Small Business Center & Business Incubation
8. Workforce Continuing Education

BioNetwork

BioNetwork is a statewide resource supporting the growth of the natural products and life science industries in North Carolina. Services at A-B Tech include a variety of laboratory, analytical and quality assurance testing as well as assistance with research and development.

Community Enrichment Programs

Community Enrichment Programs provide courses, seminars and activities that contribute to the community's overall cultural, civic, and intellectual growth. Courses are designed to assist adults in the development of new skills, or upgrading of existing ones. Hundreds of classes and events offered each year provide lifelong learning opportunities to community members of Buncombe and Madison counties. The Program offers a variety of classes in fine arts; from drawing and painting to photography and pottery (ceramics). The language component includes French, Italian, German, Spanish, and American Sign Language. Motorcycle Safety, Recreation, Music and Dance classes including fly fishing, yoga, ballroom and contemporary dance classes attract thousands of adult learners to the campus each year. Financial Wellness and Home and Garden classes such as backyard chickens, botany, upholstery, sewing and quilting add to the diversity of the courses offered.

Economic & Workforce Development

Economic & Workforce Development provides customized training and services that directly support local business and industry. Businesses of all sizes and types are served, offering workforce training solutions to strengthen the skill sets of employees and build opportunities for advancement, and increase productivity and profitability for companies. The College partners with local, regional, and state agencies to develop our local workforce and to implement flexible workforce training solutions.

Customized training is a specialized program that is designed to react quickly to the needs of businesses and to respect the confidential nature of proprietary processes and information within those businesses. Regardless of the technology or the challenges, A-B Tech has the ability to create training that fits the need. Our programs are designed to align with the needs and schedules of our clients. We can bring the training to your site, and can be flexible to accommodate shifts and productions schedules.

Customized training opportunities can include:

- Pre-employment activities (recruitment, customized job fairs, job profiling, skills assessment)

- Job-specific and advanced manufacturing processes (such as robotics, industrial maintenance, machining, electrical componentry)
- Business support, computer applications
- Continuous improvement, Lean/Six Sigma
- Leadership, supervisory skills, human resource and talent development
- Safety, OSHA general industry and regulatory subjects
- Technology
- Train-the-Trainer

Advanced Manufacturing provides education and training for individuals to prepare for new or different employment in advanced manufacturing, machining, blueprint reading, industrial maintenance, composites, forklift safety, supply chain basics, Six Sigma, logistics, OSHA training, craft beverage industry, production/ inventory control and APICS certification. Many programs lead to local, state or national certifications.

Emergency Services Programs

Emergency Services Programs were created to establish a single point of contact for students, College personnel, and the community in the fields of fire services, law enforcement, and emergency medical services. These programs provide training in both curriculum and continuing education. A significant number of these courses are offered to meet licensure or certification requirements for employment in fire and rescue, criminal justice and law enforcement, and emergency medical services. Emergency Services Programs also offer numerous specialized classes that meet qualifications and standards required by governing agencies.

NCWorks Career Center Asheville

NCWorks Career Center Asheville is part of the statewide employment and training system. Staff members at the career center provide job seekers and employers with a wide array of services. Job seekers receive assistance in identifying careers that are a fit with their interests and abilities, finding job leads on ncworks.gov, and gaining job-seeking skills in areas such as resume writing, networking and interviewing. In addition, job seekers are informed of labor market information relevant to their career and job search, as well as occupational skills training opportunities. Employers receive assistance in posting jobs on ncworks.gov, recruiting qualified candidates, setting up employer interview days and locating labor market information relevant to their industries. The NCWorks Career Center Madison is located at the College's A-B Tech Madison site located in Marshall.

Skills Training Employment Program (STEP)

Skills Training Employment Program (STEP) works one on one with SNAP (formerly known as food stamps) recipients within Buncombe County to offer guidance and financial support in attending and successfully completing A-B Tech courses and programs. Clients have the option of participating in occupational skills courses geared toward employment, high school equivalency courses, A-B Tech Job Club program and two-year curriculum courses. Additionally, STEP offers employment services geared toward living wage positions for our clients including hiring events with living wage employers, resume and cover letter development and community based workshops to assist in employment.

Small Business Center & Business Incubation

Small Business Center. The Small Business Center (SBC) is part of the statewide Small Business Center Network (SBCN), a community college-funded initiative with a vision to foster and support entrepreneurship, small business, and economic development in local communities with an emphasis on assisting start-ups, early stage, and at-risk enterprises. The mission of the Small Business Center is to increase the success rate and number of viable small businesses in North Carolina by providing high quality, readily accessible assistance to prospective and existing small business owners, with the goal of job creation and retention. Confidential counseling services and access to resource libraries are free of charge as are the majority of seminar offerings.

Business Incubation Program. Business Incubation at A-B Tech is a dynamic process of entrepreneurial development designed to increase business success through consultation services, coaching, access to shared resources, and either office, wet lab or manufacturing facilities. The purpose of the Business Incubation program is to create a business atmosphere that encourages the development of businesses that promise a public or private good, have the potential to create single or multiple additional jobs and which contribute to the economic development of the region once formally established.

Student Business Incubation Program. The Student Business Incubator Program is an extracurricular activity designed to provide a motivating, supportive environment to A-B Tech students who want to start their own business and guide them toward becoming sustainable, contributing members of a strong economic community. This program is administered by the A-B Tech Small Business Center (SBC) and is located at A-B Tech Enka.

Workforce Continuing Education Programs

Workforce Continuing Education Programs encompass five areas providing education and training for individuals to prepare for new employment or upgrade skills in their current employment. These opportunities are available through single courses or a series of courses specifically designed for an occupation. A significant number of courses are offered to meet licensure or certification requirements.

Business & Hospitality Training helps businesses operate more efficiently, increase productivity, and provide superb customer service - all of which increase profits. The hospitality industry is a multi-billion dollar industry that capitalizes on customer's leisure time and disposable income, providing multiple career options. This program focuses on technology marketing and communications, business office solutions, lodging/restaurant hospitality, craft beverage and outdoor recreation skills. Professional skills gained in this program are comprehensive, allowing flexibility to transfer into any career within a variety of industry sectors. Students can enter into a new career, advance within their current career, or explore emerging technologies that may lead to a career change.

Computer & Online Training encompasses a variety of skills and disciplines including Networking, Accounting, Grant Writing, Teaching & Education, Nonprofit, Business, Computers & Technology and even Healthcare. We offer both on-site and online courses that provide a wealth of knowledge and skills specific to software and operating systems. All online courses have an instructor who is readily available to answer questions via the Discussion Area of the online course. This program is dedicated to helping students enhance their technology skills and attain job placement or advancement.

Health Occupations includes training in healthcare professions such as Nurse Aide I, Nurse Aide II, Medication Aide, Modular Education Program for Activity Professionals, Medical Terminology Made Easy, Phlebotomy, Clinical Massage, Veterinary and Dental Radiology. Students successfully completing the Nurse Aide I program and state exam will be listed on the North Carolina state registry for Nurse Aides. Additional courses are offered to professionals, to include Mental Health First Aid.

Human Resources Development (HRD) classes focus on short-term basic employability skills training such as computer skills, job search, resumes, interviewing and introduction classes about local industry employment needs. These introduction classes highlight the basic skills and education level needed in healthcare, hospitality, manufacturing and other skilled trades to help students make informed decisions about their career choices. Classes are fee waived for unemployed and underemployed adults.

Occupational & Skilled Trades provides training for individuals to prepare for employment in industrial and technical fields, as well as upgrade the skills of individuals in their current career. Classes are available to train Code Enforcement Officials, to conduct Mechanical, Building, Electrical, and Fire Inspections. Courses are offered regularly to meet certification requirements for employment in careers such as automotive, escort vehicle operator, substitute teacher, human services, and electrical contractors. For those who like to work with their hands and enjoy building or fixing problems, hands-on classes are conducted by industry experts for learning blacksmithing, welding, woodworking, HVAC, electrical, and masonry skills. To encourage our community to live more sustainably, workshops are available in permaculture, green building, small scale living, and energy efficiency.

General Admission for Curriculum Students

The College accepts applications online at www.abtech.edu/admissions continuously throughout the school year at no cost to the student. Early application is advised for many programs.

Admissions Policy

It is the policy of the Board of Trustees to maintain an open-door institution, which accepts all applicants who have graduated from high school, hold a high school equivalency (HSE) or adult high school diploma, are at least 18 years of age or older, are emancipated minors, or dual enrollment students. High school graduation or the equivalent from a valid institution or Ability to Benefit (ATB) eligibility is required for Financial Aid purposes.

1. Some academic programs are selective and typically require the high school credential. Admission to these programs is selective in nature or have a seat capacity.

2. Individuals granted Deferred Action for Childhood Arrivals are eligible for admission based on the qualifications and limitations listed below:

    a. Attended and graduated from a United States public high school, private high school, home school and/or adult high school that operates in compliance with state or local laws or completed a high school equivalency diploma.

    b. Must be charged out-of-state tuition and are not considered a North Carolina resident for tuition purposes.

   c. Will be counseled that federal and state laws prohibit states from granting professional licenses.

   d. Must comply with all federal and state laws concerning financial aid.

3. Undocumented immigrants are eligible for admission based on the qualifications and limitations listed below:

   a. Attended and graduated from a United States public high school, private high school, home school and/or adult high school that operates in compliance with state or local laws or completed a high school equivalency diploma.

   b. Must be charged out-of-state tuition and are not considered a North Carolina resident for tuition purposes.

   c. Will be counseled that federal and state laws prohibit states from granting professional licenses to undocumented students.

   d. Students lawfully present in the United States shall have priority over any undocumented immigrant in any program of study when capacity limitations exist.

   e. Must comply with all federal and state laws concerning financial aid.

4. The College will refuse admission to any applicant when it is deemed necessary to protect the safety of the applicant or other individuals. When making this safety determination, the College shall refuse admission to an applicant only when there is an articulable, imminent, and significant threat to the applicant or other individuals. In this case, the College shall document the following:

   a. Detailed facts supporting the rationale for denying admission;

   b. The time period within which the refusal to admit shall be applicable and the supporting rationale for the designated time period;

   c. The condition upon which the applicant that is refused would be eligible to be admitted.

5. The College has an appeals process for applicants denied admission pursuant to this policy.

6. Ability to Benefit (ATB) testing is required to receive Financial Aid in an eligible career pathway program for those students who do not hold the high school credential. Eligible career pathway programs do not include College transfer programs or selective or limited Allied Health programs which require the high school credential for professional or program accreditation or credentialing. Students must consult with an advisor in the K. Ray Bailey Student Services Center before pursuing this option to discuss required College placement assessment score levels which allow ATB to be utilized for financial aid purposes.

7. The College will require proof of eligibility to possess a firearm to enroll in Basic Law Enforcement Training (BLET). Certified local law enforcement agency sponsorship is required for admission to the BLET program. Proof of eligibility for firearm possession will include:

   a. Any current, valid State-issued permit to purchase a firearm;

   b. A current, valid State-issued concealed carry permit from North Carolina;

   c. A current, valid State-issued concealed carry permit from a state with a reciprocal concealed carry agreement with North Carolina;

   d. Proof of an exemption from permit requirements pursuant to G.S. 14-415.25; or

   e. A background check that is determined by the college. The sole purpose of the background check shall be to determine whether an applicant can lawfully possess a firearm in North Carolina pursuant to G.S. 14-269.8, G.S. 14-404(c), G.S. 14-415.1, G.S. 14-415.3, and G.S. 14-415.25

Admissions Procedure

1. Submit an application for admission to the College. Applications are available online at abtech.edu or in paper format on campus. The preferred method of submission is electronic.

2. Complete the online residency application during the college application or go directly to ncresidency.org. Immediately following completion of the residency application, retrieve Residency Certification Number (RCN).

3. Provide the Residency Certification Number (RCN) on college application.

4. Upon receipt of a completed online College Foundation of North Carolina (CFNC) application for admission, staff verifies all data for the applicant in the student file in the NCCCS Colleague computer system. Applicants select their program of interest from available academic programs on the CFNC application. Students may not register within programs for which they do not meet placement or program prerequisites.

5. An electronic file is made for each applicant and all additional supporting documents are linked to this file.

6. Inactive students, who have not attended for two consecutive semesters, excluding summer, will need to do the following:

   a. Complete new college and residency applications by going to abtech.edu.

7. Students who are seeking a degree, diploma or certificate must do the following:

   a. Submit transcripts from other colleges attended if transfer credit is desired.

   OR

   b. Submit official high school transcripts for placement and assessment of college readiness.

   OR

   c. Submit High school Equivalency (HSE) or HiSET test scores.

   OR

   d. Submit satisfactory SAT or ACT test reports.

   OR

   e. Submit Advanced Placement (AAP) or College-Level Program (CLEP) test sores

   OR

   f. If needed, complete placement testing offered at A-B Tech's Testing Center. Placement options can be found by going to https://abtech.edu/future-students/admissions-overview/placement-overview.

   g. Complete New Student Orientation. Degree or diploma completers and visiting students from another institution are waived from this requirement and will receive a new student resource guide via email.

   h. Meet with the faculty, program, or transfer advisor for course selection and program assistance.

   i. Register at designated time.

8. New applicants not seeking to earn a degree, diploma, or certificate must do the following:

   a. Applicants who plan to enroll in English and mathematics classes or in classes for which English or math prerequisites exist must:

      1. Submit appropriate transfer credit from other colleges prior to registering for courses.

      OR

      2. Submit official high school transcripts for placement or college readiness.

      OR

      3. Submit High School Equivalency (HSE) or HiSET test scores.

      OR

      4. Submit satisfactory SAT or ACT test reports.

      OR

      5. Submit Advanced Placement (AP) or College-Level Examination Program (CLEP) test scores.

      OR

      6. If needed, complete placement testing. Placement options can be found by going to https://abtech.edu/future-students/admissions-overview/placement-overview.

   b. Complete New Student Orientation. Degree or diploma completers and visiting students from another institution are waived from this requirement and will receive a new student resource guide via email.

   c. Register at designated time.

9. Some academic programs are selective in nature, due to the high volume of applicants and the limited number of students who can be enrolled in the programs. Selective programs have an application period, which is typically in the fall and spring.

   - Applicants must show college level skills in English and Math. Other standardized tests used for placement purposes in North Carolina or appropriate transfer credits may be used to show college level skills.

   - Complete any prerequisite courses or certifications as required by the intended program of study.

   - Applicants who meet college level benchmarks in English and Math or have appropriate transfer credit, then meet with a student advisor in the K. Ray Bailey Student Services Center to apply during the designated application period.

   - Ultimate selection in the program occurs in the fall and spring semester and is based on the TEAS composite score and designated general education courses, allied health-related education and training credentials detailed in the published admissions criteria for programs with the exception of Nursing which uses the TEAS composite score only. Interested applicants should see a student advisor in the K. Ray Bailey Student Services Center for application information and schedules.

10. Upon determination by the College that admission should be denied to an applicant to protect the safety of the applicant or other individuals because of an articulable, imminent, and significant threat, the following shall be documented, and a letter sent to the applicant stating:

    a. Detailed facts supporting the rationale for denying admission;

    b. The time period within which the refusal to admit shall be applicable and the supporting rationale for the designated time period; and

    c. The conditions upon which the applicant that is refused would be eligible to be admitted.

11. The provisions in this admissions safety exception procedure only apply during the time period prior to an applicant becoming admitted as a student at a community college. Once an applicant is admitted as a student, the Code of Student Conduct will apply.

12. The applicant has the right to appeal any action taken by the College. Any appeal must be in writing and be submitted to the Vice President for Student Services' office within ten (10) College business days. The Vice President for Student Services or their designee will forward the appeal, along with all documentation concerning the matter, to the President whose decision will be final.

13. To comply with federal law and the Department of Education requirements regarding the enrollment of students in distance education, students who reside in California are not allowed to enroll in A-B Tech Distance Education curriculum courses. A-B Tech is a member of the National Council for State Authorization Reciprocity Agreement (NC-SARA) which allows students across the nation to enroll in distance education with the exception of California.

Dual High School Enrollment

The Career and College Promise Program offers structured opportunities for qualified high school juniors and seniors to accelerate completion of college certificates, diplomas, and associate degrees that lead to college transfer or provide entry-level job and/or career skills. Academic credits earned through Career and College Promise shall enable students who continue into postsecondary education, after graduating from high school, to complete a postsecondary credential in less time than would normally be required.

A-B Tech offers four types of Career and College Promise pathways: College Transfer Pathways, Career Technical Education Pathways, Workforce Continuing Education Pathways and Cooperative-Innovative High School Programs.

College Transfer Pathways include at least 30 semester hours of transfer courses, including English and mathematics, that are available to qualified junior and senior high school students.

Career Technical Education Pathways lead to a certificate or diploma aligned with a high school career cluster. These pathways are designed for accelerated high school juniors and seniors who are ready to get a head start on career and technical courses that will lead to a career.

A-B Tech is affiliated with five cooperative-innovative high schools. Two that are early college, one that is focused on career and technical education, one that is a school-within-a-school, and one that is a Science, Technology, Engineering, and Math (STEM) focused school.

Early colleges, statewide, are rigorous programs in which students can earn a high school diploma and associate degree simultaneously. Early college students start in the ninth grade, and can complete the program in five years. A-B Tech has two partner early colleges:

- Buncombe County Early College, located on the main campus of A-B Tech in Asheville.
- Madison Early College High School, located in Marshall.

Buncombe County Center for Career Innovation (BCCI), the School of Inquiry and Life Sciences at Asheville (SILSA) and the Martin l. Nesbitt Jr. Discovery Academy are also cooperative innovative high schools. BCCI is located on the main A-B Tech campus in Asheville. It provides students with a career focused curriculum that promotes completion of credentials, diplomas, and degrees in professional career preparation areas including Health Care, Engineering, and Skilled Trades. SILSA is a four-year high school that is located on the campus of Asheville High School, and the STEM-themed Discovery Academy is located at the Buncombe County Board of Education Building. For more information visit our website www.abtech.edu/ccp or email us at ccp@abtech.edu. You may also reach us by calling a liaison/advisor at: 828-398-7900.

New Student Orientation

In order to make the A-B Tech experience as successful as possible, most incoming curriculum students are required to complete New Student Orientation (NSO). Students can complete the New Student Orientation either in a classroom setting or online. The program will include all necessary tools and resources to help ensure student success. Students can schedule their orientation at abtech.edu/nso. New Student Orientation must be completed before registering for classes. Degree or diploma completers and visiting students from another institution are waived from this and will receive a new student resource guide via email.

Selective and Limited Admission Programs

Due to the high volume of applicants, limited number of available seats, and clinical/resource/lab space availability, certain programs may be designated as selective or limited. These programs include the following:

- Associate Degree Nursing
- LPN to ADN Advanced Placement Option
- Brewing, Distillation, and Fermentation
- Cardiovascular Sonography
- Cosmetology
- Cosmetology Instructor
- Dental Assisting
- Dental Hygiene
- Esthetics Technology
- Esthetics Instructor
- Manicuring/Nail Technology
- Manicuring Instructor
- Medical Assisting
- Medical Laboratory Technology
- Medical Sonography
- Occupational Therapy Assistant
- Paramedic to Associate Degree Nursing Option
- Practical Nursing
- Radiography
- RIBN - Nursing
- Surgical Technology
- Veterinary Medical Technology

These programs have separate application periods and specific admission requirements and procedures. Those interested should contact a Student Advisor in the K. Ray Bailey Student Services Center or by email at Advising@abtech.edu for specific instructions and application procedures. Distance services are available for students living outside of Buncombe County or its adjacent counties by contacting Advising@abtech.edu

Overview of Placement and Assessment of College Readiness

The purpose of placement and assessment is to match the academic readiness of incoming students with academic requirements of the curriculum. Incoming students for all degree and diploma programs are required to provide evidence of college readiness using one of the approved methods listed below. Unclassified students (those not enrolled in a degree or diploma program) are also required to provide evidence of college readiness if they desire to take a mathematics or English course, or any course for which math or English are prerequisites. Students are required to take the courses into which they place.

Options available to assess college readiness include the following:

- Certain GED® and Hiset® scores may be eligible for placment. Contact admissions to determine if your scores are eligible.
- Placement using unweighted high school GPA. An official high school transcript must be submitted.
- Placement using the college placement testing, offered at A-B Tech's Testing Center. Students are encouraged (but not re- quired) to take the math and English assessments in separate sessions.
- Placement using the submission of college-ready scores from one or more of the following alternate assessments (please note that scores below college-ready benchmarks will not be accepted): SAT; ACT; Accuplacer. Official copies of test scores must be submitted.
- Placement using transfer credit from a regionally accredited institution for college-level English (Expository Writing equivalency) or mathematics (Statistics, Quantitative Literacy, or Pre-calculus equivalency). Official transcripts and a grade of "C" or higher are required.
- Placement using successful completion of acceptable developmental education courses from a North Carolina Community College. Official transcripts are required.

Students who have previously taken the NC-DAP assessment may be eligible to take the college placement test. Students who did not place at college-level using NC-DAP and who have not yet completed acceptable developmental education courses may be required to take the college placement test to determine appropriate placement.

Placement using A-B Tech course credit for transfer credit for English and Math, RISE, or assessment scores do not expire. After ten years, if math or English courses have not been completed successfully, a student is required to be re-assessed using one of the methods listed above.

Alternate testing formats are available to individuals with disabilities upon request to Support Services. Students requesting accommodations should allow at least one week for arrangement of accommodations.

Students submitting high school transcripts should submit them to: Admissions Office, 340 Victoria Rd., Asheville, NC 28801. College transcripts should be sent to: Records and Registration, A-B Tech Community College, 340 Victoria Rd, Asheville, NC 28801.

Students applying for admission to limited or selective enrollment programs should consult the program admissions information in the Admissions section of the College website at abtech.edu/selective–limited-programs. This information is also available in the K. Ray Bailey Student Services Center or via email at Advising@abtech.edu.

Scheduling an Assessment

Students may schedule the college placement test by emailing testingcenter@abtech.edu. Students must present a picture I.D. to take the assessment. Students are encouraged to meet with a Student Advisor in the Bailey Building or their Program Advisor for an explanation of assessment results and course placement.

A-B Tech ID Cards

A-B Tech issues student ID cards to current students in the K. Ray Bailey Student Services Center. ID Cards can be produced with an unexpired application on file, class registration, and a current government-issued photo ID card (driver's license, passport, military ID).

After receiving an A-B Tech ID card, please take it to the Locke Library to be activated in the Library's database. With their library-activated photo ID card, students can check out materials, use the research computers, and access reserve items. Students must present the card each time they wish to check out library materials. The ID card must be presented in order to use college printing services.

The A-B Tech ID card can be used as identification for voting purposes. A-B Tech cards printed after 1/1/2024 can be used during elections. More information about voting can be found at voterid@ncsbe.gov.

Transfer Credit, Credit-by-Exam, Articulated Credit, CLEP and Advanced Placement Credit, Continuing Education and Licensure Credit

No more than 75% of credits required for a degree, diploma or certificate program may be awarded through alternative credit options listed in this section. To complete a degree, diploma or certificate program, the student must successfully complete 25% of the required credit hours for the respective program through A-B Tech curriculum coursework.

Transfer Credit from Other Institutions

Asheville-Buncombe Technical Community College will accept credit transfer from institutions recognized by a regional accrediting agency. A-B Tech will also consider transfer credit from non-regionally accredited institutions of higher education for only career and technical courses if the institution is accredited by an organization recognized by the Council for Higher Education Accreditation. Transcripts must be unopened and officially issued by the credit granting institution. Credit may be awarded for appropriate military courses. Students must submit a curriculum application before transfer credit is evaluated. Credit obtained outside the U.S. or any U.S. Territory must be evaluated by an educational credential evaluation service that is a member of the National Association of Credential Evaluation Services (NACES). Students should contact internationalinfo@abtech.edu for more information.

Only grades of "C" or better will be considered for transfer. College-level courses awarded the grade of "Pass" at another institution will only be transferred to A-B Tech if it is clear that the grade of "Pass" indicates a grade of C or better of if A-B Tech offers that particular course only as Pass/Fail. Credits will be evaluated in the context of the current catalog. The Office of Records and Registration in consultation with Department Chairs will determine the appropriate A-B Tech course credit to award. Some departments may require a skills assessment before transfer credit is awarded. In such cases the decision of the department is final.

Credit will be assigned without quality points and will not be calculated into the student's A-B Tech grade point average. If a transferred course is also taken at A-B Tech, the local grade will be calculated in the grade point average.

Credit by Examination (Proficiency Testing)
Students who can provide tangible evidence of preparation to challenge a course, such as a transcript of similar college-level credits, record of military study, certification or license, standardized test scores or written statements from employers regarding training or directly related work experience indicating that they may be proficient in a subject, may request credit by examination. A written request must be made to the appropriate department chairperson on a form obtained from the Office of Records & Registration. This test must be administered immediately after the 10 percentage point of the class in the semester.

Examinations are comprehensive and must be approved by the supervisor of the instructor administering the exam. The examination may be oral, performance, written, or a combination of these methods. To receive credit by examination, the score must be above average ("A" or "B"). A grade of "A" or "B" will be posted on the transcript of the student who successfully completes the examination. The decision of the examining instructor is final.

No student may request a second test for Credit by Examination in the same course or request Credit by Examination in a course after receiving any recorded grade for that course. Exceptions must be approved by the Vice President of Instructional Services.

Procedure:

1. Enroll as a credit student in the course to be challenged and pay tuition. There is no extra charge for full-time students who are taking at least 16 credit hours of non self-supporting coursework.

2. Present evidence of proficiency, complete the written request form, and have the request approved prior to the 10 percent point of the semester (or 10 percent of the minimester session).

3. Remain enrolled and attend class until the examination is administered. During this period, students who have written approval for the exam may attend class without purchasing textbooks and materials. If books are purchased and returned for refund, they must be in new condition.

4. Students who are very confident of passing the exam may request a course overload.

5. Students who perform on the exam at a level sufficient to get credit may leave the course and will be awarded a grade of "A" or "B" for the course. Receiving credit does not entitle the student to a tuition refund. Students who do not achieve an "A" or "B" on the proficiency exam are encouraged to remain in the class as a regular student.

6. Students who receive financial assistance of any type are required to inform the director of their assistance program that they are seeking credit by exam. Assistance may be reduced and reimbursement will be required if the course load is reduced by receiving credit by examination.

Any exceptions to these procedures must have prior written approval by the appropriate Department Chairperson, Division Dean, and the Vice President of Instructional Services.

Articulated Credit
College credit may be awarded for high school courses if conditions of the Regional Articulation in Career Education (RACE) are met. Students must see the Records and Registration office in the K. Ray Bailey Student Services Center.

Advanced Placement and CLEP Credit
Advanced Placement (AP) scores of 3 or higher will be used to grant college equivalent credit. CLEP scores of 50 or higher will be considered for awarding college credit.

Licensure and Certification Credit
A-B Tech awards curriculum credit for select licensure and certifications. Contact the office of Records and Registration for a list of the licensures and certification that are eligible for course credit.

Continuing Education
Continuing education credits may be considered for curriculum course equivalency. The Department Chairperson responsible for the respective course, or his/her designee, must approve the awarding of credit for continuing education coursework. Such approval will include a review of the continuing education work to ensure that course outcomes are met. The student must be enrolled in a program of study for which the respective course is included.

CR (equivalency credit) will be assigned for the curriculum course. The course will be used to satisfy requisites and applied toward completion of any and all programs containing the course. Continuing education credit may not be used once the respective curriculum course has been attempted at the College.

International Applicants

A-B Tech has been approved to issue I-20 forms for qualified international applicants seeking certain diplomas or associate degrees in F-1 or M-1 visa status. A-B Tech does not issue I-20 forms for continuing education programs, English Language Acquisition classes, or curriculum certificate programs. International applicants must show proficiency in the English language.

International applicants should submit all admission credentials together. The A-B Tech online application, written international application, Test of English as a Foreign Language (TOEFL) scores, college transcripts and English translations (if interested in transfer credit), and affidavits of financial support with supporting documentation are all necessary for an admission decision. Applications must be received by the following deadlines for consideration: June 1 for Fall semester; October 1 for Spring semester; March 1 for Summer semester.

To demonstrate English proficiency, international applicants whose native language is not English must take the TOEFL or an equivalent assessment. The applicant must score at least 60 on the internet-based TOEFL (with no less than 15 on any section). Applicants already in the Asheville area may substitute the North Carolina Diagnostic Assessment and Placement Test.

International applicants must also certify their ability to pay for out-of-state tuition, fees, books, supplies, transportation, and living expenses for at least one full year of study. Medical insurance is not required at this time but is highly recommended for all international applicants.

International applicants should contact an International Student Advisor in the K. Ray Bailey Student Services Center for further information about admission. Email inquiries should be addressed to: advising@abtech.edu.

Tuition and Expenses

North Carolina Residency

In order to qualify for the resident tuition rate, North Carolina law (G.S. 116-143.1) requires that a legal resident must have maintained domicile in North Carolina for at least the 12 months immediately prior to classification as a resident for tuition purposes. The student cannot qualify for in-state tuition if he or she is claimed as a dependent by a parent or guardian who is not a N.C. resident.

Proof of residency can include being employed within the state of North Carolina, paying NC taxes, having a current NC driver's license, and voting in NC.

A-B Tech uses a centralized process for residency determination known as the Residency Determination Service (RDS) at the direction of North Carolina law. All students are required to have a residency determination from RDS. It is the student's responsibility to provide documenting evidence or change of residency status to RDS.

NOTE: The out-of-state tuition rate is charged automatically to students who have not completed the RDS process.

To learn more about residency go to www.NCresidency.org.

Tuition

Fall, Spring, and Summer Semester:

N.C. residents per semester	$1,216.00
Nonresident of N.C. (16 or more credit hours)	$4,288.00
N.C. residents per credit hour per semester	$76.00*
Please note: Tuition is subject to change.	
Nonresident of N.C. per credit hour per semester (fewer than 16 credit hours)	$268.00
Return Check Charge	$25.00

** Tuition is subject to change by the state legislature.*

Student Activity Fees

The student activity fee of $40 will be charged to all online students and students enrolled on the A-B Tech main campus, Fall and Spring only. Career and College Promise (CCP) students are excluded.

Computer Use and Technology Fee

The State Board of Community Colleges has established a computer use and technology fee to support the procurement, operations and repair of computer and other instructional technology, including the supplies and materials that support the technology. This fee is set annually by the Board of Trustees and is $48 per semester for curriculum students and $5 per course for occupational continuing education classes.

Printing Fees

Students are allowed 100 black-and-white copies at no charge per semester. Additional black-and-white copies are $0.08 per page. Color copies are charged at a rate of $0.15 per page.

Consumable Supply Fee

Certain courses have additional fees attached to them to pay for consumable supplies not covered by tuition. Consumable fees for academic programs will vary by class.

Student Accident Insurance

A group policy, providing supplemental accident insurance, is maintained by the College and students are required to subscribe to such coverage. The cost of accident insurance to the student will not exceed $2 per semester.

Matriculation Fee

A $20 Curriculum Matriculation fee will be charged to all curriculum students each semester, with the exception of Career and College Promise (CCP) students.

CAPS Fee

The Campus Access, Parking and Security fee is $30 per semester for curriculum students and $10 per course for Continuing Education Students.

Transcript Fee

$5.00 Electronic Transcript (delivered by third party vendor)

$7.50 Standard hard copy transcript (delivered by third party vendor)

$33 Overnight Delivery (delivered by third party vendor)

$10.00 On-demand transcript (A-B Tech walk-ins)

Rates vary depending on location for International delivery (delivered by third party vendor)

Additional Costs

Students should be prepared to incur additional estimated expenses during the academic year (two semesters and summer term) as follows:

Allied Health	
Books	$900-1,900
Supplies	$200-1,000
Arts and Sciences: A.A., A.E., A.S., A.F.A.	
Books	$1,200-2,000
Supplies	$150-600
Business and Hospitality Education	
Books	$1,000-2,500
Supplies	$200-1,000
Emergency Services	
Books	$900-1,900
Supplies	$200-1,000
Engineering and Applied Technology	
Books	$700-1,000
Supplies	$200-1,100
Academic Success and Public Service	
Books	$1,000-1,500
Supplies	$200-1,000

The cost of books and supplies varies from year to year by curriculum due to price changes, curriculum changes, and instructor preferences. For purposes of definition, the following items may be classified as supplies: pen, pencils, paper, notebooks, instruments, student kits, uniforms and shoes, rental of uniforms, safety equipment, hand tools, calculators, lab coats, membership dues, and pins. Students will incur most of the supply costs for their curriculum during the first semester of study. Students are encouraged to consult with their department chairperson for actual costs of supplies for their curriculum. Prior to the purchase of a calculator for use in class, students should consult with their instructor.

Tuition and Fee Refunds

The tuition policy is set by the State of North Carolina and is subject to change. A 100% refund shall be made if a student drops the class(es) in Self-Service or by visiting Student Services in the Bailey Building prior to the start-date of the class that is published on the student’s schedule in Self-Service. For example, if a class’s published start-date is August 20, the student must drop the class by 11:59 p.m. on August 19 to be eligible for a 100% refund, regardless of what date the class meets for the first time. Also, a student is eligible for a 100% refund if the class in which the student is registered is canceled.

A 75% refund shall be made if the student officially drops the class(es) prior to or on the official 10% point of the term. Insurance, technology, student activity, and curriculum matriculation fees are not refundable. Federal regulations, if different from above, will overrule this policy.

Students registered for more than 16 credit hours are not charged additional tuition for those credits. Therefore, only hours dropped below a total of 16 credit hours are eligible for a refund.

Tuition Refund Process

To be eligible for a tuition refund the student must:

1. Register and pay tuition and fees.
2. Officially drop the class on or before the 10% point of the term in one of the following ways:
   a. By dropping the class online in Self-Service.
   b. By having a Student Services staff person process the drop. The student is responsible for ensuring this has been done by the appropriate deadline.

Financial Aid

The purpose of the financial aid program at Asheville-Buncombe Technical Community College is to provide financial assistance to students who would otherwise be unable to attend the College. The program is committed to the philosophy that no eligible student should be denied access to a higher education due to a lack of financial resources. Students who submit a FAFSA will be considered for grants, loans, scholarships, and student employment opportunities. Financial aid is generally awarded to students on the basis of need and academic merit. Students desiring financial aid for an academic year (August through May) are encouraged to apply early (January through March) to be given priority consideration for the funds available. It is important for students to know that it may take 2 to 3 weeks to process the application.

Application Procedure

In order to be considered for financial aid, a student must complete a Free Application for Federal Student Aid (FAFSA) online at www.studentaid.gov. Alternative accessible application formats will be made available to individuals with disabilities upon request to the ADA Coordinator or the Financial Aid Office.

Students will need an FSA ID to complete the FAFSA. The FSA ID may be created by visiting fsaid.ed.gov. When visiting the website, students will be given explicit instructions. Assistance is also provided by the Department of Education at 1-800-433-3243. TTY users (hearing impaired) may call 1-800-730-8913.

For dependent students who must include contributor information on the FAFSA, at least one contributor must also apply for an FSA ID. Dependent students are required to have a contributor sign the FAFSA. When visiting the website, students will be given explicit instructions. Assistance is also provided by the Department of Education at 1-800-433-3243. TTY users (hearing impaired) may call 1-800-730-8913.

The Financial Aid Office offers FAFSA assistance throughout the academic year. Students may schedule a FAFSA by Appointment session at abtech.edu/financial-aid.

There is a FAFSA worksheet that students may complete prior to completing the application online. Worksheets will be available at their local high school or college. They may also print the worksheet from the www.studentaid.gov website.

When students log into studentaid.gov, they will be advised on the documentation they must have to complete the FAFSA. A complete and accurate application will prevent delays in processing their financial aid. When completing the FAFSA, students and contributors should give consent to and approval for the Department of Education to retrieve federal tax information automatically from the IRS. The college code for A-B Tech is 004033.

Students should make sure they receive and retain a copy of the confirmation number when their FAFSA is submitted. After the Department of Education processes the application, an electronic file will be transmitted to the A-B Tech Financial Aid Office for processing.

Additionally, when the FAFSA is processed, the student will receive their FAFSA Summary by email or a hard copy of the report may be mailed.

It is important for students seeking financial aid to complete the A-B Tech enrollment process and be admitted into a financial aid eligible academic program.

All correspondence from the Financial Aid Office is sent to students via their A-B Tech student email account. All students who apply to A-B Tech are automatically assigned a student email account.

Information regarding how to access the student email account can be found online at abtech.edu. It is the student's responsibility to check their student email regularly for information regarding missing financial aid documentation, class information, registration, billing status, etc.

After the financial aid file is completely processed, students can go to their Self-Service account to view their offer letter, which displays how much and what types of financial aid they will receive. It is important for students to remember that the offer letter is based on a full-time enrollment status. Financial aid awards will be adjusted for all students who are enrolled in a less than full-time enrollment status. Students can access their Self-Service account from the A-B Tech website at abtech.edu.

Visit abtech.edu to find all of the web links mentioned above, as well as other helpful resources. Computers are available for student use in the K. Ray Bailey Student Services Center.

Students seeking additional information about financial aid at A-B Tech are urged to contact the Financial Aid Office in the K. Ray Bailey Student Services Center.

Important Pell Grant Information: Eligible students may receive the Pell Grant for the equivalency of 12 full-time semesters, or 600%, per federal regulations.

Types of Financial Aid Processed by the Financial Aid Office:

- Pell Grant (Maximum eligibility: the equivalency of 12 full-time semesters or 600%)
- Federal Supplemental Educational Opportunity Grant
- William D. Ford Federal Direct Loan Program*
- Federal Work Study Program
- NC Scholarship(Not awarded during the summer semester)
- A-B Tech Foundation Scholarships
- A-B Tech Enrollment Scholarships

* Students must be enrolled in a minimum of 6 in-program credit hours as part of the eligibility requirements for these awards.

Anticipated Financial Aid Disbursement Dates:

- Fall Semester-Late September
- Spring Semester-Late February
- Summer Semester-Mid June

BankMobile

A-B Tech has partnered with BankMobile Disbursements to disburse financial aid and tuition refunds. After students have registered for classes, a Refund Selection Kit will beemailed to their student email. All students will be provided two options to receive their disbursement through BankMobile. More information can be found on the Financial Aid Office website.

Financial Aid Satisfactory Academic Progress (FASAP) Policy

According to federal regulations, students receiving financial aid must maintain Financial Aid Satisfactory Academic Progress (FASAP). The Financial Aid Office at Asheville-Buncombe Technical Community College monitors a student's academic progress as a condition of eligibility when the student applies for financial aid and at the end of each Spring Semester. These requirements are applied to a student's entire academic history at A-B Tech, including transfer hours from other schools that apply to the student's program and including periods when financial aid was not received (e.g. courses taken through A-B Tech in high school). A student is considered to be making Financial Aid Satisfactory Academic Progress when the following three requirements are satisfied:

1. **Qualitative Standard (Cumulative Grade Point Average) –** A student must maintain a minimum cumulative grade point average of 2.0.
2. **Quantitative Standard (Completion Rate) –** A student must maintain a minimum cumulative completion rate of 50% between 1-29 completed hours. A student must maintain a minimum cumulative completion rate of 67% with 30+ completed hours.
3. **Maximum Timeframe –** A student must successfully complete the program of study within its timeframe. Federal regulations specify that the timeframe may not exceed 150% of the published length of the program. When students exceed the timeframe for their programs of study, they are no longer eligible to receive financial aid. However, students can submit an appeal to the Financial Aid Appeals Committee to have their eligibility extended if there are extenuating circumstances.

Monitoring Financial Aid Satisfactory Academic Progress. A-B Tech will monitor Financial Aid Satisfactory Academic Progress using the chart below.

Credit Hours Attempted*	Minimum Cumulative Completion Rate**	Minimum Cumulative GPA Required***
1-29	50%	2.0
30+	67%	2.0

FASAP Status

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Monitoring FASAP occurs once annually after the spring semester. The exception to this is if a student is ONLY in a certificate or diploma that requires less than one year to complete. Those individuals will be calculated after each semester.

Every course attempted with a final grade or transferred into the College will be factored into the SAP calculation

Passing grades are: A, B, C, D, P, P1, P2

Failing grades are: F and R

Courses attempted but not completed are: I and W

Courses transferred from another institution are courses attempted and completed but carry no weight in the GPA are: T, TR

Students may repeat a course until it is completed with a passing grade, however, each attempt is factored into the FASAP Calculation.

At the end of the spring semester the College will check the FASAP of all students who received aid over the past year. Students will enter one of the following statuses after the calculation:

Satisfactory – The student is meeting the above listed terms and remains eligible for aid.

Suspension – The abovementioned terms have not been met and eligibility has been lost (students in this category are eligible for appeal.)

Continued Probation – The student has appealed and has met the terms of probation but has not reestablished FASAP conditions.

Termination – The student was on a probation plan and failed to meet the terms of the probation (students in this category are not eligible for appeal.)

Students will receive an e-mail to their student e-mail account and a banner notification in their student self-service portal notifying them of their standing immediately after the FASAP calculation has been completed.

Students in a suspension status are eligible to appeal. A successful appeal will outline the mitigating circumstances that prevented the student from being successful with documentation that supports the student's claim from an official source (doctor's office, counselor, or other professional). Documentation submitted from a friend or parent is not acceptable. Once this portion of the process is reviewed, the student is referred to a counselor to establish a success plan that will help the student reenter FASAP as quickly as possible. Once this plan is approved by the Financial Aid Office the student is moved to a Probation status for the next scheduled semester. The student is required to attend in that term. If they do not, the account is reverted to a suspension status and the student is eligible to appeal again.

Key points to remember regarding the FASAP policy and maximum timeframe

Since the timeframe sets the limit for the number of credit hours a student may attempt and remain eligible to receive financial aid, it is very important that the student plan class schedules carefully with his or her academic advisor and/or the Student Services Advising staff. It is the responsibility of the student to register only for classes listed in his or her chosen program of study and for scheduling only the number of hours he or she is capable of completing. **SOME STUDENTS WILL BE REQUIRED TO TAKE PROVISIONAL (DEVELOPMENTAL) COURSES, WHICH WILL ALSO BE COUNTED AS HOURS ATTEMPTED.** Students are responsible for knowing the policy concerning the limitation on hours attempted for financial aid purposes. Registering for more courses than a student is capable of completing, having to withdraw from classes, registering for courses for which the student has already received credit, taking courses in error, etc. All impact the timeframe and could result in losing financial aid eligibility before completing a program of study.

The timeframe is cumulative; therefore, by switching programs without completing the initial program, the student runs the risk of losing financial aid eligibility.

The timeframe begins when the student first attends the College and continues until that student successfully completes a program of study regardless of the number of years that may elapse between enrollment periods.

Only students who successfully complete a program of study will have attempted and completed credit hours from earning a degree, diploma, or certificate deducted from the maximum timeframe calculation for the next program of study.

*Students may only complete two programs of study within a five-year period receiving financial aid (the five year period will be considered from the time a degree is completed). This rule may not be appealed. All programs of study, with exception of GOT A.A.S., completed more than five years from the time of initial degree completed can be subtracted from the calculation.

Students who take course work in a financial aid ineligible program of study will have those hours attempted added to their timeframe if and when they enter a financial aid eligible program of study.

Students accepted into a program of study who are required to take developmental course work, as determined by placement assessment results, will have the credit hours attempted for such course work count toward their maximum timeframe. (Financial aid can only pay for 30 credit hours of developmental course work.)

The credit hours for course incompletes, withdrawals, and repetitions will be counted as hours attempted toward the timeframe.

Credit hours transferred from other institutions of higher education will be counted toward the maximum timeframe of eligibility only if they count towards the current program of study. Prior degrees earned will be taken into consideration when determining transfer hours.

Students who wish to double major (attempt two programs of study at once) may appeal to the Financial Aid Office to do so. The Financial Aid Office will determine an adequate timeframe for the multiple programs.

*Students may only complete two programs of study within a five-year period receiving financial aid (the five year period will be considered from the time a degree is completed). This rule may not be appealed.

Credit hours attempted will be cumulative and will include all hours for which the student was enrolled as of the 10 percent point (the point at which a student cannot drop a course for a partial refund, and must receive a W grade) of each academic term, or for which the student received a grade. The census date is defined as the 10 percent point of a semester. Students have the right to drop courses during this period.

Credit hours completed with grades of A, B, C, D, T, TR, CR, P, or AP only will fulfill this requirement. Grades of F, R, I, W, IE, WE and Y will not fulfill this requirement.

Cumulative GPA is calculated by dividing the total number of quality points earned by the total credit hours attempted for which the student received grades of A, B, C, D, F, P, R, and U.

The second quantitative standard, referred to as the maximum timeframe, will be measured independently of the monitoring chart. For each program of study, a maximum timeframe will be calculated by taking the total credit hours required for the program of study as outlined in the College catalog and multiplying the total by 150 percent. Timeframes will vary from program to program.

All classes taken at A-B Tech that appear on the College curriculum transcript are included in FASAP calculations (this includes courses taken through Early College, Middle College, and/or High School Dual Enrollment).

Transfer courses may be deducted from the calculation if they do not count towards the program of study, however, courses cannot be deducted if they are considered a prerequisite for a course in the program.

If at any point it is determined that a student cannot complete their program of study within the maximum timeframe, the student's aid will be suspended.

Federal Return of Title IV Funds Policy; Financial Aid for Students Who Withdraw or Drop Out. The Higher Education Act of 1965, as amended Oct. 1, 1998, allows institutions participating in any Title IV program (e.g., Pell Grant, Direct Loan Program, etc.) to implement the policy and make a “good faith effort” to enforce it prior to the writing of the final regulations, which became effective on October 7, 2000.

The law focuses on the return of Title IV Funds received for the semester the student was enrolled if that student completely withdraws or partially withdraws (terms with modules) from the College prior to the 60 percent point of the semester.

If a student withdraws after the 60 percent point of the semester or minimester, the student will be considered to have earned all funds disbursed and no return of funds will be required unless a student had received a loan that was subject to repayment under the terms of the loan.

Any student who decides to completely withdraw, or stop attending classes at the College during a semester, and who has been disbursed Title IV funds may be required to repay a portion of those funds to the Department of Education and/or the College based on the federal calculation. Returns for funds are calculated in the following order:

1. Unsubsidized Direct Loans
2. Subsidized Direct Loans
3. Direct Plus Loans
4. Federal Pell Grants
5. FSEOG

Students are determined to be completely withdrawn when they officially withdraw from all registered courses OR when the College determines students are no longer attending classes. A-B Tech does not require that courses have an attendance policy. As such, if a student receives a failing grade in all courses (or a combination of failing grades and withdrawals) the College will attempt to verify the last date an assignment was submitted. If that date cannot be determined, the College will use the 50% point to complete the calculation. If the 50% point is used and the student attended more than 50%, the student may contact the Financial Aid Office to provide proof of course attendance past 50%. Aid is considered earned after the 60% point of a semester. It is possible that the student may owe the Department of Education directly based on the number of days attended. Breaks of five days or more will be excluded from the calculation when determining how many days the student attended. If this occurs, the balance will not be covered by A-B Tech and the student will need to pay The Department of Education directly. Students are given 45 days from the date of an official withdrawal or 30 days from the end of the payment period for an unofficial withdrawal to return funds.

If the student completely withdrawals prior to disbursement, the College will complete a calculation to determine how much aid was earned (this is called a post-withdrawal disbursement). If the student was packaged loans, those amounts will be prorated and offered to the student within 30 days. The student will have 14 days from the date of the offer to accept or decline. If the student does not accept within 14 days, the College will assume the offer for loans was declined. Federal Pell Grant and FSEOG awards (federal grants) will be processed and disbursed within 45 days. Any amount will first be applied to the student's balance with the college with residual funds disbursed to the student if any remain within 14 days. Funding will be returned by the College to the Department of Education within 31 calendar days.

Scholarships and Other Financial Aid Information

A-B Tech offers a variety of enrollment and foundation scholarships each academic year. There are eligibility requirements for these scholarships. Students should visit the page for details on the types of scholarships offered and instructions for applying. Students are also encouraged to seek out scholarships offered by clubs and organizations in their communities.

- Early March: Students should have the Free Application for Federal Student Aid (FAFSA) at www.studentaid.gov completed.
- Early January: Students may apply for Enrollment and Foundation scholarships.
- Late March: Online application for Foundation scholarships will close.
- Late May/early June: Scholarship notifications are sent to students via email.

Students may access scholarship criteria on the financial aid website.

Recommended Sites

- www.finaid.org: Students can access FASTWEB, which contains a database of more than 180,000 scholarships.
- www.ncseaa.edu: Scholarships are available to North Carolina residents through the North Carolina State Education Assistance Authority.
- www.cfnc.org: Provides students with information about scholarships, loans, and other programs.
- www.nasfaa.org: Parents and students can find an assortment of information about financial aid.
- www.studentloans.gov: Students can find a significant amount of information pertaining to the William D. Ford Federal Direct Loan Program.

Education Tax Credits

Community college students are eligible to receive education tax credits that can reduce the expense of their education. The credits are based on education expenses paid for them, their spouse, or their dependents.

American Opportunity Credit

Under the American Recovery and Reinvestment Act (ARRA), more parents and students qualify for a tax credit, the American opportunity credit, to pay for college expenses.

The full credit is available to individuals whose modified adjusted gross income is $80,000 or less, or $160,000 or less for married couples filing a joint return. The credit is phased out for taxpayers with incomes above these levels. These income limits are higher than under the prior Hope and existing lifetime learning credit. Many of those eligible qualify for the maximum annual credit of $2,500 per student.

The Lifetime Learning Tax Credit

The lifetime learning credit helps parents and students pay for post-secondary education.

For the tax year, you may be able to claim a lifetime learning credit of up to $2,000 for qualified education expenses paid for all students enrolled in eligible educational institutions. There is no limit on the number of years the lifetime learning credit can be claimed for each student. However, a taxpayer cannot claim both the American opportunity credit and lifetime learning credits for the same student in one year. Thus, the lifetime learning credit may be particularly helpful to graduate students, students who are only taking one course and those who are not pursuing a degree.

This is provided for informational purposes only. For detailed tax information, please consult a tax advisor. Information is also available at **http://www.irs.gov/Credits-&-Deductions**

Contact Information:
Financial Aid Office
340 Victoria Road
Asheville, NC 28803
828-398-7900 (office)
FinancialAidOffice@abtech.edu
www.abtech.edu/financial-aid

Scholarships

A-B Tech offers a variety of enrollment scholarships each year. There are certain requirements for these scholarships. Students should check with the Financial Aid Office at 398-7162 for an application and additional information regarding these scholarships.

All students are encouraged to seek out scholarships offered by clubs and organizations in their communities.

An excellent source for scholarships is located on the World Wide Web. Students can visit www.finaid.org and use the free scholarship search, FASTWEB. FASTWEB alone contains a database of more than 180,000 scholarships. The website of the North Carolina State Education Assistance Authority (www.ncseaa.edu) lists scholarships available to North Carolina residents only.

The Asheville-Buncombe Technical Community College Foundation

The Asheville-Buncombe Technical Community College Foundation awards scholarships annually.

January 7 – Online applications are available at www.abtech.edu/scholarships.

March 15 – Students applying for scholarships requiring the establishment of financial need should complete the Free Application for Federal Student Aid (FAFSA) at www.studentaid.gov.

March 29 – Online application for scholarships closes and all reference forms must be submitted by 5 p.m.

June 3 – Scholarship awards sent to students via email.

For additional information about the Foundation, please call 398-7562.

Other financial aid information

In addition to scholarships, information about grants, loans and work programs are also available on the internet. Some recommended sites are:
www.ed.gov
www.cfnc.org, Provides comprehensive information about scholarships, loans, and other programs/issues.
www.nasfaa.org, Click on “Students, Parents & Counselors”.
www.studentloans.gov, Federal student loans

Veterans’ Educational Benefits

The Veterans’ Coordinator helps incoming veterans and dependents of veterans process their requests for benefits. The Veterans’ Office is located in the K. Ray Bailey Student Services Center. Individuals applying for veteran’s benefits must meet all entrance requirements and are required to meet the College’s Standards of Academic Progress as they progress through their programs. In addition, the VA requires that the student provide transcripts from all prior education, including high school and any other colleges. Failure to meet these standards will result in loss of veteran’s educational benefits. For more information, the Veterans’ Coordinator can be reached at veteranservices@abtech.edu.

Student Rights and Responsibilities

A-B Tech is fully committed to providing a learning environment that is safe, nurturing, and free from prohibited discrimination. While advisors, deans, instructors, administrators, and other College officials assist students in becoming acquainted with College regulations, including rights and responsibilities; ultimately, students must assume final responsibility for being acquainted with College policy and procedures. A-B Tech recognizes the rights of students and is dedicated to resolving student complaints in a timely, fair, and reasonable manner as outlined in this section of the catalog. Any student, including those participating in online/distance courses and high school dual enrollment courses offered at any A-B Tech site may file a complaint and request a review. Students unable to attend hearings in person may request electronic options throughout the respective appeal process. For the most up-to-date version of College policies and procedures, please visit abtech.edu.

Non-Discrimination and Harassment Policy

It is the policy of the A-B Tech Board of Trustees that the College is fully committed to providing a learning and work environment that is free from prohibited discrimination. The College does not practice or condone discrimination or harassment based on race, color, national origin, religion, sex, sexual orientation, gender identity or expression, pregnancy, disability, genetic information/medical history, age, political affiliation or veterans' status in the administration of any of its academic programs and employment practices.

Inquiries or complaints concerning possible discrimination or harassment should be referred to the following offices:

Discrimination and harassment for students, please contact:

Office of the Vice President for Student Services

340 Victoria Road, Asheville, NC 28801, (828) 398-7484

Sexual Misconduct for students (including discrimination or harassment related to sex, sexual orientation, gender identity or expression, or pregnancy), please contact:

Director of Title IX Compliance

340 Victoria Road, Asheville, NC 28801, (828) 398-7932

Discrimination and harassment for employee (including Sexual Misconduct), please contact:

Office of the Executive Director for Human Resources

340 Victoria Road, Asheville, NC 28801, (828) 398-7178

For more specific information, related to Sexual Misconduct (both student and employee), refer to Sexual Misconduct Policy and Procedures #112.

Non-Discrimination and Harassment Procedure

Non-Discrimination Statement

The A-B Tech Board of Trustees and administration are fully committed to encouraging and sustaining a learning and work environment that is free from prohibited discrimination. The College does not practice or condone discrimination based on race, color, national origin, religion, sex, sexual orientation, gender identity or expression, pregnancy, disability, genetic information/medical history, age, political affiliation or veterans' status in the administration of any of its academic programs and employment practices.

For allegations of discrimination or harassment related to sex, sexual orientation, gender identity or expression, or pregnancy, please refer to the Sexual Misconduct Policy and Procedure #112.

Statements of Prohibition

Prohibition of Retaliation

The College strictly prohibits punishing students or employees for asserting their rights to be free from discrimination or harassment. Retaliation against any person participating in connection with a complaint of discrimination or harassment is strictly prohibited. Reports of retaliation will be addressed through this procedure and/or other applicable College procedures. Retaliation includes, but is not limited to, any form of intimidation, punitive actions from authority figure or peers, reprisal (acts of vengeance) or harassment. Retaliation is a serious violation and should be reported immediately. The College will take appropriate disciplinary action against any employee or student found to have retaliated against another.

Prohibition of Providing False Information

Any individual who knowingly files a false report or complaint, who knowingly provides false information to College officials, or who intentionally misleads College officials involved in the investigation or resolution of a complaint may be subject to disciplinary action including, but not limited to expulsion or employment termination. The College recognizes that an allegation made in good faith will not be considered false when the evidence does not confirm the allegation(s) of discrimination or harassment.

Individuals Requesting Accommodations

Students

Students with disabilities (as defined in the Americans with Disabilities Act of 1990, "ADA") wishing to make a request for reasonable accommodations, auxiliary communication aids or services, or materials in alternative accessible formats should contact the Support Services Office in the K. Ray Bailey Student

Services Center. The Support Services office can be reached at (828) 398-7900. Information provided by students is voluntary and strict confidentiality is maintained. A-B Tech is invested in full compliance with Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act.

Employees

A-B Tech understands that most employees with disabilities, medical conditions, or serious illnesses benefit greatly from the normal routines of daily life. When such an employee is able to meet approved standards of job performance as outlined by the College, and the medical information indicates that the disability or condition does not endanger the employee, other employees, students, or the public, they must be treated fairly and consistently with and by other employees.

If an employee has a disability, medical condition, or serious disease, they should notify the College if it could adversely affect the health or safety of other employees or students, impair the employee's ability to safely and effectively perform their job, or the employee would like the College to consider a reasonable accommodation for a disability.

All medical information will be maintained in a separate benefits/medical file in the Human Resources Department. Access to the benefits/medical records and related discussions will be strictly limited to those with a legitimate need to know this information and/or those with legal authority for access to them.

Consistent with the College's policy, A-B Tech will provide a reasonable accommodation for qualified applicants and employees with disabilities in accordance with the Americans with Disabilities Act (ADA), as amended, unless such accommodation would cause an undue hardship for the College. For the purpose of this policy, disability, reasonable accommodation, and undue hardship will be defined in accordance with the ADA.

A-B Tech will also provide a reasonable accommodation of an employee's religious beliefs/practices provided such expression/practice does not create a hostile work environment for other employees and/or the accommodation does not cause an undue hardship for the College.

Confidentiality

Standards of Confidentiality

The College will respect and make every reasonable effort to preserve the confidentiality of the information and identities shared by the parties involved in an alleged discrimination or harassment matter. College administrators will, however, share information regarding an alleged incident, as appropriate and necessary, in order to address and resolve the allegation. In cases where the Complainant or reporting party requests confidentiality and the circumstances allow the College to honor that request, the College will offer interim support and remedies to the Complainant but will not otherwise pursue formal action against the Respondent. However, in cases indicating pattern, predation, threat, weapons and/or violence, the College will likely be unable to honor a request for confidentiality. The College administrators will evaluate the following when determining if a report can remain confidential:

- the seriousness of the allegation;
- the alleged Complainant's age;
- whether there have been other complaints of discrimination or harassment against the Respondent; and
- the applicability of any laws mandating disclosure to local law enforcement.

Dissemination of information and/or written materials to persons not involved in the resolution process is not permitted. Violations of the privacy of the reporting party or the responding party may lead to disciplinary action by the College which could include expulsion or employment termination.

Confidential Resources

If a Complainant would like to speak confidentially with someone about the details of an incident, the Complainant may contact:

On campus – Student Resources

- Professional counselors in the K. Ray Bailey Student Services, Asheville Campus (and by appointment at all A-B Tech instructional sites). Students may schedule an appointment with a counselor by calling (828) 398-7584. A-B Tech Counselors will maintain confidentiality except in cases of imminent harm to self or others or in cases related to the abuse of a child, elder, or dependent adult. Counselors are available to help free of charge and can be seen on an emergency basis during normal business hours.

Off-campus – Student and Employee Resources

- Mobile Crisis Management Services – 888-573-1006 (Community Counseling)
- Employee Assistance Network (EAN) 828-252-5725 (Support services for A-B Tech employees)

Reporting Options

Reporting to College Officials

Vice President for Student Services – Incidents solely between students may be referred directly to the Office of the Vice President.
Vice President, Student Services
Asheville Campus
828-398-7484
fairleypatton@abtech.edu
Online reporting:
https://www.abtech.edu/incidentreport

Executive Director for Human Resources - Incidents solely between employees may be referred directly to the Office for the
Executive Director, Human Resources
Asheville Campus
828-398-7178

Student/Employee Allegations - For allegations between students and employees, you may contact either the Vice President for Student Services or the Executive Director for Human Resources. The Vice President for Student Services or designee will work in partnership with the Executive Director for Human Resources or designee to investigate and resolve the allegation.

A-B Tech Police - The A-B Tech Police Department is located across from the parking deck in the Mission Health/A-B Tech Conference Center and can be reached by phone at (828) 398-7125. A-B Tech Police Officers are available 24-hours a day, seven days a week. To reach the on-duty officer, call (828) 279-3166.

Anonymous Reporting - Individuals may also file anonymous reports by completing the report at https://www.abtech.edu/incidentreport. It may be very difficult for the College to take action on anonymous reports where supporting information is limited. Anonymous reports may be used for statistical reporting purposes.

Reporting to Local Law Enforcement

Individuals may report discrimination or harassment directly to local law enforcement agencies. Individuals who make a criminal allegation may also choose to pursue College disciplinary action simultaneously. A criminal investigation into the matter does not release the College from its obligation to conduct its own investigation. However, the College's investigation may be delayed temporarily while the criminal investigators are gathering evidence. In the event of such a delay, the College must take interim measures when necessary to protect the alleged Complainant and/or the College community.

Individuals may choose not to report alleged discrimination or harassment to law enforcement authorities. The College respects and supports individuals' decisions regarding reporting; nevertheless, the College may notify appropriate law enforcement authorities if required or warranted by the nature of the allegations.

Reporting Timeframe

Individuals filing discrimination or harassment complaints are urged to do so in writing as soon as possible and will be promptly and thoroughly investigated. Individuals should recognize that delays in reporting may impair the ability of College officials to investigate and respond.

Federal Statistical Reporting Obligations – Hate Crimes

Hate crimes that are reported pertain to crimes that manifest evidence that the Complainant was intentionally selected because of the Complainant's actual or perceived race, gender, religion, sexual orientation, gender identity, ethnicity, national origin or disability. Hate crimes include criminal homicide, sex offense, robbery, aggravated assault, burglary, motor vehicle theft, arson, larceny-theft, simple assault, intimidation, and destruction/damage/vandalism of property or any other crime involving personal injury.

According to the Jeanne Clery Act, all personally identifiable information is kept confidential, but statistical information must be shared with campus law enforcement. The information to be shared includes the date, the location of the incident and the crime category. This reporting protects the identity of the Complainant and may be done anonymously. The College's Annual Security Report helps to provide the community with a clear picture of the extent and nature of campus crime, in order to build community safety and awareness. To see a copy of the report, go to the College website under Consumer Information or go to the following link: abtech.edu/about/campus-safety/campus-safety-and-security-reporting

Investigation Process

Investigative Timeline

The College will make every reasonable effort to ensure that the investigation and resolution of a complaint occurs in as timely and efficient a manner as possible. The College's investigation and resolution of a complaint will generally be completed within 60 calendar days of the receipt of the complaint, absent extenuating circumstances. Any party may request an extension of any deadline by providing a written request for an extension that includes reference to the duration of the proposed extension and the basis for the request.

Interim Measure

If at any point during the initial report, investigation, disciplinary, or appeal process the College administrator deems it necessary for the protection of any member of the College community, they may take actions such as the following for students:

- Temporarily suspend the Respondent for up to ten (10) College business days;
- Change the Respondent's and/or Complainant's class schedule;
- Take such steps as are reasonable, appropriate and necessary to restrict the Respondent's movement on campus.

For employees, the College administrator may take the following actions:

- Take such steps as are reasonable, appropriate and necessary to restrict the Respondent's movement on campus;
- Request that the President place the Respondent on temporary paid administrative leave or reassign the Respondent to other duties.

Student Investigations

Initial Meeting - Complainant
As soon as is practicable, the Vice President for Student Services or designee will contact the Complainant to schedule an initial meeting. During these initial meetings, the Vice President for Student

Services or designee will:

- Work with student to stop and remedy the impact of the current situation;
- Implement safety measures as necessary;
- Conduct an initial investigation to retrieve all relevant facts related to the alleged discrimination or harassment. During this initial meeting, the Vice President for Student Services or designee will explain how the investigation will move forward.

The Vice President for Student Services or designee will evaluate the situation and determine if any additional remedies are needed.

Initial Meeting - Respondent

As soon as is practicable and after the initial meeting with the Complainant, the Vice President for Student Services or designee will contact the Respondent and schedule a meeting. At this meeting, the Vice President for Student Services or designee will, as applicable:

- Provide the Respondent details of the allegations being brought against them;
- Discuss with the Respondent, as applicable, any initial interim measures that were implemented as a result of the alleged discrimination or harassment;
- Work with Respondent to ensure that alleged actions of discrimination or harassment is immediately stopped and prevent future reoccurrence;
- Implement safety measures as necessary;
- Conduct an initial investigation to retrieve all relevant facts related to the alleged discrimination or harassment.

The Vice President for Student Services or designee will evaluate the situation and determine if any additional remedies are needed.

Employee Investigations

Initial Meetings - Complainant
As soon as is practicable, the Executive Director, Human Resources or designee will contact the Complainant to schedule an initial meeting, and will proceed with an initial investigation to retrieve all relevant facts related to the alleged discrimination or harassment. During this initial meeting, the Executive Director, Human Resources or designee will explain how the investigation will move forward.

The Executive Director, Human Resources or designee will evaluate the situation and determine if any additional remedies are needed.

Initial Meeting - Respondent
As soon as is practicable and after the initial meeting with the Complainant, the Executive Director, Human Resources or designee will contact the alleged Respondent to schedule an initial meeting. At this initial meeting the following resources may be discussed as applicable:

- Provide the Respondent, in writing, with the alleged allegations being brought against them.
- Conduct an initial investigation to retrieve all relevant facts related to the alleged discrimination or harassment. During this initial meeting, the Executive Director, Human Resources, or designee will explain how the investigation will move forward.
- Discuss with the Respondent, as appropriate, possible interim measures that can be provided to the Respondent pending the results of the investigative and resolution processes.

The Executive Director, Human Resources or designee will evaluate the situation and determine if any additional remedies are needed.

Student/Employee Investigation Process

All student/employee investigations will be handled jointly by the Vice President for Student Services and by the Executive Director, Human Resources. The investigation process will be determined by the role (student or employee) of the Respondent. If the Respondent is a student, the College will utilize the student investigation process. If the Respondent is an employee, the College will utilize the employee investigation process.

Recommendations and Hearing

Students

After the investigation is complete, the Vice President for Student Services or designee will provide a recommendation letter to the Respondent which may include the following:

- Determination if the Respondent is responsible or not responsible for violating the Non-Discrimination or Harassment Policy.
- Sanction, if appropriate.
- Whether monitoring of academic schedules is needed between the parties to ensure that the individuals involved are not in classes together. The Vice President for Student Services or designee will assist in this process.
- Short-term College counseling services or training.

If the recommendation is accepted by the Respondent, the sanction(s) become effective immediately and the Respondent forgoes the option of a formal hearing.

If the recommendations of the Vice President for Student Services or designee are not accepted, the case will move to a formal hearing. The Vice President for Student Services or a designee will preside over the hearing. If the incident involves a College employee, the Executive Director, Human Resources or designee and the Vice President for Student Services shall preside jointly over the hearing (Presiding Officers). The process for the hearing is outlined below:

- Prior to the hearing, the Complainant and the Respondent have the right to review all relevant information, including written statements by the Respondent, the Complainant, or witnesses. Strict rules of evidence do not apply.
- Written notice including the date, time, and location of the hearing will be sent to all parties.
- At the hearing, all pertinent parties have a right to speak and be questioned by the Presiding Officers. Cross-examination between parties is not permitted. The College will provide options for questioning without confrontation. Each phase of the hearing will be heard by both parties in separate rooms by use of a speaker phone.
- The Complainant and the Respondent are allowed to be accompanied by an advocate. The advocate may not present on behalf of either party unless otherwise instructed to do so by the Presiding Officers. If the Complainant or the Respondent chooses to have an advocate who is an attorney, notification must be provided to either Presiding Officer at least three College business days prior to the hearing date. In this case, the College Attorney will also be present.
- Both parties will be notified of the hearing outcome.

Employees

The Human Resources representative will put forward a recommendation of finding and sanctions to both the Complainant and Respondent. If the recommendation is accepted by both parties involved, the recommendation and sanctions will become effective and both parties forgo the option of a formal hearing. A final outcome letter will be submitted to the Complainant and Respondent that may include, but not limited to, the following:

- Determination if the Respondent is responsible, not responsible, or if the decision is deemed inconclusive, or there is a finding of shared responsibility.
- Sanction, if appropriate.
- Monitoring of academic schedules or workplace schedules between the Complainant and the Respondent, if needed.
- Short-term counseling services will be offered to each party.

If the recommendations of the Human Resources representative are not accepted by either the Complainant or the Respondent, the case will move to a formal hearing. The Executive Director, Human Resources or designee will preside over the hearing as the Presiding Officer. The Human Resources representative presiding over the hearing will be different from the Human Resources representative who conducted the investigation. If either party is a student, the Vice President for Student Services or designee and the Executive Director for Human Resources or designee shall preside jointly over the hearing. The process for the hearing is outlined below:

- Prior to the hearing, the Complainant and the Respondent have the right to review all evidence, including written statements by the Respondent, the Complainant, or witnesses. Strict rules of evidence do not apply.
- Written notice including the date, time, and location of the hearing will be sent to all parties.
- At the hearing, all pertinent parties have a right to speak and be questioned by the Presiding Officers. Cross-examination between parties is not permitted. The College will provide options for questioning without confrontation; each phase of the hearing will be heard by both parties in separate rooms by use of a speaker phone.
- The Complainant and the Respondent are allowed to be accompanied by an advocate. The advocate may not present on behalf of either party unless otherwise instructed to do so by the Presiding Officers. If the Complainant or the Respondent chooses to have an advocate who is an attorney, notification must be provided to either Presiding Officer at least three College business days prior to the hearing date. In this case, the College Attorney will also be present.
- Both parties have a right to a written notice of the hearing outcome.

Sanctioning

The following sanctions may be imposed for those who have violated the Non-Discrimination and Harassment Policy:

Student Sanctions

- Verbal or Written Warning
- Probation
- Administrative withdrawal from a course without refund
- Required Counseling
- No Contact Directive
- Suspension
- Recommendation for Expulsion with automatic appeal to the President
- Other consequences deemed appropriate

Employee Sanctions

- Verbal or Written Warning
- Performance Improvement Plan
- Required Counseling

- Required Mediation
- Required Training or Education
- Recommendation of Demotion with automatic appeal to the President
- Recommendation to Suspend with or without Pay with automatic appeal to the President
- Recommendation for termination with automatic appeal to the President
- Other consequences deemed appropriate to the specific violation

Appeal Process

The Complainant or Respondent has a right to a final appeal to the President:

- Each party has the right to appeal the outcome of the hearing to the College President.
- Upon receipt of the hearing decision, both parties have five (5) College business days to submit a notice requesting an appeal. For students, this notice must be submitted in writing to the Office of the Vice President for Student Services. For employees, this notice must be submitted in writing to the Office of the Executive Director, Human Resources.
- If an appeal is requested, both parties will be notified.
- The President will conduct a document review which does not include a new hearing but shall consist of evidence presented at the hearing along with a recording of the proceeding.
- The President will affirm, modify, or reject the decision and/or sanctioning. The President's decision will be final, and notification of the decision will be sent directly from the President's office to each party.

Records Retention

Records Retention for Students and Employees

Students - All documentation will be stored in the Vice President for Student Services' office for a period of seven years at which point the documentation will be moved to an electronic version to be retained permanently.

Students - In cases where the Respondent is found responsible for violating the Non-Discrimination and Harassment Policy, this information will be considered as a disciplinary record with the College.

Employees – Personnel files are retained for 30 years. If the action taken is informal counseling, this does not become part of the permanent record.

Civil Rights files are maintained for a minimum of two (2) years.

Pursuant to Board Policy 111, this procedure must be followed when dealing with non-discrimination and harassment.

Privacy of Student Records

The Family Educational Rights and Privacy Act (FERPA) gives students the following rights with respect to their education records:

1. The right to inspect and review the student's education records within 45 days after the day A-B Tech receives a request for access. Any such requests should be submitted in writing to the Records and Registration Office, either by email to registrar@abtech.edu or by hand-delivering or mailing a letter to: Records and Registration, K. Ray Bailey Student Services Building, 340 Victoria Rd., Asheville, NC 28801. The written request must identify the record(s) the student wishes to inspect. The Registrar will make arrangements for access and notify the student of the time and place where the records may be inspected. If the records are not maintained by the Registrar, the Registrar shall advise the student of the correct official to whom the request should be addressed.
2. The right to request the amendment of the student's education records that the student believes is inaccurate, misleading, or otherwise in violation of the student's privacy rights under FERPA. Any such requests should be submitted in writing to Records and Registration, either by email to registrar@abtech.edu or by hand-delivering or mailing a letter to: Records and Registration, K. Ray Bailey Student Services Building, 340 Victoria Rd., Asheville, NC 28801. The written request must identify the part(s) of the record the student wants changed, and specify why it should be changed. If A-B Tech decides not to amend the record as requested, A-B Tech will notify the student in writing of the decision and the student's right to a hearing regarding the request for amendment. Additional information regarding the hearing procedures will be provided to the student when notified of the right to a hearing.
3. The right to provide written consent before A-B Tech discloses personally-identifiable information from the student's education records, except to the extent that FERPA authorizes disclosure without consent.
4. The right to file a complaint with the U.S. Department of Education concerning alleged failures by A-B Tech to comply with the requirements of FERPA.

As a general rule, a student's parents/guardians do not have access to a student's education records. When a student turns 18 years old or enrolls at an institution of postsecondary education (such as A-B Tech), a student's rights under FERPA transfer from the parent to the student. In order for parents to have access to a student's education records, beyond Directory Information and without written permission from the student, a parent must certify that the student is economically dependent as defined in Section 152 of the Internal Revenue Code of 1986. If a parent can prove dependency to the Records and Registration Office by showing a copy of the parent's most recent tax return or other acceptable documentation, then the parent may have full access to the student's education records.

Directory Information

In compliance with FERPA, A-B Tech will not disclose a student's education records without the students' consent except as otherwise stipulated herein.

Directory Information will be released to anyone who requests it, and Limited Directory Information will be released under specific conditions, unless the student requests in writing to the Records and Registration Office that the students' Directory Information be withheld. In such case, no Directory Information or Limited Directory Information will be released.

Directory Information is information contained in a student's education record that would not generally be considered harmful or an invasion of privacy if disclosed. At A-B Tech, Directory Information includes:

- Major field of study
- Dates of enrollment
- Enrollment status (full-time or part-time)
- Degrees, honors, and awards received

Limited Directory Information is information contained in a student's education record that may only be disclosed under certain circumstances. This includes:

- Date of birth, which may be disclosed only as a means of verifying a student's identity when a College employee has no other means of doing so.
- Name, mailing address, telephone number, and email address, which may be disclosed only for educational purposes, at the discretion of College administration.

Blocking the Release of Directory Information

A student may request that A-B Tech not release their Directory Information unless the student first provides written consent, except for the circumstances in which FERPA authorizes disclosure without student's consent. To request a block on the release of Directory Information, a student must submit their request in writing, either by submitting the "Request to Block the Release of Directory Information" form to the Records and Registration Office or emailing a written request to registrar@abtech.edu. Emailed requests must be sent from the student's official A-B Tech email account. A student's request to block the release of their Directory Information will remain in effect until the student requests that the block be removed.

A block on the release of a student's Directory Information will prevent the student's name and information from appearing in public directories, without the student's written consent, such as the Commencement Booklet, Dean's/President's lists, etc. In addition, a block will prevent A-B Tech from confirming a student's enrollment status, degrees, and other Directory Information with third-parties such as prospective employers, unless the student first provides his or her written consent.

Disclosure Without Student Consent

FERPA permits the disclosure of personally-identifiable information from a student's education records, without consent of the student, only under limited circumstances. These circumstances include the release of education records to:

- A-B Tech officials who have legitimate educational interest in the records. A school official typically includes a person employed by A-B Tech in an administrative, supervisory, academic, research, or support staff position; a person serving on the Board of Trustees; or a student serving on an official committee, such as a disciplinary or appeals committee. A school official also may include a volunteer or contractor outside of A-B Tech who performs an institutional service or function for which the school would otherwise use its own employees and who is under the direct control of the school with respect to the use and maintenance of personally-identifiable information from education records, such as an attorney, auditor, or collection agent or a student volunteering to assist another school official in performing their tasks. A school official typically has a legitimate educational interest if the official needs to review an education record in order to fulfill his or her professional responsibilities for A-B Tech.
- Officials of another college or university in which the student seeks or intends to enroll.
- Officials of secondary schools in which the student is concurrently enrolled.
- Certain federal and state educational authorities for purposes of meeting legal requirements in federally supported educational programs.
- Persons involved in granting financial aid or scholarships for which the student has applied or received.
- Testing and research organizations conducting certain studies for or on behalf of the school.
- Accrediting organizations to carry out their accrediting functions.
- Individuals named in a court order or lawfully issued subpoena, but only after the student has been duly notified. The College will then comply in the absence of any legal order cancelling the subpoena.
- Parents/guardians, law enforcement, and first responders in very narrowly defined emergencies affecting the health and safety of the student or other persons.
- State and local authorities, within a juvenile justice system, pursuant to specific state law.

- Parents/guardians who have certified with the Records and Registration Office that the student is economically dependent as defined in Section 152 of the Internal Revenue Code of 1986.
- The public, when the discloser is the final results of an institutional disciplinary proceeding regarding a crime of violence or "non-forcible sex offense" where the institution has determined that a policy violation occurred.
- The victim of an alleged crime of violence or a non-forcible sex offense when the disclosure is the final results of an institutional disciplinary proceeding regarding that offense, regardless of whether the institution determined that a policy violation occurred.
- Certain individuals, pursuant to the specific conditions outlined in FERPA, in connection with a disciplinary proceeding when the student is an alleged perpetrator of a crime of violence or non-forcible sex offense and, with respect to the allegation made against him or her, the student has committed a violation of A-B Tech policy.
- Parents of students under the age of 21 regarding the student's violation of any Federal, State, or local law, or of any A-B Tech policy, governing the use or possession of alcohol or a controlled substance.
- Certain individuals when a student has been designated a sex offender or otherwise required to register under section 170101 of the Violent Crime Control and Law Enforcement Act of 1994.

Protection of Student Data

Safeguarding of personal information is a priority for A-B Tech. Great care is taken to protect all forms of sensitive data, including but not limited to personally identifying information. In addition to the FERPA requirements discussed in the previous section, the College continually strives to stay abreast of and adapt appropriately to changing expectations, guidelines and best practices, such as the Health Insurance Portability and Protection Act (HIPPA), the North Carolina Community College Institutional Information Processing System (IIPS) Security Manual, publications from the National Institute on Standards and Technology (NIST), the European Union's General Data Protection Regulation (GDPR), and the Gramm-Leach-Bliley Act (GLBA). Information on the College's current procedures and practices regarding data protection, identity management and authentication can be found in the Curriculum Distance Instruction Procedure (207.07) here, www.abtech.edu/online-distance-learning/curriculum-distance-instruction.

Gramm-Leach Bliley Act

The Gramm-Leach-Bliley Act (GLBA) requires financial institutions to protect the privacy of their customers, including customers' nonpublic, personal information. To ensure this protection, the GLBA mandates appropriate administrative, technical, and physical safeguards.

Because colleges and universities are considered financial institutions, A-B Tech must follow GLBA requirements. The College has a responsibility to secure information typically gathered in connection with obtaining a financial product or service. This includes, but is not limited to, names, addresses, phone numbers, bank and credit card account numbers, income and credit histories and Social Security numbers.

In an effort to pursue all appropriate safeguarding standards, the GLBA directs institutions to implement an Information Security Program and designate a program coordinator. A-B Tech's Information Security Program is coordinated by the Administrator of Information Security.

In accordance with GLBA mandates, A-B Tech's Information Security Program also adheres to the following elements:

1. Assessment of internal and external risks to the security and confidentiality of customer information.
2. Annual reporting of safeguards to the A-B Tech Board of Trustees.
3. Employee training.
4. Oversight of service providers.
5. Evaluation and improvement of the Information Security Program.

Student Complaints

A-B Tech recognizes the rights of students and is dedicated to resolving student complaints in a timely, fair, and reasonable manner. Any student, including those participating in online/distance courses and high school dual enrollment courses offered at any A-B Tech site may file a complaint and request a review. Students unable to attend hearings in person may request electronic options throughout the respective appeal process. A-B Tech recognizes the following categories of written student complaints: Grade Appeals, Student Appeals, Discrimination and Harassment grievances, including Sexual Misconduct, and Code of Student Conduct Violation Appeals. As such, A-B Tech follows guidelines set forth in the Grade Appeals Policy and Procedure (see pages 47-48),the Student Appeals Policy and Procedure (see pages 48-49), the Non-Discrimination and Harassment Policy and Procedure (see pages 39), the Sexual Misconduct Policy and Procedures (see page 57), Code of Student Conduct Policy and Procedure (see page 51), and the Student Due Process Policy and Procedures (see page 54) when addressing student complaints. The College is committed to a prompt and fair resolution of any issues that arise between students and College employees and takes great care to ensure these policies and procedures are reviewed, updated and consistently followed when addressing student complaints.

A-B Tech is dedicated to resolving student complaints in a timely, fair, and amicable manner. A formal student complaint is a written request for a college action or decision to be reviewed to ensure compliance with College policies. A complaint may or may not be grade related. Any student, including those participating in online/distance courses, may file a complaint and request a review. For students attending A-B Tech who would like to file a formal written complaint, the student can contact Office of the Vice President of Student Services at 828-398-7484.

Non-Discrimination and Harassment Policy: Inquiries or complaints concerning possible discrimination or harassment will be addressed via the Non-Discrimination and Harassment Policy.

Grade Appeals

1. It is the responsibility of faculty and students to attempt, in good faith, to resolve disputes regarding course grades. If such discussions are unsuccessful, the student shall be entitled to initiate the grade appeals procedure if he or she has reason to believe that a course grade is inaccurate. At this time, a Grade Appeals Committee will be formed and a date and time set for a hearing.

2. No student appealing any decision shall be subjected to harassment or intimidation or be in any way discouraged from filing an appeal pursuant to this procedure.

3. At any stage of the appeal process, all parties shall have the right to be accompanied by an advocate of their choice. The advocate may not present the appeal or complaint on behalf of the student unless otherwise instructed to do so by the chair of the Grade Appeals Committee. If the student chooses to have an attorney present, the student must provide notification to the Vice President for Student Services at least three college business days prior to the scheduled hearing date.

4. If the student and/or faculty wishes to present documentation to be considered during the hearing, it should be submitted to the Vice President for Student Services or a designee no later than two business days prior to the scheduled hearing. Both the student and faculty will be given an opportunity to review all documentation submitted prior to the hearing.

5. The Vice President for Student Services shall monitor the handling of grade appeals through this procedure to ensure correct and prompt compliance by all parties.

Appeals Procedure Regarding Course Grades

1. Students are strongly encouraged to first discuss the course grade with the involved instructor as soon as possible.

2. The student will submit the completed written grade appeal form, including all necessary faculty and student signatures, within three weeks from the day the final course grade is awarded. The form will clearly explain the student's complaint as well as the student's proposed resolution of the complaint. The instructor will be given the opportunity to read the student's written complaint and to meet with the student one more time. Alternately, the instructor may sign the appeal form indicating that the instructor is unable to resolve the problem. The student will then be directed to the department chair of the instructor, who will meet separately with the student to attempt to resolve the issue. If the department chair is unable to resolve the issue with the student, then the department chair will sign the appeal form and direct the student to the Vice President for Student Services or designee. Completion of the form by the instructor or chair does not in any way indicate agreement with the complaint. Each party may propose solutions to the disagreement that, if accepted by both parties, results in resolution of the appeal. If either party refuses to accept a proposed solution, then the matter is referred to the Vice President for Student Services who will convene a Grade Appeals Committee.

3. If the student has difficulty contacting the department chair, the student should contact the Vice President for Student Services, who is responsible for assisting with contacts.

4. If the student and/or faculty wishes to present documentation to be considered during the hearing, it should be submitted to the Vice President for Student Services or designee no later than two business days prior to the scheduled hearing. Both the student and faculty will be given an opportunity to review all documentation submitted prior to the hearing. The Vice President for Student Services shall maintain files of all course grade appeal forms submitted to the vice president's office. Such forms, together with other records indicating final action on a problem, shall be maintained for a minimum of five years.

5. Students enrolled in distance courses may find it difficult to come to campus in order to pursue an appeal. In these instances, the process may be handled by telephone with the instructor involved, the department chair, and the Vice President for Student Services by mail, fax, or other agreed upon electronic means for submission of the appeals document. As with other appeals, the Vice President for Student Services will closely monitor the progress,

ensuring the contacts are made in a timely fashion and documents are submitted properly. If it becomes necessary for an appeal to go to the Grade Appeals Committee, conference calling or any other electronic means agreed upon by both parties will be used. When conference calling is employed for a hearing, no business can be conducted without the student being present on the telephone, with the exception of the deliberations of the Committee in executive session.

The Grade Appeals Committee

Composition of the Grade Appeals Committee:

The Grade Appeals Committee will consist of no less than seven voting members and will be composed as follows to ensure the representation of all constituent groups in the College community.

1. Two student representatives
2. Two faculty representatives
3. One Student Services representative
4. One non-faculty employee
5. One non-teaching professional representative at the level of coordinator or higher who will serve as chairperson.

Grade Appeals Committee Hearing and Procedures:

1. The Vice President for Student Services shall inform the instructor, the involved department chair, and the student of the date, time, and place of the appeals hearing. The Vice President for Student Services shall convene the Grade Appeals Committee no later than 15 college business days after receipt of the completed request, along with required signatures from both student and faculty, for a hearing.
2. When an appeal is made by a student with a disability, the Committee, at its sole discretion, may consult with or include the Director for Support Services in the hearing process for such person's knowledge of disability and Disability Services issues and requirements.
3. A quorum to conduct Committee business and vote is defined as a minimum of four members. In no case shall any business be conducted unless at least one student and one faculty member are present. There will be an audio recording of the appeal hearing.
4. The decision of the Grade Appeals Committee will be conveyed to the student and may be appealed within five business days to the Vice President for Instructional Services whose decision will be final. The Vice President's review does not include a new hearing, and his or her review shall consist of evidence presented at the hearing. The Vice President will affirm, modify or reject the decision of the Grade Appeals Committee.
5. In addition to the committee members, the following persons are permitted to attend the hearing:
   a. Involved parties
   b. An advocate for the appealing individual. The advocate may not present the appeal or complaint on behalf of the student unless otherwise instructed to do so by the chair of the Grade Appeals Committee. If the student chooses to have an attorney in attendance, the student must provide notification to the Vice President for Student Services at least three college business days prior to the scheduled hearing date.
   c. The chair of the Grade Appeals Committee will manage all hearing proceedings, including the sequencing and time allocated for presentation of evidence by both student and faculty.
   d. Administrative officers of the College who may be directly concerned with the dispute.
6. If a student fails to attend the scheduled hearing, the appeal is considered to be dropped.
7. All steps of the appeal procedure for students shall be closed to the public, and all documents generated in the course of a complaint shall be confidential except to authorized College officials.

Availability of Information

The Grade Appeals Policy and Procedure are available on the College website.

Student Appeals

a. It is the responsibility of all employees and students to attempt, in good faith, to resolve disputes regarding actions taken by College employees that are perceived to be unfair or unjust. If such discussions are unsuccessful, the student shall be entitled to initiate the appeals procedure. At this time, a Student Appeals Committee will be formed and a date and time set for a hearing.

b. No student appealing any decision shall be subjected to harassment or intimidation or be in any way discouraged from filing an appeal pursuant to this procedure.

c. At any stage of the appeal process, all parties shall have the right to be accompanied by an advocate of their choice. The advocate may not present the appeal or complaint on behalf of the student unless otherwise instructed to do so by the chair of the

Student Appeals Committee. If the student chooses to have an attorney in attendance, the student must provide notification to the Vice President of Student Services or designee at least three college business days prior to the scheduled hearing date.

d. If the student and/or employee wishes to present documentation to be considered during the hearing, it should be submitted to the Vice President for Student Services or designee no later than two business days prior to the scheduled hearing. Both the student and employee will be given an opportunity to review all documentation submitted prior to the hearing.

e. The Vice President for Student Services or designee shall monitor the handling of appeals through this procedure to ensure correct and prompt compliance by all parties.

f. Please note this procedure applies to students wishing to appeal administrative action or decisions with exception to financial aid, code of student conduct sanctioning, grade appeals, and dismissal by a host clinical or other work-based learning site.

Appeal Procedure

a. Students are strongly encouraged to first discuss the disputed matter with the involved employee as soon as possible.

b. It is the responsibility of the student to complete and submit a written appeal form, including all necessary employee and student signatures, within six weeks of the date when the matter occurred. The form will clearly explain the student's complaint as well as the student's proposed resolution of the complaint. The employee will be given the opportunity to read the student's written complaint and to meet with the student one more time. Alternately, the employee may sign the appeal form indicating that he or she is unable to resolve the problem. The student will then be directed to the supervisor of the employee who will meet separately with the student to attempt to resolve the issue. If the supervisor is unable to resolve the issue with the student, then the supervisor will sign the appeal form and direct the student back to the Vice President for Student Services. Completion of the form by the employee and supervisor does not in any way indicate agreement with the complaint. Each party may propose solutions to the disagreement that, if accepted by both parties, results in resolution of the appeal. If either party refuses to accept a proposed solution, the matter is referred to the Student Appeals Committee.

c. If the student has difficulty contacting the supervisor, he or she should contact the Vice President for Student Services or designee, who is responsible for assisting with contacts.

d. If the student and/or employee wishes to present documentation to be considered during the hearing, it should be submitted to the Vice President for Student Services or designee no later than two business days prior to the scheduled hearing. Both the student and employee will be given an opportunity to review all documentation submitted prior to the hearing. The Vice President for Student Services or designee shall maintain files of all appeal forms submitted to his or her office. Such forms, together with other records indicating final action on a problem, shall be maintained for a minimum of five years.

e. Students enrolled in distance courses may find it difficult to come to campus in order to pursue an appeal. In these instances, the process may be handled by telephone with the employee involved, the employee's supervisor, and the Vice President for Student Services by mail, fax, or other agreed upon electronic means for submission of the appeals document. As with other appeals, the Vice President for Student Services will closely monitor the progress, ensuring the contacts are made in a timely fashion and documents are submitted properly. If it becomes necessary for an appeal to go to the Student Appeals Committee, conference calling or any other electronic means agreed upon by both parties will be used. When conference calling is employed for a hearing, no business can be conducted without the student being present on the telephone, with the exception of the deliberations of the Committee in executive session.

The Student Appeals Committee

a. Composition of the Student Appeals Committee

The Student Appeals Committee will be comprised of no less than seven members and will be composed as follows in an effort to ensure the representation of all constituent groups in the College community.

1. Two student representatives
2. Two faculty representatives
3. One Student Services representative
4. One non-faculty employee
5. One non-teaching professional representative at the level of coordinator or higher who will serve as chairperson.

b. Student Appeals Committee Hearing and Procedures

1. The Vice President for Student Services or designee shall be responsible for informing the employee and supervisor involved and the student of the date, time, and place of the hearing. The Vice President for Student Services

or designee shall convene the Student Appeals Committee no later than 15 calendar days after receipt of the completed request, along with required signatures from both student and employee, for a hearing.

2. When an appeal is made by a disabled student, the Committee, at its sole discretion, may consult with or include the Director of Support Services in the hearing process for such person's knowledge of disability and ADA issues and requirements.
3. A quorum to conduct Committee business and vote is defined as a minimum of four members. In no case shall any business be conducted unless at least one student and one faculty member are present. There will be an audio recording of the appeal hearing.
4. The decision of the Student Appeals Committee will be conveyed to the student and may be appealed within five business days to the President, whose decision will be final. The President's review does not include a new hearing and his or her review shall consist of evidence presented at the hearing. The President will affirm, modify or reject the decision of the Student Appeals Committee.
5. In addition to the committee members, the following persons are permitted to attend the hearing:
    a. Involved parties
    b. An advocate for the appealing individual. The advocate may not present the appeal or complaint on behalf of the student unless otherwise instructed to do so by the chair of the Student Appeals Committee. If the student chooses to have an attorney in attendance, the student must provide notification to the Vice President for Student Services or designee at least three college business days prior to the scheduled hearing date.
    c. The chair of the Student Appeals Committee will manage all hearing proceedings, including the sequencing and time allocated for presentation of evidence by both student and employee.
    d. Administrative officers of the College who may be directly concerned with the dispute.
6. If a student fails to attend the scheduled hearing, the appeal is considered to be dropped.
7. All steps of the appeal procedure for students shall be closed to the public, and all documents generated in the course of a complaint shall be confidential except to authorized College officials.

Availability of Information
The Student Appeal Policy and Procedure is available on the College website.

Exception for Disciplinary Appeals
When these procedures are used to appeal a disciplinary action taken by the Vice President for Student Services or designee, in his or her capacity as the College discipline officer, the appeal will be forwarded directly to the President. An appeal of a disciplinary action taken by the Vice President for Student Services must be submitted in writing to the Vice President for Student Services or designee within five business days of the action. He or she will forward the appeal, along with all documentation concerning the matter, to the President, whose decision will be final following an on-the–record review. The President may, in their discretion, allow the parties to supplement the record if additional information is needed for the fair disposition to the matter.

Code of Classroom Conduct

A-B Tech is an institution for adult learning. It is a partnership between instructors with the desire to teach and students with the desire to learn. In order to create an appropriate environment for teaching and learning, there must be respect for the instructor and fellow students. Listed below are guidelines for classroom behavior, which the College has established to ensure that the learning environment is not compromised.

1. **Absences.** Inform the instructor in advance if you know you are going to miss class. Also, take responsibility for getting missed assignments from other students. Do not expect that you will be allowed to make up assignments after an absence, instructors are not responsible for re-teaching the material you missed because of absence.
2. **Attendance.** You are expected to be in class the entire class time. Do not enter late or leave early. Rare exceptions may be excused, particularly under emergency circumstances, but you should be prepared to explain your tardiness to the instructor after class. Likewise, the need to leave early should be explained to the instructor before class.
3. **Classroom Behavior.** You are expected to conduct yourself in a professional and respectful manner with your fellow classmates and instructors while engaging in all classroom activities and discussions. All students shall be allowed to freely participate in classroom discourse and shall be allowed to express their viewpoints and ideas as long as those viewpoints and ideas are reasonably

related to the topic or assignment being discussed. As a participant in an open and free learning environment, students are free and are encouraged to disagree and challenge others' viewpoints and ideas; however, students shall behave in a professional and respectful manner in class by: a) being recognized by instructors prior to speaking; b) not interrupting other students and instructors when they are speaking; c) listening to students and instructors while they are speaking; and d) speaking in a normal, calm voice when addressing students and instructors.

4. **Electronic Devices.** You may not send or receive personal communication on electronic devices during class.
5. **Conversation.** Do not carry on side conversations in class.
6. **Food, Drink, and Tobacco.** You may not have food or drink in class. You may not use tobacco of any form on campus, including electronic cigarettes, or vaping devices.
7. **Guests**. You may not bring unregistered friends or children to class.
8. **Internet.** In classes where internet access is provided, you may use the internet for valid, academic purposes only. You may not use it for open access to other non-academic sites, which are unrelated to the course.
9. **Other Activities.** You may not work on other activities while in class. This includes homework for other courses or other personal activities.
10. **Personal Business.** You may need to transact personal business with the instructor, asking him or her to sign forms. Plan to do this outside of class.
11. **Sleep.** Do not sleep in class.
12. **Personal Attire and Protective Equipment**. All students are expected to dress in a manner that is modest, clean and appropriate for the program of study. Good personal hygiene and grooming are also expected and may be outlined by the program of study. Shirts and shoes are required at all times. You must properly wear personal protective equipment at all times in any area of the College in which it is required.
13. **Fragrances.** You should avoid wearing strong fragrances of any kind as other students may be allergic to them.
14. **Animals:** Domestic Animals are not permitted on campus and may not be left in vehicles on campus property. If a student has a documented disability covered by the ADA and requires an Animal as an Accommodation for access, the student is required to request services from the Support Services Office to receive necessary accommodations. Appropriate documentation of the disability is required and accommodations are determined on a case-by-case basis. Persons with a disability who have a Service Animal are encouraged, but not required, to contact the Support Services Office in the K. Ray Bailey Student Services Center to register as a student requesting accommodations.

Typically, violations of the Code of Classroom Conduct will be dealt with as minor infractions. However, repetition of minor infractions or other more serious violations of the Code of Student Conduct may lead to removal from the classroom while the matter is resolved and referral to the Vice President for Student Services for disciplinary action.

Code of Student Conduct

A-B Tech strives to maintain a safe, nurturing, and orderly learning environment that supports the students, faculty, and staff. Each student shall be responsible for their conduct from the time of admissions through the actual awarding of a credential. The Code of Student Conduct applies throughout the academic year as well as before classes begin or after classes end for the semester, and during periods of time between actual enrollment. The Code of Student Conduct shall apply to a student's conduct even if the student withdraws from classes while a disciplinary matter is pending. When, in the judgment of College officials, the student's conduct disrupts or threatens to disrupt the College community, appropriate disciplinary action will be administered. Students have the rights of Due Process when accused of a violation of the Code of Student Conduct (please reference Student Due Process policy 823). All matters related to alleged sexual misconduct shall be referred to the College's Title IX Coordinator and governed pursuant to the Sexual Misconduct Policy 112. For matters regarding alleged discrimination and harassment, please refer to the Non-Discrimination and Harassment Policy 111.

A student who is in possible violation of the Code of Student Conduct will be referred to the Vice President for Student Services or designee. If the Vice President of Student Services or designee determines the student's alleged actions are egregious and/or potentially threatening to the learning environment or to campus safety, the student may be immediately suspended for up to ten College business days, pending a due process hearing or Threat Assessment review under the Threat Assessment Policy (please reference Threat Assessment Policy 819).

Students who have been found responsible of a violation of the Code of Student Conduct may be assigned consequences based upon the seriousness of the offense. Sanctions for violations may include but not be limited to: verbal warning, written warning, a failing grade for an assignment, examination, or course, administrative withdrawal from courses or academic program, restitution for damages, probation including mandatory periodic progress reports, consequences

adapted to the specific violation, suspension, or expulsion. The President shall have final approval in the expulsion of a student.
Jurisdiction of the Code of Student Conduct is in effect on College premises, in online classes conducted by the College, on property owned or leased by the College and at functions sponsored by or participated in by the College regardless of the locations. Violations of any federal, state, or local laws may lead to legal actions as well as College discipline. Violations of federal, state, or local laws occurring off campus may result in disciplinary action if the student's continued presence on campus constitutes a threat to the safety and order of the campus. If a student is charged with a felony that may compromise the safety and order of campus, then the College has the right to suspend the student pending the final outcome of the criminal charges. If the student is convicted, then the student may be limited in class location and course delivery options, and/or recommended for suspension or expulsion.

High School students who are dually enrolled at the College are also subject to the Code of Student Conduct. Students are expected to follow the behavior guidelines for their high school as well as the College. Therefore, high school students shall conduct themselves in accordance with the Code of Student Conduct of their school system as well as those rules and regulations set for in the College Code of Student Conduct and published annually on the College website, in the Catalog, and Student Handbook.
The College uses the preponderance of the evidence as the standard for proof of whether a violation occurred. In the student conduct process, legal terms like "guilt, "innocence" and "burdens of proof" are not applicable. Student Hearing outcomes take into account the totality of all evidence available from all relevant sources. The College will find the student either "responsible" or "not responsible" for violating College policy.

Violations for which disciplinary proceedings may be initiated are as follows:

Academic Dishonesty: Academic Dishonesty includes, but is not limited to, submitting someone else's work as one's own; using notes or other material without permission from the faculty on an exam, homework, or other assignments; receiving information from another student during an exam; obtaining a copy of an exam or questions from an exam prior to taking the exam; having someone else take one's exam and submitting it as their own, or using a commercial online learning platform to produce work and then submitting it as your own; submitting work produced using generative artificial intelligence without faculty permission. Academic dishonesty includes any student who has someone else use an account and password for the purpose of submitting work as one's own. **Academic dishonesty also includes plagiarism,** the intentional theft or unacknowledged use of another's words or ideas. Plagiarism includes but is not limited to paraphrasing or summarizing another's words or works without proper acknowledgement; using direct quotes of material without proper acknowledgement; or purchasing or using a paper or presentation written or produced by another. If a student is uncertain about what constitutes plagiarism, they should discuss this with the class instructor. Submission of previously used work as an original work on subsequent assignments or in multiple courses is not acceptable unless the resubmitted work is substantially different and appropriately cited as previous work.

Aiding Acts of Academic Dishonesty: Providing information to another student with the awareness that the student intends to use it for deceptive purposes. Students are prohibited from sharing, distributing, uploading, or downloading course materials, including outlines, teaching materials, labs, videos, lectures, tests, exams, or other course material including note sharing or commercial study prep services without the permission of the instructor.

Alcoholic Beverages: Students may not possess or use alcoholic beverages on campus. Students may not be under the influence of alcoholic beverages on campus or at College-affiliated activities or events (please reference Drug and Alcohol Policy 113).

Animals: Students may not have an animal of any kind on campus, or at any College affiliated activities, sites, or events. This includes animals left within a vehicle. Limited exceptions to this code may be found in the Animals on Campus Procedure (please reference Animals on Campus Policy 802).

Assault: Students may not assault or threaten to assault another person for any reason whatsoever. Assault may include a demonstration of force, unlawful physical touching, or striking.

Bullying: Students may not intimidate or threaten with harm any other individual. Bullying is defined as "any pattern of gestures or written, electronic or verbal communications, or any physical act or any threatening communication that takes place on College premises or at any College sponsored function that: (a) places a person in actual and reasonable fear of harm to their person or damage to their property; or (b) creates or is certain to create a hostile environment by substantially interfering with or impairing a student's educational performance, opportunities or benefits, or a College employee's ability to perform the essential functions of their job."

Communicating Threats: Students may not verbally, in writing, through a third party, or by any other means threaten to physically injure another person or that person's child, sibling, spouse, or dependent or willfully threaten to damage the property of another.

Copyright Infringement and Peer-to-Peer File Sharing: Students may not violate the College's Copyright Infringement and Peer-to-Peer File Sharing Policy through the act of violating, without permission or legal authority, one or more of the exclusive rights granted to the copyright owner under section 106 of the Copyright Act (Title 17 of the United States Code). These rights include the right to reproduce or distribute a copyrighted work. In the file-sharing context, downloading or uploading substantial parts of a copyrighted work without authority constitutes an infringement (please reference Copyright and Fair Use Policy 215 and Peer to Peer File Sharing Policy 1006).

Damage to Property: Students may not damage property of the College or of any other person working at or attending the College.

Disorderly Conduct: Students may not conduct themselves in a way which will interrupt the academic mission of the College, or which will disturb the peace of the College.

Disrespect: Students are expected to treat all College employees with respect and courtesy, particularly when and if disagreements arise.

Disruption: Students may not disrupt the normal activities of the College by physically or verbally interfering with instruction, meetings, traffic, or scheduled administrative functions.

Drugs: Students may not possess, use, or be under the influence of any narcotic or illegal drugs on campus or at any College-affiliated activities or event. This is in violation of the laws of the state of North Carolina of the United States (please reference Drug and Alcohol Policy 113).

Failure to Comply: Students must comply with the directives of College officials or law enforcement officers during the performance of their duties. Students must identify themselves to these persons when requested to do so. Failure to respond to notifications of conduct charges is also prohibited.

False Information: Students may not present to the College or its employees' false information; neither may they knowingly withhold information which may have an effect on their enrollment or their status in the institution and which is properly and legally requested by the College.

Gambling: Students may not gamble on campus or at any College-affiliated activities or events.

Internet and Campus Network Acceptable Use: The College has an extensive policy for appropriate use of the Internet. Users of the College computers acknowledge the policy whenever they sign on. Students may not use the College's access to the Internet for access to sexually explicit material or for downloading music. Email accounts are provided for student use; however, no right of privacy exists for use of email (please reference Acceptable Use Policy 1003). Students may not share their account and password, nor may they access another student's account.

Possession of Weapons: Students may not have a weapon of any kind, including a knife, stun gun, or any firearm in their possession on campus or at any College-affiliated activities or events except handguns as allowed by NC GS §14-269.2(k). Handguns are permitted under these circumstances:

- The person has a concealed handgun permit that is lawfully issued.
- The handgun is in a closed compartment or container within the person's locked vehicle.
- The handgun is in a locked container securely affixed to the person's vehicle.
- A person may unlock the vehicle to enter or exit the vehicle provided the handgun remains in the closed compartment at all times.
- The vehicle is locked immediately following the entrance or exit.

Law enforcement officers are exempt from this prohibition. This includes facsimiles of weapons (please reference Weapons on Campus Policy 305).

Public Laws: Violations of any federal, state, or local laws occurring while on campus may lead to legal actions as well as College discipline. Violations of federal, state, or local laws occurring off campus may result in disciplinary action if the student's continued presence on campus constitutes a threat to the safety and order of the campus.

Retaliation: Retaliation against any person submitting a report of possible violation(s) of the Code of Student Conduct against another person is strictly prohibited. Retaliation includes, but is not limited to, any form of intimidation, punitive actions from authority figure or peers, reprisal (acts of vengeance) or harassment. Retaliation is a serious violation and should be reported immediately. The College will take appropriate disciplinary action against students found to have retaliated against another.

Skate Boards, Hover Boards, and Roller Skates: Skateboards, hover boards, and roller skates are not permitted to be used on campus outside College sanctioned events.

Theft: Students may not steal the property of another individual or of the College. Students who are caught stealing will be required to make restitution and may be eligible for civil or criminal prosecution as well as College discipline.

Threats: Students may not engage in any behavior that constitutes a clear and present danger to the physical and/or emotion well-being of the student and/or other students, faculty, and staff.

Trespass: Students are trespassing if in an unauthorized area of the College campus or remain on the College campus after having been directed to leave by a College official.

Vaping, E-cigarettes and Tobacco: Students may not use vaporizing devices, e-cigarettes, or tobacco of any form, on campus or at any College-affiliated activity, sites, or events (please reference Tobacco Free Campus Policy 306).

Unauthorized Access to Records: Students may not access, view, copy or change official College records without official authorization to do so.

Use of Social Media: Students should obey their social media platform terms of use. Students may not make, or cause to be made, communications (including electronically or through social media) to another person in any manner likely to seriously annoy or cause alarm. Social media may not be used to breach privacy, discriminate, or harass. Students may not make, transmit, or attempt to transmit audio or video of any person(s) on College property where there is an explicit expectation of privacy. Any posts or tweets deemed inappropriate on an A-B Tech social web site or blog will be deleted immediately and may result in having access to the site blocked permanently.

Violations of Expected Classroom or Learning Environment Behaviors: May include, but not limited to, being disobedient, disrespectful, disruptive to the classroom or learning environment, or not abiding by professional conduct standards.

Threat Assessment

A-B Tech is committed to providing a safe learning and working environment. As such, the College utilizes a threat assessment process to determine whether or not a student's behavior constitutes a potential safety risk to the individual or others. Matters that rise to the level of a potential threat will be handled under the Threat Assessment Policy. If the potential violation of this procedure includes other behaviors or conduct that may also violate the Code of Student Conduct, the violations will also be handled through the Threat Assessment procedure.

Student Rights of Due Process Policy (please reference Student Due Process Policy 823)

Threat Assessment Policy (please reference Threat Assessment Policy 819)

Student Rights of Due Process

Students have the following rights of due process when an allegation has been brought against them regarding violations of the Code of Student Conduct. The College uses the preponderance of the evidence as the standard for proof of whether a violation occurred. In the student conduct process, legal terms like "guilt, "innocence" and "burdens of proof" are not applicable. Student Hearing outcomes take into account the totality of all evidence available from all relevant sources. The College will find the student either "responsible" or "not responsible" for violating College policy.

For allegations of Title IX sexual harassment see Title IX Sexual Harassment Policy 112.For allegations of discrimination and harassment, see Non-Discrimination and Harassment Policy 111.

Students have a right to a Written Notice:

1. Upon receipt of an incident report to the Office of the Vice President of Student Services, the student in question will be sent a written notice to inform them of the allegations regarding the possible violation(s) of the Code of Student Conduct.

Students have a right to an Administrative Conference:

1. The student will be advised of the date, time, and location of the Administrative Conference with the Vice President for Student Services or designee to discuss and attempt to resolve the issue.
   a. If the student's alleged actions are considered egregious or disruptive to the teaching and learning environment or to campus safety, the Vice President for Student Services or designee may suspend the student for up to ten College business days. The matter may be moved directly to a Student Due Process Hearing or referred to a Threat Assessment Team for review.
2. 2. Outcome of Administrative Conference:
   a. If the student admits responsibility for a violation(s) of the Code of Student Conduct and accepts sanctions administered during the Administrative Conference process, then the matter will be considered closed.
   b. If the student denies responsibility for any offense, and/or disagrees with the adminis-

tered sanctions, then the matter will move to a Student Due Process Hearing which will be conducted by the Vice President of Student Services or designee or by members of the College's Behavioral Intervention Team (CARE Team).

3. If the student fails to attend the scheduled conference, then the matter will be moved to a Student Due Process Hearing.

Students have a right to a Student Due Process Hearing:

1. The hearing will be scheduled as soon as practical after receipt of an incident report of allegations deemed to be egregious in nature or after the conclusion of the Administrative Conference.
2. Prior to the hearing, the student has the right to review all evidence, including written statements made against them. Strict rules of evidence do not apply in the hearing.
3. A written hearing notice including the date, time, and location of the hearing will be sent to the student.
4. At the hearing, all parties involved in the incident will be given the opportunity to provide evidence. All pertinent parties have a right to speak and be questioned by the hearing chair. Cross-examination between parties is not permitted during the hearing.
5. The student is allowed to be accompanied by a person of your choosing. This person may not present on behalf of the student unless otherwise instructed to do so by the designated hearing chair. If the student chooses to have an attorney, the student must provide notification to the Office of the Vice President for Student Services at least three College business days prior to the hearing date. In this case, the College Attorney will be present also.
6. The student has a right to a recording of the hearing.
7. The student has a right to a written notice of the hearing outcome.
8. The decision of the hearing officer or CARE Team is final.

Threat Assessment

Overview

A-B Tech is committed to providing a safe learning and working environment. As such, the College utilizes a threat assessment process to determine whether or not a student's behavior constitutes a potential safety risk to the individual or others. Matters that rise to the level of a potential threat will be handled solely under the Threat Assessment Policy. If the potential violation of this procedure includes other behaviors or conduct that may also violate the Code of Student Conduct (Policy #804), the violations will also be handled through this procedure.

Introduction

A threat assessment is an objective process relying on a review of behaviors or conduct to identify potentially harmful, dangerous, or violent situations and to identify possible solutions. A threat is defined as any communication or behavior that suggests to a reasonable person that an individual may intend to harm him or herself or others. The threat may be spoken, written, or gestured and is considered a threat regardless of whether it is observed by or communicated to a third party.

Examples of prohibited conduct that may rise to the level of a threat assessment include, but are not limited to:

- Injuring another person physically including assault;
- Engaging in behavior that creates a reasonable fear of injury to oneself or others including bullying and/or disorderly conduct;
- Engaging in behavior that would subject a reasonable person to, and does subject another individual or individuals to, extreme emotional distress;
- Possessing, brandishing, or using a weapon while on College premises by students except where possession is a result of participation in an organized and scheduled exercise for a course, or where the student is a law enforcement professional;
- Intentionally damaging property;
- Threatening to injure an individual (including oneself) or to damage property; and
- Retaliating against any employee, student or community member who, in good faith, reports a violation of College policy.

In situations where a student may pose a threat to self, the individual may be directed to Student Support Services. However, if the potential threat to self includes other behavior or conduct that may also violate the Code of Student Conduct (Policy #804), the violation will be handled through this process.

There are many behaviors that may cause concern for the safety and well-being of an individual or the campus as a whole. The following is not an exhaustive list but provides examples of concerning behaviors or situations:

- Unusual or abrupt changes in behaviors or patterns;
- Extreme emotional reaction to a loss, traumatic event or situation;
- Preoccupation with weapons, violent events or persons who have engaged in violent acts;
- References to harming others or planning a violent or destructive event;
- Prolonged irritability, angry outbursts or inordinate reactions to situations;

- Strained interpersonal relations, isolating behaviors and/or hopelessness;
- Stalking others, either in person or electronically;
- Past history of disciplinary problems and issues; and
- Verbal or physical altercation with another student, faculty, staff, or community member.

These examples of potentially threatening behaviors are not intended to operate as speech codes, promote content and viewpoint discrimination or suppress minority viewpoints in the academic setting. While a student's speech or expression may be deemed offensive by others, it does not necessarily mean it constitutes a threat under this Policy.

Reporting Potential Threats

Anyone who believes that the immediate safety and well-being of an individual or the campus as a whole are at risk should notify the A-B Tech Police Department or call 911. The A-B Tech Police Department is located across from the parking deck in the Mission Health/A-B Tech Conference Center and can be reached by phone at (828) 398-7125. A-B Tech Police officers are available 24-hours a day, 7-days a week. To reach the on-duty officer, please call (828) 279-3166. The A-B Tech Police will forward the report to the Vice President for Student Services (VPSS) or designee and will work in partnership to determine the best course of action.

Individuals may also make a report to the Office of the VPSS by submitting an incident report at www.abtech.edu/incidentreport. While anonymous reports are accepted, it is important that individuals making reports share as much information as possible. The College will make every reasonable effort to preserve the confidentiality of those reporting threatening behaviors. However, confidentiality cannot be guaranteed in the process.

Retaliation

Retaliation against any person in connection with a report of a threat is strictly prohibited. Reports of retaliation will be addressed through this policy and/or other applicable College policies. Retaliation includes, but is not limited to, any form of intimidation, punitive actions from an authority figure or peers, reprisal (acts of vengeance) or harassment. Retaliation is a serious violation and should be reported immediately. The College will take appropriate disciplinary action against anyone found to have retaliated against another.

Standard of Evidence

The College uses the preponderance of the evidence as the standard for proof of whether a violation occurred. In the threat assessment process, legal terms like "guilt, "innocence" and "burdens of proof" are not applicable. Student Hearing outcomes take into account the totality of all evidence available from all relevant sources. The College will find the Student either "responsible" or "not responsible" for violating College this policy.

Threat Assessment Process

After the VPSS or designee reviews the initial report and determines that it warrants further review, a Threat Assessment Team (Team) will be assembled. Interim measures shall only be used when necessary to protect the student's emotional and physical health and to protect the safety of the campus community. When interim measures are implemented, every effort will be made to expedite the assessment process. Interim measures may include, but are not limited to, changing the student's academic environment or temporary suspension through the investigation and hearing process. Suspensions can only be imposed by the VPSS or the President.

A Team will be comprised of no less than four members of the College's Behavioral Intervention Team (CARE Team) in an effort to ensure an efficient and equitable assessment. The VPSS or designee may at his or her discretion include additional members to the Team. If a conflict or appearance of conflict arises for any member of the Team, the VPSS or designee shall appoint a substitute for that member.

The VPSS or designee will serve as chair and provide the Team with the following information:

- The original report or A-B Tech Police incident report;
- Any witness statements and/or any other supporting documentation;
- Any previous disciplinary issues relevant to the threat; and
- Any additional relevant information that would be useful to the Team.

The role of the Team is to review the alleged threat and evaluate the alleged student's behavior/conduct in light of the accumulated evidence in order to determine if a violation of College policy has occurred and whether or not the student constitutes a threat.

The VPSS or designee will provide a written notification to the student explaining that a Team has been assembled and is evaluating the possible threat. This notification will also include the date and time of the Threat Assessment Hearing. Prior to the hearing, the student has the right to review all evidence, including written statements. Strict rules of evidence do not apply in the hearing. If the student is not able to attend, reasonable modifications to the date will be made. However, if the student chooses not to attend the scheduled hearing, the hearing will proceed as planned utilizing the evidence available.

During the hearing, the Team will have full investigatory authority when reviewing the alleged threat and evaluating the student's behavior or conduct. The

Team will interview or review statements from the student, witnesses, and other relevant parties involved in the incident. All pertinent parties have a right to speak and be questioned by the Team during the hearing. Direct cross-examination between parties takes place in a modified format. The student has the right to pose questions of those providing evidence through the Team chair.

The Team has the right to inspect the student's school record and may request that the student provide secondary and post-secondary school records. The Team may also request that the student provide additional information such as medical records.
The student is allowed to be accompanied by an advocate. The role of the advocate is to provide support to the student and not to speak on behalf of the student unless invited to do so by the chair. If the student chooses to have an advocate, the student must provide the name and role of the advocate to the VPSS at least three College business days prior to the hearing date.

Threat Assessment Finding

The student has a right to a written notice of the hearing outcome. The hearing outcome will determine if the student is in violation of this procedure and the Code of Student Conduct (Policy #804), and if any sanctions should be imposed. Possible sanctions may include:

- Warning;
- Probation;
- Administrative withdrawal from the Academic Program or course without refund;
- Required counseling;
- No contact directive;
- Suspension from the College without refund;
- Expulsion with automatic appeal to the President; and
- Other sanctions deemed appropriate

Appeal

The student has a right to appeal the outcome of the Threat Assessment Hearing to the College President or designee. Upon receipt of the hearing outcome, the student has five College business days to submit a notice requesting an appeal. This notice must be submitted in writing to the Office of the VPSS. If the recommendation of the Team is suspension from the College, the student will remain suspended through the appeal process. The President's document review does not include a new hearing but shall consist of evidence presented at the hearing along with a recording of the proceeding. The President or designee will affirm, modify, or overturn the decision of the Team. The President or designee's decision will be final and notification of the decision will be sent directly from the Office of the President to the student.

Return to Campus

A student who is suspended from the College as a result of a threat assessment may be considered for re-enrollment. A student wishing to be considered for re-enrollment should contact the Office of the VPSS. Based on sanction requirements additional documentation may be required, including compliance with any conditions that may have been set for re-enrollment.

Records Retention

All documentation will be stored in the Office of the VPSS for a period of seven years at which point the documentation will be moved to an electronic version to be retained permanently. In cases where the student is found to be in violation of this policy or other College policies, this information will be considered as a disciplinary record with the College.

Sexual Misconduct Policy (Title IX)

It is the policy of the Board of Trustees to provide the campus community with education and training to increase awareness, prevention and the prompt reporting and resolution of all types of sex/gender based discrimination, harassment and violence in compliance with all applicable federal and state laws and administrative regulations.

A-B Tech students, employees, and guests/visitors have the right to be free from all forms of sex/gender based misconduct, harassment, and discrimination, examples of which include acts of sexual assault, sexual harassment, domestic violence, dating violence, and stalking (collectively "Sexual Misconduct"). All members of the A-B Tech community are expected to conduct themselves in a manner that does not infringe upon the rights of others in an illegal or offensive manner. A-B Tech believes in zero tolerance for Sexual Misconduct. Zero tolerance means that when an allegation of Sexual Misconduct is brought to an appropriate administrator's attention, protective and other interim safety measures will be used to reasonably ensure that such conduct is stopped, is not repeated, and the effects on the victim and community are remedied, including serious sanctions when a respondent is found to have violated this Policy.

Non-Discrimination Statement

The A-B Tech Board of Trustees and administration are fully committed to encouraging and sustaining a learning and work environment that is free from prohibited discrimination. The College does not practice or condone discrimination based on race, color, national origin, religion, sex, sexual orientation, gender identity or expression, pregnancy, disability, genetic information/medical history, age, political affiliation or veterans' status in the administration of any of its academic programs and employment practices.

Inquiries or complaints concerning possible discrimination based on any of the categories above should be referred to:

Sexual Misconduct, please contact:
Director of Title IX Compliance, Office of the Vice President for Student Services
340 Victoria Road, Asheville, NC 28801, (828) 398-7932
All other Student inquiries, contact:
Office of the Vice President for Student Services
340 Victoria Road, Asheville, NC 28801, (828) 398-7484
Employee inquiries, contact:
Office of the Executive Director for Human Resources
340 Victoria Road, Asheville, NC 28801, (828) 398-7113

Sexual Misconduct Procedure

Introduction

Overview

This procedure applies to any allegation of Sexual Misconduct made by or against a student, a College employee or a third party. A-B Tech may take disciplinary action to address Sexual Misconduct and will take appropriate action to investigate and adjudicate the matter if it impacts the educational environment of the College. The College's disciplinary authority, however, may not extend to third parties who are not students or employees; or to incidents that occur outside of College or College sponsored events. This procedure applies regardless of the sexual orientation or gender identity of the parties involved.

All report of Sexual Misconduct will be reviewed by the Director of Title IX Compliance or designee to confirm that the alleged conduct can be addressed under this procedure. If it is determined that the alleged sexual misconduct complies with the standards set forth by Title IX, the complaint shall be addressed under the Title IX Sexual Harassment procedure (112.02).

Statements of Prohibition

Prohibition of Sexual Misconduct

The College prohibits Sexual Misconduct and is committed to a timely and fair resolution. The College encourages prompt reporting of all types of Sexual Misconduct. While the College will investigate all reports of Sexual Misconduct, some Sexual Misconduct can be addressed effectively without full adjudication and/or without formal disciplinary sanctions against a Respondent.

Prohibition of Retaliation

Retaliation against any person in connection with a complaint of Sexual Misconduct is strictly prohibited. Reports of retaliation will be addressed through this procedure and/or other applicable College procedures. Retaliation includes, but is not limited to, any form of intimidation, punitive actions from authority figure or peers, reprisal (acts of vengeance) or harassment. Retaliation is a serious violation and should be reported immediately. The College will take appropriate disciplinary action against any employee or student found to have retaliated against another.

Prohibition of Providing False Information

Any individual who knowingly files a false report or complaint, who knowingly provides false information to College officials, or who intentionally misleads College officials involved in the investigation or resolution of a complaint may be subject to disciplinary action including, but not limited to expulsion or employment termination. The College recognizes that an allegation made in good faith will not be considered false when the evidence does not confirm the allegation(s) of Sexual Misconduct.

Prohibition of Student/Employee Relationships

Employee Relationships: Romantic or sexual relationships between College employees in a direct supervisor/supervisee relationship are prohibited. This prohibition shall continue as long as the employees remain in a direct supervisor/supervisee relationship or in the chain of supervision. Employees violating this provision will be subject to disciplinary action up to and including termination of employment.

Romantic or sexual relationships between College employees not in a supervisor/supervisee relationship that impairs the College employee's effectiveness, disrupts the workplace/learning environment, and/or impairs the public confidence in the College will be subject to disciplinary action up to and including termination of employment.

Employee/Student Relationships: Romantic or sexual relationships between College employees and students are prohibited if the employee and the student have an academic relationship; if the student is still enrolled in high school; of if the student is under the age of eighteen. Academic relationships include any activities in which the employee is a direct or indirect supervisor (i.e., student working in the program or department such as a work study/student worker or an employee serving as an advisor for a student club or organizational activity) or faculty and staff in an instructional setting for the student (i.e., classroom, lab, or clinical/practical setting). This prohibition shall continue until the student, or the employee is no longer affiliated with the College. Employees engaging in inappropriate relationships will be subject to disciplinary action up to and including termination of employment.

Romantic or sexual relationships between College employees and students that do not violate the above provision but otherwise impairs the College employee's effectiveness, disrupts the workplace/learning environment, and/or impairs the public confidence in the College will be subject to disciplinary action up to and including termination of employment or expulsion from the College.

Confidentiality

The College will respect and make every reasonable effort to preserve the confidentiality of the information and identities shared by the parties involved in a Sexual Misconduct matter. College administrators will, however, share information regarding an alleged Sexual Misconduct, as appropriate and necessary, in order to address and resolve the allegation, prevent the recurrence of similar Sexual Misconduct and address the effects of the Sexual Misconduct.
All full-time and part-time regular employees and curriculum adjunct faculty members are considered Responsible Employees and have a duty to report to the Director of Title IX Compliance (for student matters) or the Executive Director for Human Resources (for employee matters) unless the employee is an A-B Tech professional counselor.

Reporting Options

Reporting to Local Law Enforcement

Individuals may report Sexual Misconduct directly to local law enforcement agencies by dialing 911. Individuals who make a criminal allegation may also choose to pursue College disciplinary action simultaneously. A criminal investigation into the matter does not release the College from its obligation to conduct its own investigation (nor is a criminal investigation determinative of whether Sexual Misconduct, for purposes of this procedure, has occurred). However, the College's investigation may be delayed temporarily while the criminal investigators are gathering evidence. In the event of such a delay, the College must take interim measures when necessary to protect the alleged Complainant and/or the College community. Individuals may choose not to report alleged Sexual Misconduct to law enforcement authorities. The College respects and supports individuals' decisions regarding reporting; nevertheless, the College may notify appropriate law enforcement authorities if required or warranted by the nature of the allegations.

Reporting to College Officials

For incidents between students and employees, the Director of Title IX Compliance will work in partnership with the Executive Director for Human Resources or designee to investigate and resolve the allegation. Director of Title IX Compliance - A-B Tech's Director of Title IX Compliance oversees compliance with all aspects of the Sexual Misconduct policy. Anyone wishing to make a report relating to Sexual Misconduct may do so by reporting the concern to the College's Director of Title IX Compliance.

Michele Hathcock
Director of Title IX Compliance
Office of the Vice President for Student Services
Asheville Campus
828-398-7932
michelechathcock@abtech.edu

Online reporting:

To submit an online report, please visit www.abtech.edu/incidentreport

Incidents solely between employees may be referred directly to the Human Resources Office at 828-398-7167.

A-B Tech Police - The A-B Tech Police Department is located across from the parking deck in the Mission Health/A-B Tech Conference Center on the main Asheville campus and can be reached by phone at (828) 398-7125. A-B Tech Police Officers are available 24-hours a day, 7-days a week. To reach the on-duty officer, please call (828) 279-3166.

Anonymous Reporting - Individuals may also file anonymous reports by completing the Incident Report Form. It may be very difficult for the College to take action on anonymous reports since supporting information may be limited. Anonymous reports may be used for statistical reporting purposes.

Reporting Timeframe

An allegation of Sexual Misconduct may be filed at any time, regardless of the length of time between the alleged Sexual Misconduct and the decision to file the complaint. The College strongly encourages individuals to file complaints promptly in order to preserve evidence for potential disciplinary or legal proceedings. A delay in filing a complaint may hinder the College's investigation.

Limited Immunity

The College community encourages the reporting of misconduct and crimes by Complainants and witnesses. Sometimes, Complainants or witnesses are hesitant to report to College officials or participate in resolution processes because they fear that they themselves may be accused of policy violations, such as underage drinking at the time of the incident. It is in the best interest of this College that as many Complainants as possible choose to report to College officials, and that witnesses come forward to share what they know. To encourage reporting, the College offers Sexual Misconduct Complainants and witnesses amnesty from minor policy violations.

State and Federal Reporting Obligations

A-B Tech follows all state laws regarding mandatory reporting of child abuse to appropriate state officials. Additionally, Campus Security Authorities have a duty to report sexual assault, domestic violence, dating violence and stalking to the Director of Title IX Compliance for federal statistical reporting purposes (Clery Act). All personally identifiable information is kept confidential, but statistical information must be shared with campus law enforcement. The information to be shared includes the date, the location of the incident (using Clery location categories) and the Clery crime category. This reporting protects the identity of the Complainant and may be done anonymously. The Annual Security Report helps to provide the community with a clear picture of the extent and nature of campus crime in order to build community safety and awareness. To see a copy of the report, you may go to the College website under Consumer Information.

Investigation Process

Standard of Evidence

The College uses the preponderance of the evidence as the standard for proof of whether a violation occurred. In the student hearing and employee grievance process, legal terms like “guilt, “innocence” and “burden of proof” are not applicable. Student and employee hearings are conducted to take into account the totality of all evidence available from all relevant sources. The College will find the Respondent either “responsible” or “not responsible” for violating this procedure.

Advocates

The Complainant and the Respondent are allowed to be accompanied by an advocate. The role of the advocate is to provide support solely to the Complainant or Respondent and not to speak on behalf of either party unless invited to do so by the Presiding Officer. If the Complainant or the Respondent chooses to have an advocate, the name must be provided as well as the role/relationship of the advocate to the Presiding Officer at least three College business days prior to the initial meeting or hearing date.

Interim Measure

If at any point the Vice President for Student Services, Director of Title IX Compliance, or designee deems it necessary to implement interim measures for the protection of any member of the College community, actions may be taken including but not limited to the following:

- Temporarily suspend the Respondent for up to ten College business days and move the matter to a hearing;
- Change the Respondent’s and/or Complainant’s class schedule;
- Take such steps as are reasonable, appropriate and necessary to restrict the Respondent’s movement on campus.

For employees, the President may take the following actions including but not limited to:

- Take such steps as are reasonable, appropriate and necessary to restrict the Respondent’s movement on campus;
- Place Respondent on temporary paid administrative leave or reassign the Respondent to other duties.

Interim measures shall only be used when necessary to protect health and safety and, when interim measures are implemented, every effort will be made to expedite the process.

Determination of Investigator and Resolution Process

This procedure applies to students and employees as either the Complainant or the Respondent. The administrator receiving the incident report will determine if the case should be handled by the Director of Title IX Compliance (student/student cases) or the Human Resources representative (employee/employee cases). For incidents involving students and employees, the College will utilize the process for both the student investigation and the employee investigation sections as applicable.

Investigations

When an individual brings forward an allegation of Sexual Misconduct, the individual is referred to as the Complainant. The individual named in the allegation is referred to as the Respondent. The investigation will follow the process below.

Administrative Conference

Complainants

As soon as is practical, the Director of Title IX Compliance or designee will contact the Complainant to schedule an administrative conference. During these initial meetings, the Director of Title IX Compliance will:

- Work with Complainant to stop and remedy the impact of the current situation.
- Implement safety measures as necessary.
- Conduct an initial investigation to retrieve all relevant facts related to the alleged Sexual Misconduct. During this initial meeting, the Director of Title IX Compliance or designee will explain how the investigation will move forward.

Respondents

Prior to the administrative conference with the Respondent, the Director of Title IX Compliance or designee will notify the Respondent of the allegations. As soon as is practical and after the administrative conference with the Complainant, the Director of Title IX Compliance or designee will contact the alleged Respondent to schedule a meeting. At this meeting, the Director of Title IX Compliance will, as applicable:

- Discuss with any initial interim measures that were implemented as a result of the alleged Sexual Misconduct.
- Work with Respondent to ensure that alleged actions of Sexual Misconduct are immediately stopped and prevent future reoccurrence.
- Conduct an initial investigation to retrieve all relevant facts related to the alleged Sexual Misconduct. During this initial meeting, the Director of Title IX Compliance or designee will explain how the investigation will move forward.

Recommendations and Hearing

After the investigation is complete, the Director of Title IX Compliance or designee will put forward a recommendation of finding and sanction(s) to both the Complainant and Respondent. The Director of Title IX Compliance or designee may also include possible violations of other College policies that contributed to, arose from, or are otherwise related to alleged violations of this policy and procedure in the scope of an investigation.

If the recommendation is accepted by both parties involved, the recommendation and sanction(s) will become effective and both parties forgo the option of a formal hearing. The Director of Title IX Compliance or designee will submit to each party a final outcome letter that will include, but not limited to, the following:

- Determination if the Respondent is responsible, not responsible, or if the decision is deemed inconclusive, or shared responsibly for violating this or other applicable College polices.
- Sanction, if appropriate.
- Monitoring of academic schedules or work-place schedule as needed
- Short-term College counseling services available to each party.

If the recommendations of the Director of Title IX Compliance or designee are not accepted by either the Complainant or the Respondent, the case will move to a formal hearing. The Vice President for Student Services or a designee will preside over the hearing as the Presiding Officer. If either party is an employee, the Executive Director for Human Resources, and the Vice President for Student Services shall preside jointly over the hearing. The process for the hearing is outlined below:

- Prior to the hearing, the Complainant and the Respondent have the right to review all evidence, including written statements by the Respondent, the Complainant, or witnesses.
- Written notice including the date, time, and location of the hearing will be sent to all parties. If the respondent is not able to attend, reasonable modifications to the date will be made. However, if the respondent does not show for the scheduled hearing, the hearing will proceed as planned utilizing the evidence available.
- At the hearing, all pertinent parties have a right to speak and be questioned by the Presiding Officer. Cross-examination takes place in a modified format. Each party has the right to pose questions to the other party through the Presiding Officer. Each phase of the hearing will be heard by both parties in separate rooms by use of a speaker phone or through the use of virtual meeting software.
- The Complainant and the Respondent are allowed to be accompanied by an advocate. The role of the advocate is to provide support to the Complainant or Respondent and not to speak on behalf of either party unless invited to do so by the Presiding Officer. If the Complainant or the Respondent chooses to have an advocate, the name must be provided as well as the role of the advocate to the Presiding Officer at least three College business days prior to the hearing date.
- Both parties have a right to a written notice of the hearing outcome.

Sanctioning

The following sanctions may be imposed for those who have violated the Sexual Misconduct Policy or other applicable College policies:

Student Sanctions:

- Verbal or Written Warning
- Probation
- Administrative withdrawal from an Academic Program or course without refund
- Required Counseling
- No Contact Directive
- Suspension from the College without refund
- Recommendation for Expulsion with automatic appeal to the President
- Other consequences deemed appropriate

Employee Sanctions:

- Verbal or Written Warning
- Performance Improvement Plan
- Required Counseling
- Required Training or Education
- Recommendation of Demotion (Automatic appeal to the President)
- Recommendation to Suspend with or without Pay (Automatic appeal to the President)

- Recommendation for termination (Automatic appeal to the President)
- Other consequences deemed appropriate to the specific violation

Appeal Process

The Complainant or Respondent has a right to a final appeal to the President:

a. Upon receipt of the hearing outcome, both parties have five College business days to submit a notice requesting an appeal. For students, this notice must be submitted in writing to the Office of the Vice President for Student Services. For employees, this notice must be submitted in writing to the Office of the Executive Director for Human Resources.
b. If an appeal is requested, both parties will be notified.
c. The President will conduct a document review which does not include a new hearing but shall consist of evidence presented at the hearing along with a recording of the proceeding.
d. The President will affirm, modify, or overturn the decision and/or sanctioning. The President's decision will be final, and notification of the decision will be sent directly from the President's office to each party.

Records Retention

Students - All documentation will be stored in the Vice President for Student Services' office for a period of seven years at which point the documentation will be moved to an electronic version to be retained permanently. In cases where the Respondent is found responsible for violating the Sexual Misconduct Policy, this information will be considered as a disciplinary record with the College.

Employees – Personnel files are retained for 30 years. If the action taken is informal counseling, this does not become part of the permanent record. Civil Rights files must be maintained for a minimum of two years. Pursuant to Board Policy 112, this procedure must be followed when dealing with sexual misconduct.

Title IX Sexual Harassment

Introduction

Overview

The College strives to make its campuses and sites inclusive and a safe and welcoming learning environment for all members of the College community. Pursuant to multiple federal and state laws and administrative regulations and pursuant to College policy, the College prohibits discrimination in its education programs and activities based on sex. This procedure applies to allegations of Title IX Sexual Harassment made by or against a student, a College employee or a third party. The College's disciplinary authority, however, may not extend to third parties who are not students or employees. A-B Tech may take disciplinary action to address Title IX violations and will take appropriate action to investigate and adjudicate the matter if it impacts the educational environment of the College.

Title IX

Note: Title IX will be updated this academic year. Refer to the online version of the Catalog for the most recent policy.

Title IX is a comprehensive federal law that prohibits discrimination on the basis of sex in any federally funded education program or activity. Under Title IX, discrimination on the basis of sex includes quid pro quo harassment; sexual harassment; and sexual assault, stalking, dating or domestic violence (collectively referred to as "sexual harassment"). The College's Director of Title IX Compliance has oversight responsibility for handling sexual harassment complaints and for identifying and addressing any patterns and/or systemic problems involving sexual discrimination or harassment.

All allegations involving sexual harassment should be directed to the Director of Title IX Compliance or designee. In the case of conduct solely between employees, reports should be directed to the Executive Director for Human Resources or designee. For other complaints of discrimination and harassment not related to sexual harassment, refer to the Non-Discrimination and Harassment procedure.

Scope and Applicability of Title IX

Title IX regulations apply to College students and applicants for admission into the College; College employees and applicants for employment; College sanctioned student organizations; and third parties participating in a College education program or activity. Title IX applies to conduct that occurs in a College education program or activity located within the United States and of which the College has actual knowledge.

Reporting

Reporting to Local Law Enforcement

Individuals may report sexual harassment directly to local law enforcement agencies by dialing 911. Individuals who make a criminal allegation may also choose to pursue College disciplinary action simultaneously. A criminal investigation into the matter does not release the College from its obligation to conduct its own investigation (nor is a criminal investigation determinative of whether sexual harassment has occurred). However, the College's investigation may be delayed temporarily while the criminal investigators are gathering evidence. In the event of such a delay, the College must take interim measures when necessary to protect the alleged Complainant and/or the College community.

Individuals may choose not to report alleged sexual harassment to law enforcement authorities. The College respects and supports individuals' decisions regarding reporting; nevertheless, the College may notify appropriate law enforcement authorities if legally required or warranted by the nature of the allegations.

Reporting to College Officials

Director of Title IX Compliance - Anyone wishing to make a report relating to sexual harassment may do so by reporting the concern to the Director of Title IX Compliance in person, by mail, by telephone, by email, or by any other means that results in the Director of Title IX Compliance receiving the person's verbal or written report of alleged harassment.

Michele Hathcock
Director of Title IX Compliance
Office of the Vice President for Student Services
Asheville Campus
828-398-7932
michelechathcock@abtech.edu

Online reporting at: www.abtech.edu/about/title-ix-sexual-discrimination-and-harassment-legislation.

Incidents solely between employees may be referred directly to the Human Resources Office who will work with the Title IX Coordinator. The Human Resources office can be reached at 828-398-7114 or hr@abtech.edu.

A-B Tech Police - The A-B Tech Police Department is located across from the parking deck in the Mission Health/A-B Tech Conference Center on the Asheville campus and can be reached by phone at (828) 398-7125. A-B Tech Police Officers are available 24-hours a day, seven days a week. To reach the on-duty officer, please call (828) 279-3166.

Responsible Employees

All full-time and part-time regular employees and curriculum adjunct faculty are considered Responsible Employees and have a duty to forward complaints to the Director of Title IX Compliance.

Providing False Information

Any individual who knowingly files a false report or complaint, who knowingly provides false information to College officials, or who knowing misleads College officials involved in the investigation or resolution of a complaint may be subject to disciplinary action including, but not limited to expulsion or employment termination. The College recognizes a determination regarding responsibility alone is not sufficient to conclude a false report or complaint was made.

Limited Immunity

The College community encourages the reporting of misconduct and crimes. Sometimes, Complainants or witnesses are hesitant to report to College officials or participate in resolution processes because they fear that they themselves may be accused of various policy violations. It is in the best interest of this College that as many Complainants as possible choose to report to College officials, and that witnesses come forward to share what they know. To encourage reporting, the College offers Complainants and witnesses amnesty from minor policy violations.

Grievance Process

Use of this grievance process applies to reports alleging sexual harassment carried out by employees, students, or third parties. When an individual brings forward an allegation of sexual harassment, the individual is referred to as the Complainant. The individual named in the allegation is referred to as the Respondent. All reports of harassment are taken seriously. At the same time, those accused of harassment are presumed "not responsible" throughout this grievance process.

Initial College Response and Assessment

After receiving a report of sexual harassment, the Title IX Coordinator takes prompt and appropriate steps to:

1. Communicate with the individual who reported the alleged conduct;
2. Implement supportive measures to eliminate and prevent the recurrence of sexual harassment, deter retaliation, remedy the effects of sex misconduct, and provide due process rights during a College investigation;
3. Provide the individual with a copy of this procedure; and
4. Determine whether the alleged conduct, as described by the reporting party, falls within the scope of this policy and if so, initiate the investigation and resolution steps outlined below.
5. The Director of Title IX Compliance may delegate the authority to take some or all of these steps to other trained College officials.

The Director of Title IX Compliance or designee will take the following action based on the initial assessment:

1. The Director of Title IX Compliance must administratively close a report or complaint of sexual harassment if after an initial assessment:
   a. The allegations as stated do not constitute a violation of this Policy and Procedure under Title IX, even if proven; or
   b. The alleged sexual harassment did not occur in the College's education program or activity or did not occur in the United States.
   c. The Director of Title IX Compliance will notify the parties if a report or complaint of sexual harassment is closed, including the reason(s) for closure, and direct the parties to the appropriate College office or department to resolve the report or complaint. All parties may appeal the Director of Title IX Compliance dismissal of a Formal Complaint by using the appeal procedures.
2. The Director of Title IX Compliance or designee may administratively close a report or complaint of sexual harassment if:
   a. The Complainant, at any time, requests withdrawal of the report or complaint;
   b. The Respondent is no longer enrolled or employed by the College; or
   c. The College is prevented from gathering evidence sufficient to reach a determination of responsibility.
   d. The Director of Title IX Compliance will notify the parties if a report or complaint of sexual harassment is closed, including the reason(s) for closure, and direct the parties to the appropriate College office or department to resolve the report or complaint. All parties may appeal the Director of Title IX Compliance's dismissal of a Formal Complaint by using the appeal procedures.

Regardless of when alleged sexual harassment is reported, a Complainant must be participating in or attempting to participate in the College's education program or activity for a Formal Complaint to be filed.

Informal Resolution

Any party may request the College facilitate an informal resolution to a sexual harassment complaint at any time after the filing of a Formal Complaint. The Director of Title IX Compliance may also offer the parties the opportunity for informal resolution.

1. Upon request for informal resolution, the Director of Title IX Compliance determines whether informal resolution is appropriate based on the facts and circumstances of the case. The Director of Title IX Compliance ensures that any proposed informal resolution is consistent with the College's obligations to prevent and redress sexual harassment.
2. A student's allegations of sexual harassment against a College employee are not eligible for informal resolution.
3. The Director of Title IX Compliance provides the parties with written notice of proceeding with an informal resolution, including the allegations of sexual harassment, the requirements of the informal resolution process, and potential outcomes resulting from participating in the informal resolution process.
4. Informal resolution is voluntary. The Complainant and Respondent must provide written consent for informal resolution to take place. Any party has a right to end the informal resolution process at any time prior to agreeing to a resolution outcome and begin or continue the formal investigation and hearing process.
5. Informal resolution concludes the matter only when all parties have signed a written agreement that confirms resolution of the allegations. The resolution agreement must include a waiver of the parties' right to have a formal hearing on the allegations that have been informally resolved.
6. Parties are prohibited from revoking or appealing a resolution agreement. Should the Respondent violate the terms of an informal resolution agreement, such violation will subject the Respondent to a formal investigation and hearing.
7. If a resolution agreement is not reached, the College will continue with a formal investigation and hearing.

Formal Title IX Investigation

The goal of a formal investigation is to reach a determination as to whether a Respondent has violated one or more College policies prohibiting sexual harassment and if so, remedy the effects of a violation. The Director of Title IX Compliance may include possible violations of other College policies that contributed to, arose from, or are otherwise related to alleged violations of this Policy and Procedure in the scope of an investigation.

1. The Director of Title IX Compliance gives written notice to the Complainant and Respondent of the investigation, providing sufficient details to allow the parties to respond and prepare for initial interviews, including the identity of the parties involved (if known), the conduct alleged to be sexual harassment, the date and location of alleged incidents (if known), a statement that the Respondent is presumed not responsible and a determination of responsibility is made at the conclusion of the process, information regarding the parties' right to an advisor and the right to review evidence, and notice that the College prohibits knowingly making false statements or submitting false information during the grievance process.

2. Parties to an investigation can expect a prompt, thorough, and equitable investigation of complaints, including the opportunity for parties to ask questions, present witnesses and provide information regarding the allegations.
3. Parties and witnesses should cooperate in the investigation process to the extent required by law and this policy.
4. The standard of proof used in investigations is the preponderance of the evidence standard. It is the College's responsibility to establish the standard of proof and gather evidence during investigations.
5. The College aims to bring all investigations to a resolution within a reasonably prompt timeframe from the date the Director of Title IX Compliance determines a formal investigation will commence. Extensions of timeframe for good cause are allowed, so long as written notice and the reason for the delay is provided to the parties. Good cause includes:
    a. The complexity and/or number of the allegations;
    b. The severity and extent of the alleged misconduct;
    c. The availability of the parties, witnesses, and evidence;
    d. A request by a party to delay an investigation;
    e. The effect of a concurrent criminal investigation or proceeding;
    f. Intervening holidays, College breaks, or other closures;
    g. Good faith efforts to reach a resolution; or
    h. Other unforeseen circumstances.
        I. Investigations typically include interviews with the Complainant, the Respondent, and any witnesses, and the objective evaluation of any physical, documentary, or other evidence as appropriate and available. The College will give the Complainant and the Respondent written notice of any interview, meeting, or hearing.
        II. The College may suspend or place on administrative leave a student or employee, pending the completion of an investigation and resolution, when the College determines the person poses an immediate threat to the physical health or safety of any member(s) of the College community. Additional interim measures may include restricting the movements of a student or employee on campus, altering class or work locations, or schedules.
            a. The Director of Title IX Compliance may recommend to the appropriate College official to implement or stay an interim suspension of a student or employee and the conditions and duration of such suspension or leave.
            b. In all cases in which an interim suspension or administrative leave is imposed, the student or employee shall be given notice and an opportunity to challenge the removal decision immediately following the removal.
            c. Violation of an interim suspension under this Procedure is grounds for expulsion or termination.
                - Interviews conducted as part of an investigation under this Procedure may be recorded by the College. Recordings not authorized by the College are prohibited.
                - The Complainant and Respondent have the right to be accompanied by an advisor of their choosing during all stages of an investigation. A party may elect to change advisors during the process. All advisors are subject to the same rules:
                    a. During the investigation, the advisor's role is limited to providing advice, guidance, and support to the Complainant or Respondent. An advisor is not permitted to act as a participant or advocate during the investigative process.
                    b. Advisors are expected to maintain the privacy of the records shared with them.
                    c. Advisors are expected to refrain from interfering with investigations.
                    d. Any advisor who oversteps their role or interferes during an investigation process will be warned once. If the advisor continues to disrupt or otherwise fails to respect the limits of the advisor role, the advisor will be asked to leave. The Director of Title IX Compliance determines whether the advisor may return or should be replaced by a different advisor.
                - Prior to finalizing a report, the investigator provides all parties an equal opportunity to review any evidence obtained as part of the investigation that is directly related to the allegations raised in the Formal Complaint, including evi-

dence upon which the College does not intend to rely. The Complainant and Respondent may submit a written response to the evidence within ten (10) days after receipt of the evidence.
  a. Responses must be submitted to the investigator via email, mail, or hand delivery by 5:00 p.m. eastern standard time on the date responses are due. Responses may not exceed 10 double-spaced pages on 8.5 x 11 paper with one-inch margins and 12-point font.
  b. The investigator considers any responses received from the parties and conducts any further investigation necessary or appropriate.

6. Following an investigation and at least 10 days prior to a grievance hearing, the investigator submits an investigative report to the parties that fairly summarizes relevant evidence. The report includes a summary of the allegations; a summary of the response; a summary of the investigative steps taken to verify the allegations and response; and a summary of the evidence relevant to a determination of responsibility.

Grievance Hearings

At least 10 days after the issuance of an investigation report, the College must hold a live hearing in front of a presiding officer to determine responsibility of a Respondent. The presiding officer may not be the Director of Title IX Compliance or the investigator. A "live hearing" means either in person or virtually. The following hearing rules apply:

1. All parties must be able to see and hear the questioning of parties and witnesses.
2. Any party may request a virtual hearing. If requested, the College will provide a virtual hearing.
3. All parties have an equal opportunity to present witnesses, including fact and expert witnesses.
4. The parties' advisors are permitted to cross-examine the parties and any witnesses.
   a. The parties are prohibited from directly conducting cross-examination. Cross-examination must be conducted by a party's advisor.
   b. The presiding officer determines whether questions asked during cross-examination are relevant to the determination of responsibility. If the presiding officer disallows a question, they will explain the basis for their decision at the hearing. Parties and advisors may not challenge a presiding officer's determination during the hearing.
   c. Evidence or questions that inquire about the Complainant's sexual predisposition or prior sexual history are prohibited unless such questions and evidence are offered to prove that someone other than the Respondent committed the conduct alleged by the Complainant, or if the questions and evidence concern specific incidents of the Complainant's prior sexual behavior with respect to the Respondent and are offered to prove consent.
   d. The presiding officer may not consider statements of individuals who do not submit to cross-examination in reaching a determination of responsibility.
   e. Records with a legally recognized privilege, such as medical treatment records, may not be used unless the individual or entity who holds the privilege waives the privilege. Any waiver must be written and made in advance of a hearing.
   f. If a party does not have an advisor, the College will provide an advisor at no cost to the party. The advisor may, or may not, be an attorney.
   g. Other standard Rules of Evidence do not apply in grievance hearings under these Procedures.
5. The College will provide either an audio recording, audiovisual recording, or transcript of the hearing to all parties.
6. The presiding officer evaluates all relevant evidence and reaches a determination regarding responsibility. The presiding officer issues their final written determination to all parties within ten (10) days of the hearing. The final written determination includes a summary of the allegations; a description of the procedural steps taken by the College to investigate and reach a determination of responsibility; findings of fact supporting the determination; conclusions regarding the application of College policies to the facts; a statement of and rationale for the result as to each allegation, including a determination of responsibility; any disciplinary sanctions the College recommends or imposes; whether remedies designed to restore or preserve equal access to an education program or activity will be provided to the Complainant; and the College's appeal procedures.
7. The following sanctions may be imposed for those who have violated these procedures:
   Student Sanctions:
   a. Verbal or Written Warning
   b. Probation
   c. Administrative withdrawal from a course without refund
   d. Required Counseling
   e. No Contact Directive
   f. Suspension
   g. Recommendation of Expulsion
   h. Other consequences deemed appropriate

Employees Sanctions:
   a. Verbal or Written Warning
   b. Performance Improvement Plan
   c. Required Counseling
   d. Required Training or Education
   e. Recommendation of Demotion
   f. Recommendation to Suspend with or without Pay
   g. Recommendation of Termination
   h. Other consequences deemed appropriate

8. If the presiding officer recommends the Respondent be expelled, suspended, demoted, or terminated, during the time in which either party has to appeal, the Respondent shall remain on suspension or administrative leave unless otherwise determined by the presiding officer. If the presiding officer is required to make a recommendation for student expulsion or employee suspension, demotion or termination, such recommendation will be made to the appropriate College official after the time for appeal has expired.

Appeals

After the presiding officer submits their determination of responsibility to the Complainant and Respondent, all parties are given an equal opportunity to appeal the determination. Appeals may be based only on these grounds:

1. Procedural irregularity that affected the outcome;
2. New evidence that was not reasonably available at the time of the hearing that could affect the outcome; and/or
3. The Director of Title IX Compliance or designee, investigator, or presiding officer had a bias or conflict of interest that affected the outcome.

Parties must submit any appeal to the President of the College by 5:00 p.m. eastern standard time via email or mail, within ten (10) days of receiving the presiding officer's written determination of responsibility. The appeals request may not exceed ten (10) double-spaced pages on 8.5 x 11 paper with one-inch margins and 12-point font.

The College notifies all parties when an appeal is filed and provides all parties a copy of the appeal and a chance to submit a written statement supporting or challenging the outcome. Parties must submit written statements supporting or challenging the outcome to the President of the College by 5:00 p.m. eastern standard time via email or mail, within two (2) days of receiving a copy of an appeal.

The President shall conduct a review of the record, including the appeal(s) received, any written statements supporting or challenging the outcome, the investigation report, the presiding officer's written determination of responsibility, and any accompanying evidence prior to issuing a written decision to the Complainant and Respondent that describes the result of the appeal and the rationale for the result.

The President's written decision is final.

Protection Against Retaliation

Retaliation against any person in connection with a complaint of sexual harassment is strictly prohibited. Reports of retaliation will be addressed through this procedure and/or other applicable College procedures. The College will not in any way retaliate against an individual for the purpose of interfering with any right or privilege secured by Title IX or because the individual has made a report or complaint, testified, assisted, participated, or refused to participate in any manner in an investigation, proceeding, or hearing under these procedures.

Retaliation is a violation of College policy regardless of whether the underlying allegations are ultimately found to have merit. Reports of retaliation are treated separately from reports or complaints of misconduct and will be addressed through this procedure and/or other applicable College procedures.

Suspending Procedures

In cases of emergency or serious misconduct, the College reserves the right to suspend this process and may enact appropriate action for the welfare and safety of the College community.

FERPA (Family Educational Rights and Privacy Act)

A student's personally identifiable information found in a student's education records will be shared only with College employees who need to know to assist with the College's response to misconduct. A student's personally identifiable information found in a student's education records will not be disclosed to third parties unaffiliated with the College unless:

1. The student gives consent;
2. The College must respond to a lawfully issued subpoena or court order; or
3. The College is otherwise required by law to disclose.

Student and Employee Education and Annual Training

The College will provide education to students and employees on an annual basis related to misconduct, consent, sexual harassment, risk reduction, and bystander interventions. College officials involved in the Title IX investigations and resolution process shall receive annual training.

Each fall, students and employees will receive an electronic copy of these procedures included in the Annual Security Report (Clery Act), sent to their

College email address. These procedures will be maintained online on the College's website and a hard copy will be available upon request to the Director of Title IX Compliance.

Records Retention

Students - All documentation will be stored in the Vice President for Student Services' office for a period of seven years at which point the documentation will be moved to an electronic version to be retained permanently. In cases where the Respondent is found responsible for violating the Sexual Misconduct Policy, this information will be considered as a disciplinary record with the College.

Employees – Personnel files are retained for 30 years. If the action taken is informal counseling, this does not become part of the permanent record.
Pursuant to Board Policy 112, this procedure must be followed when dealing with Title IX sexual harassment based sexual misconduct.

Drug and Alcohol Policy

A-B Tech is committed to providing a drug-free learning and working environment. From a safety perspective, the use of drugs or alcohol may impair the well-being of students, employees, and visitors, interfere with the College's educational environment, and result in damage to College property. Therefore, it is the College's policy that the unlawful manufacture, distribution, dispensation, possession, or use of Alcohol, illegal or unauthorized Controlled Substances or Impairing Substances are prohibited at any College Location by College students and employees.

A-B Tech complies with the Drug Free Workplace Act and the Drug Free Schools and Campuses Act (DFSCA) and applicable Department of Education requirements by instituting the following practices:

1. The College will conduct an annual review of the effectiveness of the Drug and Alcohol Abuse Prevention Program (DAAPP). This activity will be the responsibility of the Vice President for Student Services, Vice President of Human Resources or designee. The review will be completed by June 30 of each year so that this information may be used to revise the DAAPP for optimum effectiveness.
2. Annual review information will be compiled to produce a biennial review as required by the Department of Education and the DFSCA.

Students

1. No student shall distribute, dispense, possess, use or be under the influence of Alcohol, illegal or unauthorized Controlled Substance or Impairing Substance at a College Location at any time. The exceptions to this general rule are:
    a. Consumption and possession of alcohol is permitted for authorized viticulture/enology courses and brewing, distillation, and fermentation courses.
    b. Consumption and possession of alcohol is permitted for the purpose of conducting scientific, chemical, pharmaceutical, mechanical, industrial, and educational research so long as directed or supervised by an instructor.
    c. Consumption and possession of alcohol is permitted as part of a culinary class pursuant to an established curriculum.
2. A student's legal use of prescribed or over-the-counter drugs is not a violation of policy only if such use does not endanger the student or others and it does not interfere with student learning or participation in student-related activities. Students shall be held strictly accountable for their behavior while under the influence of prescribed drugs or over-the-counter drugs.
3. Any student who manufacturers, possesses, uses, sells, gives, or in any way transfers a Controlled Substance or Impairing Substance while at a College Location will be subject to disciplinary action up to and including expulsion and referral for prosecution, and possible legal sanctions.
4. A-B Tech hosts an Addition, Recovery, and Coping (ARC) program for students during the spring semester. This program is open to all students, but may be required for students in violation of this policy as a first level disciplinary sanction. Additional educational materials, programs, and other resources are available through both our Student Life and Support Services departments.
5. Instructors have the discretion to determine whether a student may be under the influence of drugs or alcohol. If the instructor suspects a student is under the influence of drugs or alcohol, he or she has the authority to contact A-B Tech Police to remove the student from the classroom. Instructors must notify the Vice President for Student Services or designee of this alleged violation of Code of Student Conduct as soon as possible.
6. A-B Tech complies with applicable Department of Education requirements by taking the following steps, as they apply to students:
    a. Prepares the College's Drug and Alcohol Abuse Prevention Program (DAAPP) for annual distribution to all currently enrolled students.
    b. Publishes the Drug and Alcohol Policy and Procedures on the website and establishes an annual email notification to students with a link to the online documents.
    c. Incorporates information about drug and alcohol Policy and Procedures in New Student Orientation.

   d. Reserves the right to search the student, vehicle, and/or personal property of student when on College property or other location where instruction occurs, consistent with applicable law.

7. A student who violates the terms of this policy will be subject to disciplinary action in accordance with the Code of Student Conduct and Student Due Process policies and procedures. The Vice President for Student Services or designee may require any student who violates the terms of this policy to satisfactorily participate in a drug abuse awareness program or other sanctions as listed below. For more severe infractions, the student may be required to complete an off-campus drug or alcohol abuse rehabilitation program sponsored by an approved private or governmental institution as a precondition of continued enrollment at the College. The following sanction options may include, but are not limited to, the following:
   a. Determination of disciplinary Warning, Probation, or Suspension.
   b. Complete a drug and alcohol use assessment in order to identify the student's current level of use and to identify appropriate service recommendations.
   c. Required to attend one or more collegiate recovery group and/or a community recovery event.
   d. Mandatory counseling focusing on drug or alcohol abuse.
   e. Referral for offsite formal clinical assessment and treatment.

Employees

A-B Tech complies with the Drug Free Workplace Act and applicable Department of Education requirements by taking the following steps, as they apply to employees:

1. Prepares the College's Drug and Alcohol Abuse Prevention Program (DAAPP) for annual distribution to all employees.
2. Publishes the Drug and Alcohol Policy and Procedures on the employee Portal page and established an annual email notification with a link to the online documents.
3. Incorporates information about the Drug and Alcohol policy and procedures in New Employee Orientation.
4. Offers an Employee Assistance Program (EAP), which includes drug and alcohol information, short-term counseling, and referrals.
5. Notifies employees of their obligation to inform the Human Resources Department of any conviction of a criminal drug violation in the workplace (see below).
6. Maintains a process for notifying the contracting or granting agency within ten days of receiving notice that a covered employee has been convicted of a criminal drug violation that occurred while on the College's premises or while participating in a work-related activity. Conducts a thorough and timely assessment regarding internal consequences for such conviction.
7. Reserves the right to search the person, vehicle, and/or personal property of employees when on College property and/or while on duty regardless of location, consistent with applicable law.
8. Establishes a separate file in the Human Resources Department where employee drug/alcohol information is maintained. The confidentiality of any medical issues discussed is protected as required by law, and this information will only be shared on a legitimate need-to-know basis or when required by law.
9. Consistent with the Drug Free Workplace Act, employees are required to:
   a. Sign a Drug-Free Workplace Statement as a condition of employment.
   b. Abide by all terms of the Drug and Alcohol Policy and Procedures.
   c. Notify the Human Resources Department in writing, within five calendar days after conviction of a criminal drug violation that occurred while on the College's premises or while participating in a work-related activity.
   d. Participate in the Employee Assistance Program and/or complete a treatment program, if required by the College as a condition of continued employment.
   e. The legal use of prescribed or over-the-counter drugs is permitted on the job only if it does not impair the employee's ability to perform the job effectively and in a safe manner, and that does not endanger the employee or others in the workplace or interfere with student learning or services.

      If an employee needs to take a prescribed or over-the-counter drug that may impair his/her judgment or performance in any way, the employee is required to notify the immediate supervisor before working. It is the employee's responsibility to use appropriate College procedures (i.e. request sick leave) if any use of legal drugs presents a safety risk. Any medical issues discussed will be kept in confidence according to legal requirements.

Employee Assistance Program/Substance Abuse Treatment

A-B Tech encourages the identification and treatment of alcohol and chemical dependency in its early stages before work is affected. Toward this end, the College retains the services of an Employee

Assistance Program (EAP) to assist employees who request help with substance abuse. Employees will not be disciplined, demoted, or terminated for seeking professional counseling and/or treatment to recover from an alcohol or chemical dependency. However, employee performance and work behavior will continue to be evaluated consistent with the College's expectations and requirements.

Drug/Alcohol Screening

A-B Tech maintains a drug/alcohol screening program consistent with legal requirements. All drug/alcohol screening is conducted by an approved laboratory identified by the College and in accordance with the NC Controlled Substance Examination Regulation Act and all testing shall comply with the Controlled Substances Examination Regulation, 13 NCAC 20.0101 et seq. All drug/alcohol screens must be approved by, and coordinated through, the Human Resources Department, except those required after hours, which must be approved and coordinated by the A-B Tech Police Department. The Human Resources Department shall be required to maintain all records associated with the College's drug/alcohol screening program.

Drug and/or alcohol testing occurs under the following circumstances:

1. Pre-Employment. Pre-employment drug screens are required for employees in safety-sensitive positions and/or College programs where such screening is a requirement for placement at a clinical or other site.
2. Post-Accident. When there is Reasonable Suspicion that drug and/or alcohol use or impairment may have contributed to the accident or incident, a post-accident drug/alcohol screen is required for any employee. The College will arrange transportation for the employee to the screening location and then home, if necessary to ensure the employee's safety. If the employee refuses to participate in the drug and/or alcohol screening, it will result in a positive test.
3. Reasonable Suspicion. A supervisor, with agreement of the next level supervisor, senior administrator, College police or security officer, and/or Human Resources Department, may require an employee to participate in drug and/or alcohol screening when the screening is based on Reasonable Suspicion. If the employee refuses to participate in the drug and/or alcohol screening, it will result in a positive test.
4. Safety-Sensitive Positions. Individuals employed in safety-sensitive positions are subject to random drug/alcohol screens. Each quarter, using a computer-based number generator, the College will randomly select five percent (5%) of the eligible pool subject to random testing. Once the employees are selected, the College will immediately arrange transportation for the employees to the testing site. If an employee is absent from work on the day his/her number is selected, that employee will be tested with the next group of selected employees the next quarter. If the employee is selected and refuses to participate in the drug and/or alcohol screening, it will result in a positive test.

Participation in College - Sanctioned and other Work-related Activities where Alcohol Is Served.

1. When an employee and/or guest attend a College-sanctioned or work-related activity where alcohol is served, each individual is expected to use good judgment with regard to the amount of alcohol consumed and the legal requirements for safely driving away from the activity. Under no circumstances may an individual under the age of 21 hold or drink an alcoholic beverage on the College's premises or work-related activity at another location.
2. When the activity is hosted by A-B Tech, the College will arrange for alternate transportation to assist an impaired employee and/or guest in getting home safely when the need is brought to the attention of the A-B Tech employee in charge of the activity. In all situations, each employee and/or guest is responsible for their own behavior and any resulting consequences.
3. When an employee is chaperoning students during an off-site activity, she or he has an obligation to inform the students that the College's Drug and Alcohol policy is still in effect. Knowingly permitting a student to consume alcohol, except as specifically allowed by the Drug and Alcohol Policy, may result in disciplinary action or dismissal, depending on the College's interpretation of the circumstances and/or legal requirements.

Consequences for Violating Policy/Procedures

1. Violations of this policy or procedures and/or a confirmed positive drug/alcohol screen may result, at A-B Tech's sole discretion, in disciplinary action and/or dismissal of any employee, depending on the College's interpretation of the circumstances and subject to Policy 509.02, Employee Due Process. Violations may also result in legal consequences, as A-B Tech will notify the appropriate authorities whenever warranted.
2. At its sole discretion, in lieu of or in addition to taking disciplinary action against an employee, the College may require the employee to satisfactorily complete a drug or alcohol abuse assistance or rehabilitation program. If an employee refuses to seek treatment when required, does not respond to treatment, and/or there are indications that the drug or alcohol dependency persists, the situation will be handled by the College like any other event which adversely affects job performance.

3. An employee who refuses to submit to a drug or alcohol screen that is consistent with the above criteria, adulterates or dilutes the specimen/sample, substitutes the specimen/sample with that from another person, sends an imposter, refuses to sign the required consent forms, and/or refuses to cooperate in the screening process in such a way that it prevents completion of the examination, will be dismissed subject to Policy 509.02, Employee Due Process, when applicable.

Requirements for A-B Tech and Third-Party Events when Alcohol is Served

At A-B Tech events, and events held on A-B Tech property by third parties, the following guidelines shall apply when alcohol is served:

1. Only beer and unfortified wine may be served at non-college sponsored events.
2. When serving alcoholic beverages, a Request to Serve Alcohol application, provided by A-B Tech, must be completed and returned ten (10) full business days prior to the event to the A-B Tech Events & Facilities Support Coordinator. No other permits are required to serve malt beverages or unfortified wine.
3. For College sponsored events, a Limited Special Occasion Permit from the N.C. ABC Commission is required to serve fortified wine and/or spirituous liquor to guests at a reception or other special occasion. This permit must be received by the A-B Tech Events & Facilities Support Coordinator no later than five (5) full business days prior to the event date. Failure to obtain, or deliver, this permit will result in alcohol being banned from the event.
4. For College sponsored events, a Special One-Time Permit from the N.C. ABC Commission is required to allow the sale of malt beverages, wine, or to allow brown bagging at a single fund-raising event. This permit must be received by the A-B Tech Events & Facilities Support Coordinator no later than five (5) full business days prior to the event date. Failure to obtain, or deliver, this permit will result in alcohol being banned from the event.
5. For College sponsored events, a Special One-Time Permit from the N.C. ABC Commission is required to serve malt beverages, wine, or spirituous liquor at a ticketed event held to allow the organization to raise funds. This permit must be received by the A-B Tech Events & Facilities Support Coordinator no later than five (5) full business days prior to the event date. Failure to obtain, or deliver, this permit will result in alcohol being banned from the event.
6. Alcoholic beverages may be served no more than one (1) hour before food for the main event is served.
7. Events at which alcoholic beverages are served may last no longer than three (3) hours.
8. For events that do not precede a meal function, serving heavy hors d'oeuvres, with at least two (2) hot hors d'oeuvres, is required.
9. Service of alcoholic beverages must be discontinued fifteen (15) minutes prior to the anticipated end of the event.
10. Alcoholic beverages must be served/consumed only in the area designated for the event. It is not permissible for individuals to take alcoholic beverages from that area.
11. Violation of this policy may lead to the termination of the event by an A-B Tech staff person and/or A-B Tech Police.
12. Bartenders and/or Catering Services must be licensed to serve alcohol. They shall provide proof that their staff has been adequately trained to recognize the early signs of intoxication in patrons. Staff must also be trained to exercise adequate intervention techniques to reduce or stop patrons' alcohol intake. Bartenders and/or Catering Services shall provide, in writing, intervention techniques, along with a copy of the liquor/serving license, appropriate insurance coverage, and a list of names, addresses, and ages of those who will distribute the alcohol. This documentation must be provided to A-B Tech Event Coordinator at least ten (10) business days prior to the event. Food and non-alcoholic beverages MUST be made available at all events where alcohol is distributed. Events held on the Victoria Road campus under the provisions of the Mission Health/A-B Tech Conference Center Memorandum of Understanding are exempt from these guidelines.
13. Servers must be at least eighteen (18) years of age.
14. No one under the age of twenty-one (21) will be allowed to consume alcohol at an A-B Tech event or event held on A-B Tech campuses. The sponsoring group will need to provide the A-B Tech Event Coordinator with detailed procedures to be followed to prevent service to minors (this is submitted with the "Request to Serve Alcohol" application).
15. A-B Tech Police must be notified at least ten (10) days in advance of the date and time of all events at which alcohol is to be served. A-B Tech Police will provide security coverage. The sponsoring organization will be responsible for any additional costs associated with that coverage.
16. If requested, guests must provide photo identification for proof of age before being served.
17. No one under the age of twenty-one (21) may sign a Facilities Usage Agreement for an event where alcohol will be served.

18. At an event, if anyone is found to have provided an alcoholic beverage to an underage person, A-B Tech Police will respond.
19. Any member of the College community found to be in violation of the College alcohol policy shall be subject to disciplinary actions by the appropriate College office. A-B Tech departments require the approval and signature of the College President if students are to be present at the event.
20. 20. Violation of these procedures may lead to the termination of the event by an A-B Tech staff person and/or A-B Tech Police.
21. 21. Refer to Policy 308, Use of Facilities, for more information regarding third party events on College property.

Vaping, E-cigarettes, and Tobacco Free Campus

It is the policy of the Board of Trustees that Asheville-Buncombe Technical Community College provide students and employees with a safe and healthy environment. No form of tobacco, e-cigarette, or vaporizing device usage is permitted on A-B Tech's campuses, sites, or at College-affiliated activities and events.

Weapons On Campus Policy

The Board of Trustees prohibits the use or possession of any weapons on A-B Tech property or at any College sponsored activities or events except handguns as allowed by NC GS §14-269.4. Handguns are permitted under these circumstances:

- The person has a concealed handgun permit that is lawfully issued.
- The handgun is in a closed compartment or container within the person's locked vehicle.
- The handgun is in a locked container securely affixed to the person's vehicle.
- A person may unlock the vehicle to enter or exit the vehicle provided the handgun remains in the closed compartment at all times.
- The vehicle is locked immediately following the entrance or exit.

The above criteria do not apply to persons and/or situations outlined in GS §14-269, such as sworn law enforcement officers.

Any person found to be in violation of this policy shall be disciplined at the discretion of the A-B Tech administration. Additionally, any person found to be in possession of any weapon will be charged under State law with a misdemeanor or a felony, as stipulated by GS §14-269.2(b) and §14-269.2(c). Upon conviction, a person will be adjudicated at the discretion of the court.

Workplace Violence Prevention Policy and Procedures

A-B Tech is committed to providing everyone associated with the College a work and learning environment that is safe and free of violence. To this end, the College prohibits any form of violence.

Reporting Threats or Acts of Violence

1. Every member of the College community is responsible for reporting any threats or acts of violence that he/she has witnessed, received, or have been told that another person has witnessed or received. Even without an actual threat, members of the College community should report any behavior he/she has witnessed which he/she regards as threatening or violent when that behavior is job related, might be carried out on College property, or is connected to College employment or activities.
2. Reports should be made immediately to A-B Tech Police.
3. The College will investigate all threats or acts of violence promptly and objectively.

Threats or Acts of Violence

Any member of the College community who threatens or commits an act of violence toward other persons or property on campus, while engaged in any work for or on behalf of the College, or a College sponsored event, shall be subject to disciplinary action, up to and including dismissal from employment, expulsion from the College, and/or banishment from campus, exclusive of any civil and/or criminal penalties that may be pursued, as appropriate. No existing College policy, practice, or procedure shall supersede prevention or acts of violence or threats as defined in this Policy.

Students with Disabilities

Students with disabilities (as defined in the Americans with Disabilities Act of 1990, "ADA") wishing to make a request for reasonable accommodation, auxiliary communication aids or services, or materials in alternative accessible formats should contact Support Services in the K. Ray Bailey Student Services Center, email supportservices@abtech.edu or call 828-398-7141. A student who wishes to file a complaint of alleged discrimination on the basis of disability should contact the Office of the Vice President of Student Services at 398-7484 or 398-7143.

Animals on Campus

In accordance with Section 504 of the Rehabilitation Act of 1973, the Americans with Disabilities Act (ADA) of 1990, and state law, A-B Tech may be required to accommodate an otherwise qualified individual with a disability by making a reasonable modification in its services, programs, or activities. This procedure addresses the use of Service Animals (including

Service Animals in Training), and Animals as an Accommodation (applicable to Emotional Support or Comfort Animals) on campus by qualified individuals with disabilities or individuals authorized to provide training.

Domestic Animals (Pets) are not permitted on campus and may not be left in vehicles on campus property.

Law Enforcement Agency (Patrol) Animals and Search and Rescue Animals shall be permitted on campus in accordance with federal, state, and local laws, regulations, and ordinances. Therapy Dogs approved through A-B Tech's Volunteers Program (see Policy and Procedure #513) are permitted on campus. Inherent to the nature of some academic programs (i.e. Veterinary Medical Technology, etc.) animals may be permitted for educational purposes at the discretion of the program chair or director. Requests for exceptions to this procedure should be made in writing to the Vice President for Student Services at least two weeks prior to the activity.

If an individual has an adverse reaction to animals and has contact with a Service Animal/Animal as an Accommodation, a request for accommodation should be made by the individual to Student Support Services (students). All facts surrounding the concern will be considered in an effort to resolve the concern and provide reasonable accommodation for both individuals.

Responsibilities of the Person with a Disability

Persons with a disability who have a Service Animal are encouraged, but not required, to contact Student Support Services (students) to register as an individual requesting accommodations. Individuals registering with this office will be provided with information about other accommodations for which the individual may be eligible.

Unlike Service Animals, Emotional Support Animals do not have automatic access to classrooms or other academic settings. A request for an animal as an accommodation must be reviewed and approved by Student Support Services (students) based on disability-related need and classroom feasibility. Appropriate documentation of the disability is required and accommodations are determined on a case-by-case basis. Individuals approved for accommodations which include an animal will receive a letter of accommodation.

The care and supervision of a Service Animal or an Animal as an Accommodation is the responsibility of the person with a disability who is using the animal's services. Service Animals must comply with Buncombe County and Asheville City vaccination and licensure laws, including rabies vaccinations for dogs over four months old. While proof of vaccination cannot be required as a condition of access, individuals may be asked to provide documentation if health and safety concerns arise (e.g., after a reported bite or illness). Dogs must wear a rabies tag at all times. (NC Rabies Law- N.C.G.S. §130A-185)

The Service Animal or Animal as an Accommodation must be under the control of the person with a disability or handler at all times and may not be left alone. A Service Animal or Animal as an Accommodation must be restrained by a leash or other appropriate device that does not exceed six (6) feet in length or otherwise be under the control of the person with a disability if the leash or tether will interfere with the ability of the Service Animal to perform required tasks.

The handler of the Service Animal or Animal as an Accommodation is responsible for any damage of personal or college property or any injuries to an individual caused by the animal.

The handler must ensure the animal is "housebroken" and trained. The handler must clean up and remove all animal waste created by the animal both inside campus buildings and outdoor campus property.

The animal may not disrupt the operation of the College or any class. Disruptions include but are not limited to barking, growling, pacing/constant motion, foul odor, pawing and or sniffing of others. It is the assumption of the college that all Service Animals on campus are "working" animals and therefore, should not be treated as a pet. There should be no petting by others and no handling by others.

Responsibilities of the College Community

Service Animals

If the need for a Service Animal is obvious, individuals may not question the presence of the animal on campus. If the need for a Service Animal is not obvious, members of the campus community are permitted to ask the individual two questions:

1. Is the animal required because of a disability?
2. What work or task(s) has the animal been individually trained to perform?

At no point may campus community members require a Service Animal to demonstrate the tasks for which they have been trained nor may they inquire as to the nature of the individual's disability.

If an individual indicates the animal is an Animal as an Accommodation, the letter of accommodation must be provided to the requesting college official. If the letter of accommodation is not in the possession of the individual, the college official should contact Student Support Services for verification of accommodation or the individual may be required to remove the animal from campus.

Consequences for Violations

The College has the authority to remove a Service Animal or Animal as an Accommodation from its facilities or properties if the animal becomes unruly or disruptive, unclean and/or unhealthy to the extent that the animal's behavior or condition poses a direct threat to the health or safety of others or otherwise causes a fundamental alteration in the College's services, programs, or activities. The person with a disability is responsible for the costs of repair to any damage to College property caused by the service animal.

It is a Class 3 misdemeanor "to disguise an animal as a service animal or service animal in training" (N.C.G.S. § 168-4.5). In other words, it is a crime under North Carolina law to attempt to obtain access for an animal under the false pretense that it is a service animal. In addition, it is a violation of the Asheville Animal Ordinance to conceal any animal for the purpose of evading any federal, state or local law.

Additionally, any individual who violates any portion of this procedure is subject to discipline under the Student Code of Conduct in addition to any applicable federal, state, or local laws.

Communicable Disease and Occupational Exposure to Blood-borne Pathogens

A-B Tech shall not exclude individuals with communicable diseases unless a determination is made that the individual presents a health risk to himself or others. It is the policy of the College to consider the educational or employment status of those with a communicable disease on an individual basis based on the program of study or work assignment. It is the policy of the College to comply with federal regulations and state statutes regarding blood-borne pathogens as set forth in the Federal Register, 29 CFR. § 1910.1030, and the North Carolina Administrative Code, 10A NCAC 41A, by attempting to limit/prevent occupational exposure of employees and students to blood or other potentially infectious bodily fluids and materials that may transmit blood-borne pathogens and lead to disease or death.

Free Speech, Distribution of Materials and Assembly

A-B Tech is a limited public forum that does not regulate speech or activities based on content or viewpoint. All individuals using College space must comply with the following Procedures. These procedures only apply to the use of College space and not to the use of facilities on campus. For more information regarding facility use, see Use of Facilities Policy 318.

Speech, Distribution of Material and Assembly for College Members

1. The College is committed to making the majority of its College space available to College members who wish to exercise their rights to speech, distribution of material and assembly. The College maintains the right to reserve any College space at any time, with or without prior notice, for College use and such use will take priority or over any other use.
2. All outdoor assembly may not be conducted within 30 feet of any building or otherwise interfere with free flow of vehicular, bicycle or pedestrian traffic.
3. Although registration by College members to use College space is not required, it is recommended for planning purposes. Registration ensures that the desired space will be available on the desired date and time. For more information about registration, see Section II (B) herein.

Speech, Distribution of Material and Assembly for Non-College members

1. Non-College members shall be allowed to use the Designated Area (see Definitions section below) between the hours of 8:00 a.m. and 9:00 p.m. on Mondays through Fridays when the College's general curriculum classes are in sessions. The Designated Area is not available on the weekends, on days scheduled for College functions or on days when the College is officially closed. The College maintains the right to use the Designated Area at any time, with or without prior notice, for College use and such use will take priority over any other use.
2. Any Non-College members will be allowed to use the Designated Area within the time restriction. All Non-College members must complete a Registration Form (the "Form") and submit it to the Office of Student Life and Development no earlier or later than three (3) business days prior to their activity on campus. The College does not restrict speech and/or activities based on content or viewpoint. The purpose of the Form is to make sure there is adequate space in the Designated Area for the requested date and time and safety concerns. Upon request by College officials, Non-College members will be required to provide proof of registration for use of the Designated Area. Forms will only cover one (1) day at a time. Requests for standing dates (i.e., every Tuesday) will not be honored.
3. The College will assign use of a Designated Area on a first come, first serve basis; however, the College may regulate hours to fairly accommodate multiple groups.

General Rules and Regulations for both College and Non-College Members

1. While expressing speech, distributing material or assembling, both College and Non-College members are prohibited from doing the following: 1) engaging in non-protected speech such as obscenity, speech inciting criminal conduct or speech that constitutes a clear and present danger or speech that constitutes defamation; 2) touching, striking, approaching or impeding the progress of pedestrians in any way, except for incidental or accidental contact; 3) obstructing the free flow of pedestrian or vehicular traffic;

4) using sound amplification or creating noise levels that are reasonably likely to or do cause a material and substantial disruption to the educational environment and/or the operation of the College; 5) damaging, destroying or stealing College or private property; and 6) possessing or using firearms, explosives or dangerous weapons or substances not allowed on campus by law or by College policy (e.g., drugs, alcohol, non-service animals, etc.). Any acts that are disruptive to the normal operations of the College will not be tolerated and may result in an immediate termination of the activity. Non-College members are required to remain in the Designated Area while on campus.

2. Individuals may distribute pamphlets, booklets, brochures, and other forms of printed materials on the condition that such material is designed for informational (not commercial) purposes. Individuals distributing materials must provide a receptacle for the disposal of such materials. The College does not assume any obligation or liability for the content of such distributed material. Any signs used may not be larger than three feet by four feet in size. Signs must either be held by participants or be freestanding signs that do not stick into the ground. No signs may be mounted on buildings, trees or other College property.

   If available, the College will allow officially recognized College student groups to use College chairs and tables. All others individuals and groups will be required to use their own chairs and tables if desired.
3. Individuals are responsible for the cleanliness and order of the area they use. Individuals shall leave the area in the same condition it was in before the activity. Individuals who damage or destroy College property shall be held responsible for such damage or destruction. This includes the campus buildings, sidewalks, lawns, shrubs and trees.
4. Individuals are subject to sanction for failing to comply with these procedures or other College policies. Such sanctions may include, but are not limited to repairing, cleaning, painting, replacement costs, restitution (as order by a court) and being banned from future use. College members may also be subject to College disciplinary action as outlined in College policies and procedures. Individuals who violate these procedures may be issued a trespass warning and denied future access to College premises. Violations that require police intervention will be reported to the College's Police Department.

Polling Places on Campus

If campus buildings are used as public polling places, all activity must be in accordance with statutory and state/local Board of Elections requirements.

City Sidewalks

City sidewalks that run along the borders of the College's campus are public forums and available to all members of the public. Use of city sidewalks must comply with federal and state laws and city ordinances.

Internet and Campus Network Acceptable Use Policy

Asheville-Buncombe Technical Community College provides campus network and computing facilities including Internet access for the use of faculty, staff, students, and other authorized individuals in support of the research, educational, and administrative purposes of the College.

The College has extensive information technology resources and systems available for both instruction and administrative applications. Faculty, staff, and students are encouraged to become familiar with College technology resources and systems and to use them on a regular basis. Users are expected to exercise responsible, ethical behavior when using these resources and to adhere to the following guidelines:

1. Information available on the Internet is not generated or selected by the College. Therefore, the College assumes no responsibility for the accuracy or quality of the information obtained through or stored on the campus network.
2. While the College respects First Amendment rights with regard to the Internet, the creation, display and transmittal of illegal, malicious, or obscene materials or fighting words is prohibited.
3. The College is not liable for the actions of anyone connecting to the Internet through College facilities. All users assume liability for their own actions.
4. The user is responsible for complying with laws protecting software or other accessed information. Downloading programs and files may violate United States copyright laws that protect information and software. All files downloaded from a source external to the College must be scanned for viruses. All users of the Internet by way of College facilities must comply with all relevant policies and procedures of the College.
5. Because of the unsecure nature of transmitting files electronically, no right to privacy exists with regard to e-mail, Internet sessions, or electronic file storage and transmission.
6. Anonymous e-mails or postings are expressly prohibited.
7. Users should be aware that usage statistics in archived log files, used for monitoring system performance and usage patterns, are maintained by the College concerning computer and telephone facilities.

8. College employees may make reasonable use of the College network, e-mail, and the Internet as long as the direct measurable cost to the public is negligible, and there is no negative impact on the employee's performance of duties.
9. All users of the Internet by way of College facilities must comply with all relevant policies and procedures of the Board of Trustees.
10. Use of the campus network, including e-mail and Internet, for personal gain is prohibited.
11. Failure to comply with any of the provisions of this procedure will result in disciplinary action as provided for under the disciplinary policies and procedures for both students and employees.

To comply with G.S. 143-805 (prohibit viewing of pornography on government networks and devices) and requirement 14 of the North Carolina Acceptable Use Policy:

1. Employees will not view pornography on College networks, and
2. Employees and students will not view pornography on College devices.

Any incident involving the viewing of pornography, unless it falls under the limited list of exceptions outlined in G.S. 143-805 subsection D, will be reported to the State Chief Information Officer and may result in disciplinary action.This policy applies to all faculty, staff, students, and guests who use A-B Tech's Information Technology resources and/or the College Network.

The College provides access to the Internet by way of the North Carolina Integrated Information Network. All users are subject to the governing policies established by the North Carolina Information Resource Management Commission (IRMC), in addition to this College policy. The current IRMC policy governing the use of the North Carolina Integrated Information Network and the Internet can be reviewed on the Website at www.scio.nc.gov/mission/itPoliciesStandards.aspx.

Deleting User Accounts

The College assigns a user account to each student so that they can sign into computers on campus, send and receive emails, access course websites, store files related to their coursework, interact with other students, and more. Access to this user account is not permanent. Once a student is no longer affiliated with the College and is not authorized to access College resources, their user account will be deleted.

Students should minimize non-academic activity on their user accounts. Students should not create accounts on third-party websites using their College email address to avoid losing access to that website in the future. Students should backup any emails and files stored in their user account prior to leaving the College.

For additional details, please refer to Policy 1013: Disabling and Deleting User Accounts at https://policies.abtech.edu.

Peer-to-Peer File Sharing

Federal legislation holds any postsecondary institution receiving Title IV financial aid legally responsible for use of peer-to-peer file-sharing on the institution's network which is in violation of copyright protections. The Higher Education Opportunity Act of 2008 specifically requires the institution's policies and sanctions related to copyright infringement to include the following:

- an annual disclosure that explicitly informs students that unauthorized distribution of copyrighted material, including unauthorized peer-to-peer file sharing, may subject students to civil and criminal liabilities;
- a summary of the penalties for violation of Federal copyright laws; and
- a description of the institution's policies with respect to unauthorized peer-to-peer file sharing, including disciplinary actions that are taken against students who engage in unauthorized distribution of copyrighted materials using the institution's information technology system.

Pursuant to these requirements, a Peer-to-Peer File-Sharing Statement that included this information will be contained in the College's Policies and Procedures Manual, in the annual Student Handbook, and communicated on an annual basis to all College employees.

The College is expected to take measures to effectively combat the unauthorized distribution of copyrighted material, including through the use of a variety of technology-based deterrents. These measures may include, but are not limited to, electronic countermeasures such as network monitoring, port blocking or bandwidth filtering. The College will, to the extent practicable, offer alternatives to illegal downloading or peer-to-peer distribution of intellectual property.

Copyright infringement is the act of exercising, without permission or legal authority, one or more of the exclusive rights granted to the copyright owner under section 106 of the Copyright Act (Title 17 of the Unites States Code). These rights include the right to reproduce or distribute a copyrighted work. In the file-sharing context, downloading or uploading substantial parts of a copyrighted work without authority constitutes an infringement. Violation of these protections may result in disciplinary measures against employees or students as outlined in the institution's Code of Student Conduct up to and including suspension or expulsion. Violations may also result in criminal and civil liabilities.

US copyright laws provide for civil penalties of up to $150,000 per violation (http://www.copyright.gov/title17/92chap5.html#504) as well as criminal penalties of up to $250,000 and up to five years in prison for the first conviction (http://www.copyright.gov/docs/2265_stat.html).

Intellectual Property

Intellectual property is a creative work that merits protection by a copyright, trademark, or patent. In the pursuit of academic studies, a student or faculty member may produce such a creative work. A-B Tech supports the development and production of intellectual property.

The College publishes an Intellectual Property policy and procedure, the purpose of which is to protect the College and the creators, including students, as they attempt to transfer inventions or creative works to the marketplace. This policy supports the sharing of property rights between the College and the originator as specified in the procedures.

Unless otherwise specified in a rights agreement, the College owns all rights to intellectual property created by an employee inside the normal scope of work or using College resources. If the property was created outside the normal scope of work or without College resources, then the property belongs to the creator. Typically, students retain rights to original works created within the course of their studies, unless otherwise specified in a rights agreement.

For a complete copy of the Intellectual Property policy and procedure, see the Vice President for Instructional Services.

Academic Procedures

(please refer to **abtech.edu/catalog** for current procedures)

Classification of Students

Full-time student: A student enrolled for 12 or more credit hours during fall and spring semesters and 9 or more credit hours during the summer semester.
Part-time student: A student enrolled for fewer than 12 hours during fall or spring semesters or fewer than 9 credit hours during summer semester.

Declaring, Changing, or Adding Second Majors

In order to declare a program (degree, diploma or certificate), change programs, or add a second program, the student should contact Student Services.

Class Attendance

Regular and punctual class attendance is important in order to achieve success in the course and develop desirable personal traits necessary for success in employment. Instructors are responsible for establishing any participation requirements and for informing students of those requirements in the class syllabus at the beginning of the academic term. Students are responsible for fulfilling the requirements of the class that are outlined in the course syllabus.

Class Entry Attendance Requirement

It is mandatory that the student attend each class at least once during the first 10% of the term, or in the case of online classes, an activity must be submitted during the first 10% of the term. Each online class syllabus must identify the activity to be completed prior to the 10% point of the term, and the date by which the activity must be completed. For hybrid, blended, or HyFlex classes, the student must attend the classroom portion of the class or complete an online activity prior to the 10% point of the term. Failure to attend or complete the activity prior to the 10% point will result in the student being dropped from the class. The student will not be allowed to continue in the course or receive a refund.

Programmatic Attendance Requirements

Some programs may have outside regulatory bodies that require a minimum of class attendance/participation hours. These requirements are clearly defined in the respective course syllabus or program orientation information.

Federal regulations require that attendance be reported for students receiving certain types of veteran's benefits and for certain classifications of international students. Instructors will be regularly asked to verify attendance for these specific student groups.

Absences Due to Military Duty

Students must provide prior official notification to instructors of military leave of absence(s). Responsibility for initiating such notice rests with the student. A-B Tech will give excused absences to students who are in the United States Armed Forces and who have received temporary or permanent reassignment as a result of military operations, as well as to students who are National Guard service members placed onto State active duty status during an academic semester for which the student is enrolled. This includes:

- Providing the student with the option, when feasible, to continue classes and coursework during the academic term through online participation for the period of time the student is placed on active duty; feasibility will be determined by the instructor and/or academic department.
- Providing the student with the option of receiving an Incomplete ("I") grade for any course that the student was unable to complete as a result of being placed on State active duty status; however, the student must complete the course requirements within the first six weeks of the following semester or by an alternate date approved by the Vice President of Instructional Services.

- Permitting the student to drop, with no penalty, any course that the student was unable to complete as a result of being placed on State active duty status. This includes receiving a 100% refund for any tuition and fees for which the student directly paid.

Absences Due to Religious Observance

In compliance with state and federal laws, A-B Tech students are eligible for reasonable accommodations, including two excused absences each academic year, for religious practices or beliefs that are required by the student's faith. The student must submit the Request for Accommodation for Religious Observance form to the instructor no later than the census date (10% point) for the class. Excused absences from classes for religious observances do not relieve students from responsibility for any part of the coursework required during the period of absence.

Prerequisites and Co-requisites

Some courses have prerequisite and/or co-requisite course requirements. All requisites must be satisfied prior to enrolling in a course. A prerequisite course can be satisfied by passing the course at A-B Tech, or by transferring credit for the course from another college or university according to the College's transfer credit policy. If a prerequisite course is currently being taken, but is not passed, the subsequent course must be dropped if registration has already taken place.

A co-requisite course must be taken in the same term. In some cases a co-requisite can be taken in a prior term or transferred to A-B Tech. Contact your program advisor for assistance.

Under some conditions, a department chair or Vice President of Instructional Services may waive a pre- or co-requisite based on a student's demonstrated knowledge of the requisite course material. Requisite waivers do not eliminate a course from a program of study; waived requisites must be taken to satisfy degree, diploma or certificate program requirements.

Course Substitutions

Curriculum course substitutions in a degree, diploma or certificate program must be approved by the Dean responsible for the course being substituted. Some course substitutions also require the approval of the Vice President of Instructional Services.

Introduction to College Courses for Degree-Seeking Students

Degree-seeking students who enroll in a college program requiring ACA 115, ACA 122 or EGR 110 must enroll in and successfully complete the course with a grade of "C" or better in their first semester of enrollment.

Any student who places into more than one developmental course must enroll concurrently in ACA 115, ACA 122, or EGR 110 as appropriate for his or her curriculum.

Students transferring a similar course or who transfer in 24 or more transfer credit hours of college-level work, will be permitted to substitute another course for ACA 115 or EGR 110 and will not be subject to the above requirement and subsequent restrictions.

ACA 122 is required for the Associate in Arts, Associate in Engineering, Associate in Fine Arts in Visual Arts, Associate in Science, and Associate in General Education degrees and substitutions may not be made.

Schedule Adjustments

Dropping a Class

Students may drop classes without a grade through the 10% point of the semester or the 10% point of a minimester (less than a full semester). Classes can be dropped via Self-Service or may be processed by Student Services (in the K. Ray Bailey Student Services Center), by an Advisor or at the Madison or Woodfin locations. Dropped classes do not appear on the official transcript.

Adding a Class

For classes 14 weeks or longer, students may add the class up to 48 hours after the start of the first class meeting. For fully online classes that are 14 weeks or longer, students may add the class up to 48 hours after the class's start date.

For classes shorter than 14 weeks, students may add the class until the class meets for the first time. For fully online classes that are shorter than 14 weeks, students may add the class through the end of the start date for the class.

Withdrawing from a Class

After the 10% point and through the 75% point of the term (full semester or minimester) a student may withdraw from a class by submitting a Class Withdrawal Form to Student Services in the Bailey Building or to staff at A-B Tech Madison. Withdrawal forms must not be mailed or put in a drop box. Distance students must contact the Registrar's Office at registrar@abtech.edu.

Students receiving financial aid are strongly encouraged to consult with the Financial Aid Office prior to withdrawing from courses. Students receiving Veteran's Affairs benefits must obtain a last date of attendance from the instructor prior to withdrawing.

Auditing Courses

Any individual may audit a College curriculum (for credit) class based on the following:

- The individual pays the normal tuition and fees. However, any person who is at least 65 years old may audit courses without the payment of tuition provided the individual meets the other criteria listed herein. Individuals 65 years or older are still required to pay any local fees associated with audited courses.

- Auditing students do not take tests or examinations and do not receive grades, credit or financial aid. Audits appear on a student's transcript as a "Y" grade, which does not impact the student's GPA.
- Students auditing a course must meet the same course prerequisite and attendance standards as all other students in the course. Auditing a course will not meet the prerequisite of any sequential or higher-level course and cannot be used toward any certificate, diploma, or degree requirements. Physical Education classes may not be audited.
- Auditing is subject to open seats in the course. A student who audits a course shall not displace other students seeking to enroll in the course.
- Students who audit a course and withdraw will be issued a grade of "W". Audited courses that are dropped prior to the 10% point of the course will not receive a grade nor appear on the student's transcript.
- Students choosing to audit a course must submit a Request for an Audit Grade form to the Records and Registration Office within the first 15 weekdays of the term for a 16-week class or an equivalent percentage for courses taught on a minimester schedule. The instructor must sign the form to approve the change to audit status. Students seeking to change from audit to credit status must contact the Records and Registration Office during the first five weekdays of the term for a 16-week class or an equivalent percentage for courses taught on a minimester schedule. Approval for changes from audit to credit status will be determined by the Registrar on a case-by-case basis.
- Students 65 years or older who are seeking to have the tuition waived for an audited course must request the tuition waiver to the Records and Registration Office at the time when the Request for an Audit Grade form is submitted.

Any individual may audit a College Continuing Education (not for credit) class based on the following:

- Any person who is at least 65 years old may audit courses, with the exception of all self-supporting or Community Services Program courses, without the payment of tuition provided the individual meets the other criteria listed herein. Individuals 65 years or older are required to pay any local fees associated with audited courses.
- Auditing students do not receive credit, certification, or a record of completion on a transcript. Students seeking credit, certification, or a record of completion on a transcript must pay the regular course fee.
- Auditing students may only enroll if a seat is available in the course. Auditing students may not displace students with paid or sponsored registration.
- Students may only audit when the number of students with paid or sponsored registrations meets the minimum number to offer the course. Ed2Go courses, or any other individually offered course with a minimum enrollment of one student, may not be audited.

Use of Artificial Intelligence

Generative Artificial Intelligence (AI) as well as any derivative technologies such as machine learning and large language models should be used responsibly, ethically, and in compliance with all regulations.

All A-B Tech instructors are required to include a statement regarding AI in their syllabi. The syllabus will indicate one of three statements as to how AI may be used in the class:

- AI Prohibited
- AI Permitted
- AI Permitted (Limited Use)

Final Examinations

Each instructor will schedule a final course evaluation at some point during the last five days of the semester or the last two days of the class. The evaluation may consist of one or multiple components or methods. The course schedule will indicate the date(s) and method(s) of evaluation. If the final evaluation is given prior to the last day of class, the schedule will reflect the class activities to take place after the final evaluation.

Students are required to take their final examinations at the time(s) and place(s) scheduled. Conflicts may be resolved by arrangement with the faculty member.

Course Repetition

Students who need a course to graduate may take the course as many times as necessary to pass it. Any course that has been passed or audited may not be taken for credit or audited more than twice per academic year. The twice-per-year regulation also applies to single or elective courses that are not required for graduation. No single Physical Education course may be attempted more than twice.

If a student has a failing grade in a required course, the course must be passed prior to graduation. If a student fails a prerequisite course, it must be repeated successfully before beginning the subsequent course. This could result in the student being enrolled for a longer period than is normally required to complete requirements for graduation.

As courses are repeated, only the higher grade will be used in the calculation of the cumulative GPA; however, both grades will remain on the student's A-B Tech transcript. Only a grade of "D" or above can replace an existing grade.

Grading System

Final grades will be issued to all students at the end of the term based on the criteria outlined in the course syllabus. A student who wants to appeal a grade must do so within three weeks of the awarding of the grade. A grade cannot be changed after this period without approval by the department chair and the division dean.

Students will be graded by the following system:

A		Excellent academic performance, consistent mastery of facts and concepts, and a thorough understanding of course content.
B		Good academic performance, high-level mastery of course content.
C		Average academic performance.
D		Marginal academic performance, poor mastery of course content.
F		Very poor performance, no demonstration of even minimal mastery of course content or did not complete the minimum requirements for the course as outlined in the course syllabus.
I	Incomplete	Assigned when a student is unable to complete work or the final assessment because of illness or other reasons over which the student has no control. An incomplete grade must be completed within the first six weeks of the next semester or by an alternate date approved by the Vice President of Instructional Services. Otherwise, the grade becomes an "F."
P	Proficiency	Does not affect quality point ratio.
R	Retake	Proficiency not demonstrated. Class must be retaken. Does not affect quality point ratio.
W	Official Withdrawal (no grade penalty)	Assigned when the student OFFICIALLY WITHDRAWS. This will not influence the quality point ratio. Official withdrawals are not allowed after the 75% point of a semester or term, as identified in the official college calendar, except for exceptional and documented emergencies. In such circumstances, the student must withdraw from all courses. Approval for an emergency withdrawal must come from the Vice President of Student Services or his or her designee.
IE	Incomplete Emergency	Assigned during a term when the College has been impacted by a natural disaster, pandemic or other circumstance that is deemed as a College wide emergency. An incomplete emergency grade must be completed within one calendar year from the date assigned or by an alternate date approved by the Vice President of Instructional Services. Otherwise, the grade becomes a "WE."
WE	Withdrawal Emergency	Assigned during a term when the College has been impacted by a natural disaster, pandemic or other circumstance that is deemed as a College wide emergency. "WE" is assigned when a student OFFICIALLY WITHDRAWS. It is processed and impacts the student record in the same way that a "W" grade does.
EI	Emergency Incomplete - Helene	Assigned during the Fall of 2024 when the College has been impacted by the devestation of Hurricane Helene. An emergency incomplete grade must be completed within one calendar year from the date assigned or by an alternate date approved by the Vice President of Instructional Services. Otherwise, the grade becomes a "EW."
EW	Emergency Withdrawal - Helene	Assigned during the Fall of 2024 when the College has been impacted by the devestation of Hurricane Helene. "EW" is assigned when a student OFFICIALLY WITHDRAWS. It is processed and impacts the student record in the same way that a "W" grade does.

Transcript Codes

Other codes that may appear on the college transcript include the following. These grade codes do not affect the grade point average:

AP	Advanced Placement course credit.
AR	North Carolina High School to Community College Articulation Agreement course credit.
CR	CLEP (College Level Examination Program) course credit, or other academic credit applied from non-course activity.
NS	No Show. Student enrolled but never attended the class.
T/TR	Transfer credit from other colleges, universities, and military credit.
Y	Audit.

# The pound sign next to a grade indicates that the course has been excluded from the quality point average either through course repetition or Academic Fresh Start.

Quality Points

At the end of each semester quality points are assigned in accordance with the following formula. (The minimum program grade-point average for graduation is 2.00 or an average of grade "C.")

A	4 quality points per credit hour	D	1 quality point per credit hour
B	3 quality points per credit hour	F	no quality points
C	2 quality points per credit hour		

The grade-point average (GPA) is determined by dividing the total number of quality points by the number of hours attempted (excluding grades of "I", "IE", "P", "R", "W", "WE", "EI", "EW"). A grade-point average of 2.00 indicates that a student has an average of "C."

Independent Study

Selected courses may be available for independent study, with approval of the appropriate dean. A student requesting to take a course by independent study must complete the Request for Independent Study form and have it approved by the Department Chair and Division Dean prior to registration. The request to enroll in a course by independent study may be approved when the following conditions are met:

1. The course is not offered during the current semester or is in schedule conflict with another required course and is needed for the student to qualify for graduation or transfer.
2. The student has a cumulative grade point average of 2.0 or higher.
3. The student has completed 15 semester hours of study in his or her academic program at Asheville-Buncombe Technical Community College.
4. A full-time faculty member, with the approval of the department chair, agrees to serve as the instructor for the semester of independent study.

Any exceptions must be justified by special circumstances and approved by the Vice President for Instructional Services.

Maximum Course Load

Due to the demands of college-level coursework, students are limited to 20 credit hours per semester. Exceptions may be granted by the Vice President for Instructional Services, typically for students with a minimum 3.0 GPA. Overload requests must be submitted by the advisor.

Work-Based Learning

Work-Based Learning is the development of job skills and an opportunity for career exploration by providing the non-captive or non-special credit curriculum student with employment that is coordinated with the educational program. Credit of one semester hour is awarded for each 160 hours of Work-Based Learning (i.e. WBL curriculum prefix courses).

Colleges may establish minimum criteria for each student seeking academic credit for work-based learning while they learn the requisite skills of a job. The employer ultimately makes the decision as to whether or not an individual is deemed appropriate for their organization.

Current Eligibility Requirements

To be eligible to participate in a work-based learning experience activity, you must meet the following eligibility requirements:

- Be enrolled in a curriculum program (associates, diploma, or certificate) that provides a work-based learning (WBL) option.
- Have a minimum of 2.0 cumulative program GPA.
- Have completed a minimum of 9 semester credit hours within the program of study with 3 semester credit hours from the core within a major not including Gen Ed courses (Program Chair can override on a case by case basis).
- All WBL applications including those offered through a certificate must have approval by the department chairperson. Work-Based Learning experience activites must be set up prior to the beginning of the work-based learning class.

Any exceptions to these requirements must be approved by the appropriate academic Dean with agreement of the WBL Director.

Students under the age of 18 must complete an online NCDOL Youth Employment Certificate. The responsibility for filing the certificate lies with the employer.

Apprenticeships

The North Carolina Community College System administers the apprenticeship program. The apprenticeship program combines on-the-job training with coordinated classroom instruction. A student enrolled in a WBL course may utilize the course experience towards the on-the-job training component of the apprenticeship program.

Standards for Academic Progress

The College has established this standard to:

- Provide struggling students with proactive advising to identify solutions and interventions fostering future and ongoing academic success (e.g., limited scheduling, targeted courses, regular advisor meetings, etc.).
- Provide a means for preventing prolonged academic failure.
- Provide students with a warning when they fail to meet satisfactory academic performance standards

This procedure applies to all curriculum students. Students whose cumulative grade point average (GPA) falls below 2.0 after attempting twelve (12) credit hours (excluding developmental courses) are subject to Academic Warning, which may be followed by two levels of Probation. Cumulative GPA will be calculated using the current official grade for each course taken that semester at Asheville-Buncombe Technical Community College.

Academic Warning

Students failing to meet the minimum cumulative GPA at the conclusion of the semester will receive an academic warning. The warning status will be communicated to the student and the student's Academic Program Dean is notified by the Registrar. To assist students in improving their GPA, the following steps are recommended:

a. Student meets with their assigned Academic Advisor within the first few weeks of the semester to develop strategies for academic success; including a review of academic progress prior to next term's registration.
b. Student participates in the "Student Success Seminar".

At the conclusion of the Academic Warning semester, students whose cumulative GPA is:

a. 2.0 and above will be considered in good academic standing.
b. Below 2.0 will be moved to Academic Probation.

Academic Probation: Level One

Students whose cumulative GPA falls below 2.0 for two successive semesters will be placed on Academic Probation. Academic Probation is posted to the student's official transcript. The student and the student's Academic Program Dean is notified of their probation status. To assist students in improving their GPA, the following steps are required:

a. Students must meet with their Academic Advisor before the next semester begins in order to retain their class schedule.
b. Students must complete the "Student Success Seminar".
c. Students will be permitted to enroll only in courses for that semester that are approved by the Academic Advisor. Actions may include one or more of the following:
    - A limitation on the number of hours attempted;
    - Registering for developmental courses as needed;
    - Registering for a repeat of unsuccessful courses;
    - Referral to other College resources, such as the Financial Aid Office, to receive further guidance.

A student remains on Academic Probation: Level One as long as his or her term GPA in the next semester of enrollment is 2.0 or above and the cumulative GPA is still below 2.0.

Academic Probation: Level Two

Students on Academic Probation: Level One whose GPA during the next semester of enrollment is below 2.0 will be placed on Academic Probation: Level Two for one semester. The student will be notified by the Vice President for Student Services via student email and the student's Academic Program Dean will also be notified by the Registrar. Academic Probation is posted to the student's official transcript. The students' classes will be dropped and they will be blocked from registering until they meet with their academic advisor. Students may only enroll in 1 course and it must be a course in which they earned below a "C". Exceptions to this restriction can only be considered and approved by the Vice President for Instructional Services. Students will be required to meet with a counselor to complete a Support Plan. Prior to registration, students must meet with their assigned program advisor and must follow the same steps as a student on Academic Probation: Level One. Upon successful completion of one course, students return to Academic Probation: Level One as long as their cumulative GPA is below 2.0.

Pursuant to Board policy, Chapter 200, Section 202.01, this procedure must be followed in enforcing the Standards of Academic Progress.

Academic Fresh Start

Any returning student who has not attended A-B Tech for three years and upon re-enrolling maintains a 2.00 GPA for a minimum of 12 semester hours may petition to have grades on all prior course work more than three years old with a grade less than a "C" excluded in calculating the cumulative GPA. Grades below "C" disregarded in calculating the GPA will not count toward graduation but will remain on the transcript. The student should complete an application for Academic Fresh Start (obtained in the Records and Registration Office), after the end of the semester in which he or she has completed the 12 semester hours required. A student who plans to transfer to another College should contact that institution to determine the impact of Academic Fresh Start on transfer.

Honors and Achievements

Dean's List

For the Dean's List, students must be enrolled in an academic program (degree, diploma or certificate), carrying a minimum of eight credit hours of curriculum courses numbered 100 or above.

1. Students must have a minimum 3.75 grade point average to qualify for the Dean's List for the semester under consideration.
2. Students who earn grades of F or I are not eligible for the Dean's List for that semester. Students receiving credit for a course by examination are not affected. Only courses numbered 100 and above taken for credit (no audits) will be considered.
3. The Dean's List will be compiled by the Office of Records and Registration. The Vice President for Instructional Services will be responsible for final approval and publication.

President's List

For the President's List, students must be enrolled in an academic program (degree, diploma or certificate) and complete a minimum of twelve credit hours of curriculum courses numbered 100 or above.

1. Students must have a 4.0 grade point average to qualify for the President's List during the semester under consideration.
2. Students who earn grades F or I are not eligible for the President's List for that semester. Students receiving credit for a course by examination are not affected. Only courses numbered 100 and above taken for credit (no audits) will be considered.

3. The President's List will be compiled by the Office of Records and Registration.

Requirements

Degree, Diploma, and Certificate Programs

Asheville-Buncombe Technical Community College confers the Associate in Arts degree, Associate in Applied Science degree, Associate in Engineering degree, Associate in Science degree, Associate in Fine Arts in Visual Arts degree, Associate in Arts in Teacher Preperation, Associate in Science in Teacher Preperation, Associate in General Education, and General Occupational Technology. A diploma is awarded for completion of one-year applied curricula. Certificates are issued to students who successfully complete designated short-term programs or course sequences. Degrees, diplomas, and certificates are conferred, awarded, or issued by authority of the North Carolina State Board of Community Colleges when all requirements for graduation have been satisfied.

Because of rapid changes in workplace technologies, certain technical courses will "time out" after five years and must be repeated for graduation. Exceptions must be approved by the Dean responsible for the course.

Requirements for Graduation

Degrees and diplomas are conferred and awarded at the end of each academic term. The College holds a single commencement ceremony in May each year. To graduate with a diploma or degree, students must meet the following minimum requirements:

1. Declare and be accepted into the program.
2. Complete all program requirements by the end of the term. Program requirements are defined in the official catalog. The default catalog is the one in effect for the term in which the student declares the program and cannot pre-date the student's first term of enrollment. Catalogs are valid for five academic years (for example a student graduating in Summer 2021 cannot use a catalog dated prior to 2016-2017). Course requirements must be completed by one of the following:
    a. Take the course at A-B Tech and attain the minimum grade required.
    b. Receive transfer credit. A minimum of 25% of program hours must be completed at A-B Tech. Official transcripts showing required courses must be received by A-B Tech before program completion will be posted to the student's transcript.
    c. Earn Credit-by-Exam, CLEP credit, Advanced Placement credit or credit for licensure/certification.
3. Earn a grade point average of at least 2.0 in the program of study.
4. Fulfill any additional program requirements as defined by special accreditation compliance standards.
5. Apply for graduation prior to completion of the program (preferably the term prior to the last term of registration) by submitting a program completion application to the Records and Registration office.
6. Be in good standing and fulfill all financial obligations.

Students who have completed degree or diploma requirements in the preceding fall semester or who are on-track to complete requirements in the spring semester or the subsequent summer semester will be invited to the May graduation ceremony.

Students with a program GPA of 4.0 will be graduated with Highest Honors. Students with a program GPA of at least 3.75 and less than 4.0 will be graduated with High Honors. Students with a program GPA of at least 3.5 and less than 3.75 will be graduated with Honors. Students who are on track to complete a program in the summer semester will not receive recognition for any applicable honors during commencement ceremony in the spring. Honors designations cannot be determined until all requirements are complete for the student's program of study.

Certificates

Certificates are issued for students who satisfy program requirements following the same criteria as for degrees and diplomas. Certificate completers do not participate in the commencement ceremony unless they also are receiving degrees or diplomas.

Transfer of Credit to Other Institutions

Asheville-Buncombe Technical Community College facilitates the transfer of credit to other institutions. The Associate in Arts, Associate in Engineering, Associate in Fine Arts in Visual Arts, Associate in Science, Associate in Arts in Teacher Preparation, and Associate in Science in Teacher Preparation degree programs are designed for students to transfer to senior institutions at or near the junior level. College transfer courses identified as satisfying the North Carolina Comprehensive Articulation Agreement (CAA) and passed with a grade of "C" or better will transfer to University of North Carolina system institutions and to participating private universities and colleges.

Associate in Applied Science graduates have the option of entering a career, continuing their education at a senior institution or both.

Curriculum courses are designed to transfer to other Community Colleges within the North Carolina Community College System.

The receiving institution determines how courses will be accepted. Student should contact the transfer institution for details on how courses will transfer.

Academic and Student Support Services

Counseling Services and Career Services

A-B Tech provides free, confidential counseling and related services for students in the K. Ray Bailey Student Services Center. Students are encouraged to use counseling services if they have personal, academic, or career concerns. The professional counseling staff, after initial assessment, will refer students who need specialized or long-term services to appropriate resources within the community.

Career Services are available to students who are undecided or uncertain about career plans and for those who are ready to make the transition from student to employee. Career resource and information tools are available in the K. Ray Bailey Student Services Center and on the College website at abtech.edu/careers. Sessions are available in career exploration, resume writing, interview skills, and other areas of interest. An appointment may be made through the website at abtech.edu/careers. Contact information is also available there.

Career Coach is available to curriculum and continuing education students as well as to the general community. Individuals may utilize Work Opportunities in Career Coach to view local employment options with preferred employers. Job seekers may create an account, review posted jobs, and apply for positions of interest. Enrolled students may also request resume assistance prior to applying for posted positions.

Academic Advising

In order to ensure that every student, including distance and unclassified students, receives quality academic advising, A-B Tech has established a comprehensive academic advising system. Students who are admitted to an applied science degree, diploma, certificate, Associate in Arts, Associate in Science, Associate in Engineering, Associate in Fine Arts program are advised by advisors in the Bailey building for the first semester and then assigned to a full-time faculty member from their curriculum department. Pre-Selective and Limited program students who are admitted to the Associate in General Education (AGE) programare advised by advisors in the Bailey building until program acceptance and unclassified/visiting students receive advising in the Bailey building. For more information, email advising@abtech.edu or call 398-7990.

Advisors are available both on an appointment and walk-in basis in the Advising Department in the Bailey Building.

Unclassified students may elect to register without meeting with a student advisor or may seek advising through the Advising department. They may register online via Self-Service. The following process outlines important considerations for individuals choosing to self-advise:

1. Prerequisites and co-requisites for courses must be met. Students may submit documentation of prerequisites and co-requisites to a student advisor.
2. High school students must see their advisor/liaison to register.
3. New students register during general registration.

Students who desire to register for more than 20 credit hours in a semester will need the approval of the Vice President for Instructional Services or his or her designee.

Services to Students with Disabilities

A-B Tech is invested in full compliance with Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990. Support Services at the College ensures that the programs and facilities of the College are accessible to all students. The College focuses on the student as an individual and works toward equal opportunity, full integration into the campus environment, physical accessibility and the provision of reasonable accommodations, auxiliary aids, and services to students.

Students with disabilities who require the services of American Sign Language interpreters, readers, or need other reasonable accommodations, should request these services from Support Services, since federal law prohibits the College from making preadmission inquiries about disabilities. Support Services is located in the K. Ray Bailey Student Services Center. Information provided by students is voluntary and appropriate confidentiality is maintained. For detailed information, refer to www.abtech.edu/supportservices.

Students who need assistance for academic services should call Support Services at 828-398-7141 or e-mail supportservices@abtech.edu. Services are designed and developed on an individual-needs basis, and students may elect to use any or all of the services appropriate to their needs at no charge.

An appointment with the Support Services staff is recommended in order to discuss any special concerns. Students who are not satisfied with the decisions of this office may utilize the College’s Student Appeals Policy.

Developmental Studies

Developmental Education

Developmental Education courses (ENG 025, ENG 045, MAT 025, and MAT 035) bridge the gap between current academic skills and those needed for college-level coursework. These courses offer detailed instruction and support to ensure students are well-prepared for their academic journey.

Transitional Studies Program

Transitional Studies offers programs to support academic improvement in the areas of reading, mathematics, English, social studies, science and contextualized pre-employment skills. Assessment is a basic element of all Transitional Studies programs. Program placement begins with a Test of Adult Basic Education (TABE) or CASAS Test and students are periodically assessed throughout their enrollment to monitor and assist their progress.

The Adult Basic Education (ABE) program supports the development of reading comprehension, mathematical reasoning and computation, and language and writing skills at pre-high school levels. This is designed to lay the foundation for those students who will go on to seek a high school equivalency (HSE) credential. Classes are also available for students who may not be seeking the HSE but are interested in pre-employment occupational skills development in a contextualized academic environment.

The High School Equivalency (HSE) Preparation program offers instruction in all areas relevant to official high school equivalency credential tests. Instruction for Transitional Studies programs is available at the A-B Tech Main campus, A-B Tech Madison campus, a variety of community sites, and through an on-line study option.

The Adult High School (AHS) Program, offered in partnership with Goodwill Industries and the Local Educational Agencies Buncombe County Schools, Asheville City Schools, Franklin School of Innovation, and Madison County Schools allows students to complete the credits they lack for the Future Ready Core requirements to earn a high school diploma. Diplomas are jointly issued by A-B Tech and the school systems. Goodwill provides career coaching, advising, and scholarships for students in the Adult High School Program through the Access Center.

The Transitional Studies JumpStart Program offers support for students interested in pursuing certificates in a variety of career fields. The program is designed to assist students in completing a variety of classes and certification requirements while they work toward completion of their high school credential, or equivalent, and/or improving their English as a means of enhancing their employability and giving them a jump start in their career field.

The Transitional Studies English Language Acquisition (ELA) program offers English instruction to non- native English speakers. Students are placed by level at entry and progress until assessment indicates they have achieved a desired level of proficiency. Upon graduation from the ELA Program, students may continue their studies in the ABE, HSE, or AHS programs.

All Transitional Studies classes are free. Some JumpStart career path classes may be fee waived while there may be cost associated with others. Transitional Studies students must be 18 years old or have an official minor permission form on record with the program.

Students are required to attend an orientation/ registration session.

Please call the Transitional Studies office at 828-398-7433 for more information on orientation/ registration.

Center for Academic Achievement

The Center for Academic Achievement, located on the lower floor of the Locke Library, provides students with a variety of free academic support services to facilitate student learning, success, and retention. These services include: drop-in tutoring in math (trigonometry, calculus, and statistics), accounting, biology, chemistry, physics, engineering, and Spanish; Writing Center appointments and walk-in services for support with academic, professional, and creative writing projects from all disciplines and at all stages of development; and academic coaching to support students in developing time management, organization, and foundational computer skills. All academic support services are available both in person and virtually. Through these services, the Center for Academic Achievement aims to provide an inclusive, nonjudgmental environment where students can gain the knowledge, confidence, and skills necessary to thrive in college and beyond. For a complete overview of academic support services provided by the Center for Academic Achievement, as well as up-to-date hours, please consult the College website.

Student Services for Distance Learners

Prior to registering for a fully online curriculum course, students should visit the Distance Learning at A-B Tech webpage found at https://abtech.edu/student-resources/onlinedistance-learning. Here students will find helpful links and resources for successful online learning including an online readiness self assessment. Students are also encouraged to complete an optional Moodle Online Orientation found at https://abtech.edu/student-resources/onlinedistance-learning

Following is the list of Student Services available to distance students. Most of these resources are available from the College website at abtech.edu:

1. Application: Application to the College may be made on the College website.
2. Student Orientation: The New Student Orientation is online.
3. Student Handbook: The Student Handbook is available on the College website.
4. Transcript Evaluation: Transcripts from colleges previously attended may be mailed or sent electronically to A-B Tech by the originating college and can be evaluated for transfer credit, if transfer credit is desired. Students will receive a summary of transfer credits in Self-Service.
5. Application for Program Completion: Applications for Program Completion may be mailed or emailed to the Office of Records and Registration for evaluation. The application is available on the College website. Applicants will receive an email response to their A-B Tech email account.
6. Catalog: The catalog is available on the College website.
7. A-B Tech Transcripts: Transcript requests may be made online at abtech.edu/transcripts.
8. Adding/Dropping/Withdrawing from Classes: Distance learners may add or drop classes online via Self-Service. Distance learners may receive assistance with withdrawing from classes by emailing the Registar's office at registar@abtech.edu.
9. Schedule of Classes: Curriculum schedules are available in Self-Service.
10. Financial Aid: Applications for federal financial aid (FAFSA) are available at www.studentaid.gov and scholarship applications are available on the College website. Financial Aid information is available by emailing financialaidoffice@abtech.edu or calling 828-398-7900.
11. Academic Advising: Academic advice is available as follows: Unclassified students who are not in any program, visiting student, International students and pre-selective and limited program students may receive academic advising by a Student Advisor in the K. Ray Bailey Building either virtually or by phone or by emailing advising@abtech.edu. Students classified into programs may receive academic advising by emailing their assigned program advisor at the College.
12. Veterans' Services: Veterans' services and advice are available by emailing the Veterans' Coordinator at veteranservices@abtech.edu.
13. Disability Services: Students with disabilities as defined by the Americans with Disabilities Act may seek services by completing the request forms at www.abtech.edu/supportservices.
14. Career Services: For those who need assistance in choosing a major/program, researching specifics of various occupations, writing resumes, and/or developing interview skills, counselors are available by appointment. Students may schedule an appointment by using links on abtech.edu/careers.
15. Personal Counseling: Free, confidential counseling appointments are provided to students virtually. Due to license restrictions, students must physically be located in North Carolina. Appointments can be scheduled by emailing supportservices@abtech.edu.
16. Placement Assessment: Placement assessment may be accomplished at any college which offers the accepted placement test or in person and online @abtech.edu. Scores can then be faxed or emailed by the originating college. Additionally, college-level SAT, ACT or Accuplacer scores may be used instead of taking the college placement test. For information or to schedule a placement test, contact the Testing Center at testingcenter@abtech.edu.
17. Payment of Tuition and Fees: Tuition and fees may be paid online from the College website or by using Self-Service.
18. Purchase of Books: Books may be purchased online from the College Bookstore.
19. Online Technical Assistance: The College provides a Help Desk for students who experience technical issues with Moodle, WebAdvisor Self-Service and other college online services. Students may contact the HelpDesk at helpdesk@abtech.edu.
20. Library Services: Students may access the resources of the Locke Library by visiting www.abtech.edu/library.
21. Academic Assistance: Tutoring for distance learners in certain disciplines is available. For help with writing, students can contact the Writing Center at abtech.edu/WritingCenter. For help with math or math related courses, the tutoring center can be found at abtech.edu/TC.
22. College Events: An updated list of college-sponsored activities and events is available on the College's website calendar.

23. Information about computer set-up: The College provides information on the proper technical set-up that will be needed for a student to fully engage in the online learning process. This information is located at abtech.edu/content/distance-learning/setting-your-computer.

24. Moodle Orientation: A self-paced Moodle Online Orientation is available to students . This course provides students with the opportunity to test drive the features of Moodle and solicit feedback from an online instructor prior to the start of their curriculum class(es). Completion of the Moodle Online Orientation is required prior to enrollment in fully online curriculum classes.

25. Proctored Exams and Identity Verification Costs: A-B Tech does not currently charge online students a separate fee for identity verification. Students enrolled in distance education/online courses at A-B Tech may be required to take proctored exams (exams administered by an approved testing facility). Each distance education/online course will indicate requirements for proctored exams prior to registration. A-B Tech students may take all proctored exams in the testing center at no charge. Students may also use any A-B Tech approved proctoring location; however, it is the student's responsibility to locate and seek approval of the site. In addition, students using a site other than the A-B Tech Testing Center may be subject to fees charged by the respective location. Information on A-B Tech's Testing Procedures, including required forms, may be found at https://abtech.edu/current-students/testing-center/campus-testing-procedures

A-B Tech Police Department

The department's mission is to serve the College in a manner that is unsurpassed and serve as the standard for others to emulate. The primary function is to provide an environment that allows students, staff, faculty and visitors to interact in safe and secure surroundings. The role is to actively support the educational activities of the College through safety, security and parking services. These services will meet the highest level of approval and will constantly strive to anticipate the needs of the College community.

Telephone Numbers for A-B Tech Police
Non-Emergency: 828-398-7125
Emergency: 911

Parking Regulations

All students are required to register their vehicles and display parking permits. Copies of parking regulations are available in the K. Ray Bailey Student Services Building lobby, the Police Dept., and the college website. Parking spaces designated for individuals with disabilities are located at each facility. Spaces marked by yellow lines are for faculty and staff use only. Green lined areas are for Barbershop, Cosmetology, and Dental Clinic clients as well as Mountain Tech Lodge guests. Students park in white lined spaces. All parking fines must be paid prior to registering for classes, seeing grades or getting transcripts.

Safety Tips

The following tips can help students avoid becoming a victim of a crime when they are at school, work, or just out and about. By taking a few simple precautions, students can reduce their risk, and also discourage those who commit crime.

Be Prepared

- Students should always be alert and aware of the people around them.
- Students should educate themselves concerning prevention tactics.
- Students should be aware of locations and situations which would make them vulnerable to crime, such as alleys and dark parking lots.

Street and Parking Lot Precautions

- Students should be alert to their surroundings and the people around them, especially if they are alone or it is dark.
- Whenever possible, students should travel with someone else.
- Students should stay in well-lit areas as much as possible.
- Students should walk close to the curb, avoiding bushes and alleys where someone could hide.
- Students carrying purses should hold them securely between their arms and body.

- Students should walk confidently, and at a steady pace.

Car Safety

- Students should ALWAYS lock car doors after entering or leaving their cars.
- Students should park in well-lit areas.
- Students should have their car keys in hand before getting to the car.
- Students should check the back seat before entering the car.
- If a student thinks he or she is being followed, the student should drive to a security, police, sheriff or fire station.
- Students should not stop to aid motorists stopped on the side of the road. Students should go to a phone and request help.
- Students should never pick up hitchhikers.

Office and Classroom Safety

- Students should never leave a purse or billfold in plain view or in the pocket of a jacket hanging on a door or chair.
- Students should not leave cash or valuables in an office or classroom, even for a short time, such as a break.
- Students should be aware of escape routes for emergencies.
- Students should report suspicious people and activities to security personnel.
- When sitting in the cafeteria, lounge or on outside benches, students should always keep personal belongings with them.
- If working alone or before/after normal business hours, students keep doors locked.
- If attending night classes or working late, students should try to walk out with one another or call security for an escort.

If a Crime Occurs – Report It

Everyone should consider it his or her responsibility to report crime. Many criminals target favorite areas and have predictable methods of operation. At least one out of two crimes in the United States goes unreported, usually because people don't want to get involved. Not reporting a crime allows the criminal to continue to operate without interference.

In many cases, it is the information provided by victims and witnesses that leads to the arrest of a criminal. No fact is too trivial.

Crime statistics for A-B Tech are posted annually on the US Department of Education, Office of Postsecondary Education's web site at **http://ope.ed.gov/security/.** For a copy of the A-B Tech Annual Security Report, please visit **www.abtech.edu/campus-police-and-security/campus-safety-and-security-reporting.**

Other College Services and Information

College Services

Food Options on Campus. Various food options exist at the Victoria Road campus. Food trucks by AHWD, the Café in Coman and the College Bookstore in Bailey all have meal and drink options. Picnic tables and solar tables exist across campus for students to share a meal or study outside. Vending machines are available at all A-B Tech locations and can provide a quick snack between classes. Visit abtech.edu/food for all dining information including a link to the A-B Tech Food Pantry.

A-B Tech Police. A-B Tech Police are on duty 24 hours a day, seven days a week, located at the A-B Tech/Mission Coference Center. Each officer is prepared to respond to medical emergencies. Call 828-398-7125 or 828-279-3166.

Access to Achievement: Access to Achievement is a service to help support students with disabilities navigate all aspects of college. Created by the North Carolina Legislature in 2023 to increase outcomes for students with disabilities, the Access to Achievement coordinator can support students in their academic journey to obtain credentials, certificates, diplomas, and degrees in a more inclusive community college setting.

Bookstore. A bookstore is operated by the College for the convenience of students and staff members to provide required textbooks and materials. Students should plan to purchase all texts and materials at the beginning of each semester.

Textbook costs vary considerably depending upon the curriculum and semester. Book costs also vary from year to year because of changes in curriculum book prices, texts, and material requirements.

Texts and materials will be made available in alternative accessible formats for individuals with disabilities upon request to the Support Services Office at supportservices@abtech.edu.

Center for Academic Achievement. The Center for Academic Achievement, located on the lower floor of the Locke Library, provides students with a variety of free academic support services to facilitate student learning, success, and retention. These services include: drop-in tutoring in math (trigonometry, calculus, and statistics), accounting, biology, chemistry, physics, engineering, and Spanish; Writing Center appointments and walk-in services for support with academic, professional, and creative writing projects from all disciplines and at all stages of development; and academic coaching to support students in developing time management, organization, and foundational computer skills. All academic support services are available both in person and virtually. Through these services, the Center for Academic Achievement aims to provide an inclusive, nonjudgmental environment where students can gain the knowledge, confidence, and skills necessary to thrive in college and beyond. For a complete overview of academic support services provided by the Center for Academic Achievement, as well as up-to-date hours, please consult the College website.

Child Care. A-B Tech has limited dollars to assist students with child care services rendered off campus. These funds are provided annually by the state of North Carolina, and funding is therefore subject to annual state budgeting. For further information, call 398-7143.

College Closing or Delayed Opening. The College will either be closed or opened on a delayed schedule when inclement weather conditions warrant such a decision. (See Student Handbook for Inclement Weather Procedures at **abtech.edu/student-handbook**.) Closing or delaying announcements are placed on the switchboard automated attendant, on the A-B Tech website at **abtech.edu**, and will be made on Asheville radio and television stations and some surrounding community radio stations. Separate decisions and announcements are made for the day and evening programs.

College Events. For an updated list of College sponsored activities and events, please click on the calendar link on the College website, **abtech.edu.**

Culinary Arts. The Culinary Arts and Hospitality Management students offer lunch and dinner service on most Thursdays during fall and spring semesters. Service is provided in the dining rooms of the Magnolia and Fernihurst Buildings on the A-B Tech Asheville Campus. For more information, email reservations@abtech.edu.

Dental Clinic. A-B Tech Allied Dental Clinic offers great savings on dental treatment. The services provided are routine dental cleaning, periodontal (deep) cleaning, fluoride treatments, sealants and digital dental radiographs. The clinic is by appointment only and they accept cash, check and credit cards. For additional information you may call 828-398-7255 or email dental@abtech.edu.

Honorary Societies. The College participates in the Phi Theta Kappa Academic Honor Society. Membership to the National program is open to students with a 3.5 GPA and 12 credits of completed college level work.

Intramurals. A-B Tech offers a wide variety of intramural activities that are open to student or employee participation. For more information, visit **www.abtech.edu/sports.**

Health Clinic. The clinic provides examinations by a licensed physician assistant/nurse practitioner. Student fees are $10 per visit. Services include, but are not limited to, treatment for aches, blood pressure evaluations, prescriptions, minor emergencies, medical questions, common cold, flu and virus care. For more information call

828-398-7570 or email healthclinic@abtech.edu. Students may be seen as a ‘walk-in’ patient in the Ferguson Center for Allied Health and Workforce Development (AHWD) in room 115.17.

Don C. Locke Library. The Don C. Locke Library is the academic center of campus, providing resources and services to support all academic programs offered on-campus, at our extended campuses and to students in our online programs. The Library offers a wide variety of materials including books, e-books, periodicals, and access to many online resources for student and faculty research. The library also has popular fiction, DVD’s and audio books available for checkout.

Computers located on the main floor of the library are available on a first-come, first-served basis for students to complete class or research assignments. The Center for Academic Achievement, located on the lower floor of the Library is where students may seek tutoring assistance for a variety of subjects taught at A-B Tech.

The Library is equipped with wireless internet throughout the building and students may borrow laptops from the library for use in their classes. A limited number of Internet hotspots are also available for students who do not have access to the Internet.

A Librarian is available at all times the Library is open to provide research guidance. Instructors may schedule a Librarian led general or subject specific library session, either in the library or in the classroom. The Library offers comfortable seating, group and individual study rooms and other services. Information about Library services is available at the circulation desk or by calling 828-398-7301.

Mountain Tech Spa. The Mountain Tech Spa is an on-campus spa facility, located in the Birch Building. Students of the Cosmetology, Esthetics Technology, Manicuring/Nail Technology and Cosmetology Instructor programs are provided with a practical experience under the direction of College faculty. For more information or to schedule an appointment, email spa@abtech.edu or call (828) 398-7670.

Parking Locations. Parking is provided at various locations around campus. Refer to the campus map located in this catalog for specific sites. Students with disabilities are provided parking at all locations. Parking areas are lighted during evening hours. Spaces marked with yellow lines are reserved for faculty, staff, disabled persons, and visitors. White lined spaces are reserved for students. Green lined spaces are reserved for client parking in specific programs

Placement Service. No reputable college can guarantee jobs for graduates. However, the College will assist students and alumni in every possible way to obtain suitable employment. Applied Science department chairs are particularly helpful with placing their program graduates. Career Services maintains an online job board via Career Coach, where employers may post openings and where students/alumni may post their resumes.

QEP: PEAK Performance A-B TECH Success Coaching

Summary and Goals

A-B Tech’s Quality Enhancement Plan (QEP) for our upcoming SACSCOC reaffirmation process focuses on improving the success and retention for first-time students. The PEAK Performance Success Coaching QEP was selected based on broad-based involvement and support. The PEAK Performance Success Coaching program provides personalized, strengths-based and high touch coaching for first-time college students who are eligible for the Pell grant. With the goal of empowering this vulnerable population of students, the Success Coaching model will help students navigate college systems and connect with support services. Our CliftonStrengths® Certified Success Coaches (SC) will lead students to leverage their individual strengths and talents to improve their overall success and persistence at A-B Tech. The three Success Coaches will each specialize in specific academic divisions: Arts & Sciences; Engineering, Transportation, and Technologies; and Wellness, Hospitality, and Public Service.

Success Coaching is a one-on-one, personalized experience. Participating students will be asked to complete the CliftonStrengths® for Students assessment to reveal their unique talents and strengths. Success Coaches will, with the CliftonStrengths® results, tailor their discussions with students to discover how their results will inform the students’ individual goals, personal and academic growth, time management strategies, and study skills.

Additional Project Goals

- Increasing retention by supporting students from their first semester to graduation or transfer to a senior college.
- Boost success rates by guiding students to use their strengths and develop key skills to improve academic performance.
- Ensuring equity in outcomes by providing underserved students with the support needed to succeed.

Success Coaches will:

- work with students to develop a roadmap to success, the Personalized Education and Graduation Plan. This plan will serve as a guide to program completion and can be adjusted depending on the students’ progress in their area of study.
- work with campus partners and student support services to ensure a holistic grid of resources for students including but not limited to:
    - timely referrals to support services
    - lead workshops for students, concentrating on

- Time Management
- Note Taking
- Managing Finances
- Building Resilience
- Navigating Academic Resources
- Mental Health & Wellness Tips
- And much more.

The RESET room. Located in Elm 204, this is a safe place for students to press pause and reset before continuing with their day. This is a place of support for those in recovery (substances, mental health, trauma, etc.) It is open Monday through Thursday 9 a.m. - 5 p.m., Friday 9 a.m. to 2 p.m. when classes are in session. For more information call 828-398-7536 or go to abtech.edu/ARC.

Student Accident Claims. Students wishing to file a claim on the College's Student Accident policy should call 398-7150 or email elizabethbgreene@abtech.edu

Small Business Center. The Small Business Center supports the development of new business and the growth of existing businesses by being a community based provider of training, counseling, and resource information. Confidential counseling services and access to resource libraries are free of charge as are the majority of seminar offerings.

Student Business Incubation. Students with an entrepreneurial spirit may apply for the student incubation program managed by the Small Business Center. The program is designed to provide a nurturing environment for students to develop and grow their own businesses. They receive guidance toward becoming sustainable and contributing members of a strong economic community. The 12-month extracurricular program is located at A-B Tech's Enka site and is open to all students. More information can be found at **abtech.edu/sbc**.

Student Clubs and Societies. A-B Tech has more than 15 clubs and societies. Students can access a full list of clubs and societies on the College website, **abtech.edu/student-organizations.**

Student Lounge. The lounge space is located in the Coman Student Activity Center. Wifi access is available throughout the Coman Building.

Student Housing. Students are responsible for their own living accommodations. A-B Tech neither approves nor maintains housing facilities. Students who are looking for housing or roommates may check bulletin boards in the K. Ray Bailey Student Services Center or the Coman Student Activity Center.

Study Abroad Program. A-B Tech occasionally sponsors both curriculum and continuing education study abroad opportunities for students. Students who want to participate must be enrolled in the College, register for the study abroad course, and purchase health and accident insurance valid outside of the United States.

Vet Café. The Vet Cafe in Ferguson Auditorium building is a place for veterans attending the College to come to take a break, network with other veterans, study and receive support from volunteers. The Vet Café is open Monday through Friday from 9 am to 5 pm when classes are in session.

A-B Tech's Assessment of Student Achievement

A-B Tech identifies, evaluates, and publishes goals and outcomes for student achievement appropriate to theinstitution's mission, "Dedicated to the success of students and communities, Asheville-Buncombe Technical Community College provides meaningful teaching and learning in a curriculum, continuing education, and workforce development environment committed to Respect, Integrity, Support, and Equity (RISE). We welcomeeveryone to join us." The College utilizes multiple measures, or criteria, of student achievement to monitor success in meeting the Mission, including:

1. Integrated Postsecondary Education Data System (IPEDS) Outcome Measure – (This is a cohort driven, eight-year measure of student completion that is collected annually by the federal government.)
2. North Carolina Community College System (NCCCS) Performance Measures – (The College selected six student success measures that are tracked annually by NCCCS. Performance on these measures are reported annually to system colleges and are linked to state performance funding.)
3. A-B Tech Student Retention and Completion Data - (These are cohort-based measures of student success that were derived from the College's participation in national Achieving the Dream and statewide Completion by Design projects and the Community College Research Center's (CCRC) evidence-based Early Momentum Metrics.)

These measures, along with specific target goals and minimum thresholds of performance have been carefully selected to assess the achievement of student success. The College expects to achieve established minimum annual thresholds with the goal of meeting or exceeding established annual targets. In addition to assessing mission success, these measures also provide the institution with national, statewide, and internal benchmarks for student achievement.

The most recent performance results for A-B Tech are presented below (For questions regarding any of the data provided below, please contact the Research and Planning Office at (828) 398-7175.)

IPEDS Outcome Measure – Eight-Year Graduation Rate (2015 - 16 cohort)

The IPEDS Outcome Measure (OM) survey component provides the award and enrollment statuses of four degree/certificate-seeking undergraduate student cohorts and eight sub-cohorts at degree-granting institutions. Student completion awards are collected at four-year, six-year, and eight-year status points after students have entered the institution. A-B Tech has selected the eight-year status point as our official completion rate.

A-B Tech expects performance on this measure, at a minimum, to meet or exceed the national average for 2-year colleges in the US. The College's goal is to exceed the national average by at least 10%.

A-B Tech's Graduation Rate	National Average	Goal Status
32%	29.2%	Above Baseline, Below target

NCCCS Performance Measures

The Performance Measures for Student Success Report is the North Carolina Community College System's major accountability document. This annual performance report is based on data compiled during the previous year and serves to inform colleges and the public on the performance of the system's 58 community colleges. Currently there are six system-wide student success measures relevant to for-credit students:

1. Student Success in College-Level English Courses
2. Student Success in College-Level Math Courses
3. First Year Progression
4. Curriculum Completion
5. Licensure and Certification Passing Rate
6. College Transfer Performance

A-B Tech expects performance on the following measures, at minimum, to meet or exceed the state average for all 58 community colleges. The College's goal is to exceed the state excellence level.

2024 Performance Measures Summary Report

Performance Measure	System Excellence Level	System Baseline	System Mean	A-B Tech Results	A-B Tech Performance
Student Success Rate in College-Level English Courses	1.174	0.723	1.025	0.834	Below System Average, Above Baseline
Student Success Rate in College-Level Math Courses	1.204	0.665	1.024	0.849	Below System Average, Above Baseline
First-Year Progression	1.063	0.899	1.009	0.850	Below System Baseline
Curriculum Completion	1.094	0.817	1.002	0.859	Below System Average, Above Baseline
Licensure and Certification Passing Rate	1.073	0.811	0.985	1.086	Above Excellence Level
College Transfer Performance	1.031	0.917	0.993	1.017	Below Excellence Level, Above Mean

Measure definitions:

1. Student Success Rate in College-Level English Courses: Percentage of first-time associate degree seeking and transfer pathway students passing a credit-bearing English course with a "C" or better within three years of their first fall term of enrollment.
2. Student Success Rate in College-Level Math Courses: Percentage of first-time fall associate degree seeking and transfer pathway students passing a credit-bearing Math course with a "C" or better within three years of their first term of enrollment.
3. First Year Progression: Percentage of first-time fall credential-seeking students who graduate prior to or enroll in postsecondary education during the subsequent fall term.
4. Curriculum Student Completion: Percentage of first-time fall credential-seeking curriculum students who have graduated, transferred, or are still enrolled during the fourth academic year with 42 successfully completed non-developmental hours.
5. Licensure and Certification Passing Rate: Weighted index score of first-time test-taker results on licensure and certification exams. Exams included in this measure are state mandated exams which candidates must pass before becoming active practitioners. Weights are based on the funding tier associated with the related instructional program.
6. College Transfer Performance: Among community college Associate Degree completers and those who have completed 30 or more articulated transfer credits who subsequently transfer to a four-year university or college during the fall semester, the percentage who graduate prior to or remain enrolled at any four-year college or university the subsequent fall semester.

Questions regarding student achievement data should be addressed to the College's Research and Planning Office

A-B Tech Student Retention and Completion Data

Based on data collection and assessment efforts during A-B Tech's participation in Achieving the Dream and Completion by Design processes, three student success measures were established to track part-time and full-time progression:

1. Proportion of students earning 6 college credits in first term
2. Proportion of students earning 12 college credits in first year
3. Credential completion in the first year

The above measures are tracked annually and progress reports are provided each term to the Board of Trustees, College leadership and the campus community.

A-B Tech expects performance on the following measures, at minimum, to meet or exceed established baseline performance levels. The College's goal is to meet or exceed established targets.

A-B Tech Student Success Measures
2023-24 Performance (2023 Fall)

Measure	Outcome/Performance	Threshold/ Baseline (Prior 3-yr Avg)	Goal/Target	Goal Status
The proportion of students earning 6 college credits in the first term	40.1%	39.3%	40.0%	Met target
The proportion of students earning 12 college credits in the first year	27.4%	27.3%	28.7%	Below target, met baseline
Credential Completion in the First Year	46.9%	49.9%	51.4%	Below target, below baseline

Student cohorts are comprised of all credential-seeking students entering the institution for the first time each fall term.

1. First-time students earning six college-level credits with a C or better. The first term is the first term with credit-bearing courses.
2. First-time curriculum students earning 12 college-level credits with a C or better. The year is based on the student's first term and the subsequent two terms (including summer).
3. First-time curriculum students earning a credential prior to the subsequent fall term or return to A-B Tech during the subsequent fall term.
4. Historic Baseline is the average of the three years prior to the Fall cohort.
5. Target is the baseline plus 3% of the three years prior to the cohort.

Questions regarding student achievement data should be addressed to the College's Research & Planning Office.

Curriculum Programs

Types of Curriculum Programs
Curriculum programs are composed of credit-bearing courses that may transfer to other institutions and which also lead to a credential such as a degree, diploma, or certificate. A-B Tech offers two main types of curriculum programs: career and technical programs and college transfer programs:

- University transfer degrees include the Associate of Arts (A.A), Associate of Science (A.S.), Associate of Fine Arts (A.F.A.), Associate of Engineering (A.E.). Associate in Arts in Teacher Preperation (A.A.T.P), or Associate in Science in Teacher Preperation (A.S.T.P.). College-transfer degrees are designed to mimic the first half of a bachelor's degree and are composed entirely of courses that are designated as transfer to a senior institution
- Career and technical programs typically lead to a credential of a certificate, diploma, or Associate of Applied Science (A.A.S.) degree and are intended to prepare students to enter the workforce directly. .

College transfer degrees at A-B Tech are further broken into Pathways, which are structured curricula designed to maximize the benefit of credits that a student will transfer toward a specific major at a four-year institution. Once a college transfer student declares a Pathway during the first semester, an academic advisor will assist the student by identifying Pathway-specific courses that will transfer to four-year institution. See Transfer Pathways on page 97.

University Transfer Degrees

Associate Transfer Degrees
Associate in Arts
Associate in Arts in Teacher Preparation
Associate in Engineering
Associate in Fine Arts in Visual Arts
Associate in General Education
Associate in Science
Associate in Science in Teacher Preparation

The North Carolina Comprehensive Articulation Agreement (CAA) is a statewide agreement governing the transfer of credits between NC community colleges and NC public universities. The CAA's objective is to facilitate the smooth transfer of students. The CAA does the following:

- Assures admission to one of the 16 UNC institutions.
- Enables NC community college graduates of two-year Associate in Arts and Associate in Science degree programs who are admitted to constituent institutions of the UNC system to transfer with junior status.
- Provides a Transfer Credit Appeal Procedure.

The Associate in Arts (A10100) degree is designed for students who want to pursue a four-year degree in one of the liberal arts disciplines or training at a professional school that requires a strong liberal arts background.

The Associate in Science (A10400) degree is designed for students who want to pursue a four-year degree in areas of study such as computer science, engineering, mathematics, the sciences, or professional programs that require strong mathematics and science backgrounds.

As part of the Associate in Arts and Associate in Science degrees, students take courses in the Universal General Education Transfer Core (UGETC). These courses provide students with a knowledge base of historical, societal, and environmental contexts for succeeding in the changing global community. UGETC represents a full spectrum of English composition, humanities and fine arts, social and behavioral sciences, natural sciences, and mathematics courses. General education courses facilitate student acquisition and sharing of knowledge, encourage social interaction, and promote an educated citizenry. General education courses also develop broad, cross-curriculum knowledge and skill sets that prepare the student for the challenges of post-graduation endeavors.

The Uniform Articulation Agreement promotes educational advancement opportunities for Associate in Engineering (A10500) completers and the constituent institutions of The University of North Carolina in order to complete Bachelor of Science in Engineering degrees.

The Uniform Articulation Agreement focuses on seamless transfer for students who begin visual arts studies at a community college and then transfer to one of the University of North Carolina Bachelor of Fine Arts/Visual Arts programs. The Associate in Fine Arts in Visual Arts to Bachelor of Fine Arts (AFAVA to BFA) agreement is made between the State Board of the North Carolina Community College System and The University of North Carolina Board of Governors. It applies to all North Carolina community colleges that offer the Associate in Fine Arts in Visual Arts (A10600) program and to those constituent institutions of The University of North Carolina that operate Bachelor of Fine Arts Programs.

For additional information about the Comprehensive Articulation Agreement or the Uniform Articulation Agreement, visit www.cfnc.org.

General Education Requirements for University Transfer Degrees
Asheville-Buncombe Technical Community College is accredited by the Southern Association of Colleges and Schools Commission on Colleges (SACS COC). "General Education" is the term used by SACSCOC to describe a breadth of skills and knowledge across various disciplines including: humanities/fine arts; social/behavioral sciences; and natural science/mathematics. Hence, "general education" is something more broadly understood than the core undergraduate courses. Specific General Education requirements are listed under each university transfer degree.

Transfer Pathways

A-B Tech has developed 31 transfer Pathways that are designed to maximize your velocity toward a bachelor's degree in a chosen field of study. The transfer Pathways are:

Associate in Arts:
Accelerated AA
Business, Accounting, and Finance
Communication
Construction Management
Creative Arts
Criminal Justice
English
Foreign Language
General
Health & Wellness
History
Information Systems
Nutrition
Philosophy
Political Science
Pre-Health
Psychology
Social Work
Sociology

Associate in Science:
Architecture
Biology
Chemistry
Computer Science – General
Computer Science – Computer Systems Concentration
Environmental Science
General
Math
Physics
Pre-Dental
Pre-Engineering
Pre-Med
Pre-Pharmacy
Pre-Physical Therapy
Pre-Physician's Assistant
Pre-Veterinarian

Associate in Engineering
General
Chemical Engineering
Civil Engineering

Associate in Fine Arts
Film
Graphic Design
Interior Design
Studio Art

Anyone can begin a path toward a bachelor's degree by enrolling at A-B Tech. Don't see a pathway for your chosen discipline? You can still start with A-B Tech. An academic advisor will work to create a specific curriculum for you to transfer to a bachelor's degree-granting institution.

Associate in Arts (AA) Degree (A10100)

Your assigned academic advisor will develop a specific curriculum for your educational goals.

The Associate in Arts degree shall be granted for a planned program of study consisting of a minimum of 60 semester hours of credit (SHC) of college transfer courses. Within the degree program, the institution shall include opportunities for the achievement of competence in reading, writing, oral communication, fundamental mathematical skills, and basic computer use.

The Comprehensive Articulation Agreement (CAA) and the Independent Comprehensive Articulation Agreement (ICAA) enables North Carolina community college graduates of two-year associate in arts programs who are admitted to constituent institutions of The University of North Carolina and to Signatory Institutions of North Carolina Independent Colleges and Universities to transfer with junior status. Community college graduates must obtain a grade of "C" or better in each course and an overall GPA of at least 2.0 on a 4.0 scale in order to transfer with a junior status. Courses may also transfer through bilateral agreements between institutions.

General Education (45 Hours)

English Composition - 6 hours

ENG-111	Writing and Inquiry
ENG-112	Writing/Research in the Disc

Humanities/Fine Arts (Courses must be from at least two different disciplines) - 9 hours

COM-120	Intro to Interpersonal Com OR
COM-231	Public Speaking
ART-111	Art Appreciation
ART-114	Art History Survey I
ART-115	Art History Survey II
ENG-231	American Literature I
ENG-232	American Literature II
ENG-241	British Literature I
ENG-242	British Literature II
MUS-110	Music Appreciation
MUS-112	Introduction to Jazz
PHI-215	Philosophical Issues
PHI-240	Introduction to Ethics

Social / Behavioral Sciences (Courses must be from at least two disciplines) - 9 hours

Pick one of the following:

HIS-111	World Civilizations I
HIS-112	World Civilizations II
HIS-131	American History I
HIS-132	American History II

Pick two of the following:

ECO-251	Prin of Microeconomics
ECO-252	Prin of Macroeconomics
HIS-111	World Civilizations I
HIS-112	World Civilizations II
HIS-131	American History I
HIS-132	American History II
POL-120	American Government
PSY-150	General Psychology
SOC-210	Introduction to Sociology

Mathematics - 3-4 hours

MAT-143	Quantitative Literacy
MAT-152	Statistical Methods I
MAT-171	Precalculus Algebra

Natural Sciences - 4 hours

BIO-110	Principles of Biology
BIO-111	General Biology
CHM-151	General Chemistry I
PHY-110	Conceptual Physics
PHY-110A	Conceptual Physics Lab

Additional General Education Requirements - 13-14 hours

HUM- 220	Human Values and Meaning

Additional General Education courses as designated in pathway. Courses listed in bold meet this requirement.

Other Required Hours - 15

ACA-122	College Transfer Success

Additional hours from the list below (14 hours)

ACC-120
ACC-121
ANT-220
ART-111
ART-114
ART-115
ART-121
ART-122
ART-131
ART-171
ART-214
ART-231
ART-240
ART-244
ART-261
ART-264
ART-266
ART-267
ART-275
ART-276
ART-283
ART-284
BIO-110
BIO-111
BIO-112
BIO-120
BIO-130
BIO-140
BIO-140A
BIO-155
BIO-163
BIO-168
BIO-169
BIO-175
BIO-275
BUS-110
BUS-115
BUS-137
CHM-130
CHM130A
CHM-132
CHM-151
CHM-152
CHM-251
CHM-252
CHM-271
CIS-110
CIS-115
CJC-111
CJC-113
CJC-121
CJC-141
COM-110
COM-120
COM-140
COM-150
COM-231
CSC-134
CSC-151
CTS-115
DFT-170
ECO-151
ECO-251
ECO-252
EDU-144
EDU-145
EDU-216
EDU-221
EGR-150
EGR-212
EGR-215
EGR-216
EGR-220
EGR-228
ENG-114
ENG-125
ENG-231
ENG-232
ENG-241
ENG-242
FRE-111
FRE-112
FRE-211
FRE-212
GIS-111
HEA-110
HEA-112
HIS-111
HIS-112
HIS-131
HIS-132
HSE-110
HUM-110
HUM-115
HUM-220
MAT-143
MAT-152
MAT-171
MAT-172
MAT-175
MAT-252
MAT-263
MAT-271
MAT-272
MAT-273
MAT-280
MAT-285
MUS-110
MUS-112
PED-110
PED-117
PED-118
PED-122
PED-123
PED-211
PED-217
PHI-215
PHI-240
PHY-110
PHY-110A
PHY-151
PHY-152
PHY-251
PHY-252
POL-120
PSY-150
PSY-237
PSY-241
PSY-281
SOC-210
SOC-213
SOC-220
SOC-225
SPA-111
SPA-112
SPA-211
SPA-212

Total Semester Hours Credit (SHC) in Program: 60-61

One semester hour of credit may be included in a 61 SHC associate in arts program of study. The transfer of this hour is not guaranteed.

Associate in Arts (AA) Pathways

AA and AS degrees require completion of a minimum of 60 semester hours of credit, but pathways may include extra hours to meet university baccalaureate degree plans. Completion of hours beyond 60 may not be required to meet AA or AS graduation requirements but is recommended based on programs offered by intended transfer institutions.

The following pathways are for full-time students. Please see the Program Advising Center or an advisor for part-time pathways.

General AA Pathway

The General AA Pathway is available in traditional format or 100% online.

First Semester		**Credits**
ACA-122	College Transfer Success	1
COM-231	Public Speaking	3
ENG-111	Writing and Inquiry	3
MAT-152	Statistical Methods I	4
PSY-150	General Psychology	3
Second Semester		
ART-111	Art Appreciation	3
BUS-110	Introduction to Business	3
ENG-112	Writing/Research in the Disc	3
FRE -111	Elementary French I (or SPA 111)	3
SOC-210	Introduction to Sociology	3
Third Semester		
BIO-110	Principles of Biology	4
FRE -112	Elementary French II (or SPA 112)	3
HIS-112	World Civilization II	3
PHI-240	Introduction to Ethics	3
	Guided Elective	3
Fourth Semester		
ECO-251	Prin of Microeconomics	3
HEA-110	Personal Health/Wellness	3
HUM-220	Human Values and Meaning	3
PSY-281	Abnormal Psychology	3
	Guided Elective	3

Accelerated AA Pathway

The accelerated AA pathway is designed to be completed in 15-18 months.

First Semester (Summer)		**Credits**
ACA -122	College Transfer Success	1
COM-120	Intro to Interpersonal Com	3
ENG-111	Writing and Inquiry	3
MAT-152	Statistical Methods I	4
PSY-150	General Psychology	3

Second Semester (Fall)		
ART-111	Art Appreciation	3
ENG-112	Writing/Research in the Disc	3
FRE -111	Elementary French I (or SPA 111)	3
HEA-110	Personal Health/Wellness	3
SOC-210	Introduction to Sociology	3

Third Semester (Spring)		
BIO-110	Principles of Biology	4
ECO-251	Prin of Microeconomics	3
FRE -112	Elementary French II (or SPA 112)	3
HIS-112	World Civilization II	3
MUS-110	Music Appreciation	3

Fourth Semester (Summer)		
ECO-252	Prin of Macroeconomics	3
HIS-111	World Civilization I	3
HUM-220	Human Values and Meaning	3
PHI-240	Introduction to Ethics	3
PSY-281	Abnormal Psychology	3

If Intersession classes are available, it is recommended that students take some of their Summer classes during Intersession.

Business, Accounting, and Finance Pathway - Appalachian State University

First Semester		**Credits**
ACA-122	College Transfer Success	1
COM-231	Public Speaking	3
ECO-251	Prin of Microeconomics	3
ENG-111	Writing and Inquiry	3
MAT-152	Statistical Methods I	4

Second Semester		
BUS-110	Introduction to Business (or BUS-115)	3
CIS-110	Introduction to Computers	3
ECO-252	Prin of Macroeconomics	3
ENG-112	Writing/Research in the Disc	3

Third Semester		
MUS-110	Music Appreciation	3
PHI-240	Introduction to Ethics	3

Fourth Semester		
ACC-120	Prin of Financial Accounting	4
MAT-171	Precalculus Algebra	4
BIO-110	Principles of Biology	4
BUS-115	Business Law	3

Fifth Semester		
ACC-121	Prin of Managerial Accounting	4
HIS-132	American History II	3
HUM-220	Human Values and Meaning	3
MAT-172	Precalculus Trigonometry	4

Business, Accounting, and Finance Pathway- UNC Asheville, Western Carolina University, and Mars Hill University

First Semester		**Credits**
ACA-122	College Transfer Success	1
COM-231	Public Speaking	3
ECO-251	Prin of Microeconomics	3
ENG-111	Writing and Inquiry	3
MAT-152	Statistical Methods I	4

Second Semester		
BIO-110	Principles of Biology	4
BUS-110	Introduction to Business	3
ECO-252	Prin of Macroeconomics	3
ENG-112	Writing/Research in the Disc	3
MUS-110	Music Appreciation	3

Third Semester		
ACC-120	Prin of Financial Accounting	4
BUS-115	Business Law I	3
FRE-111	Elementary French I (or SPA-111)	3
PHI-240	Introduction to Ethics	3
PSY-150	General Psychology	3

Fourth Semester		
ACC-121	Prin of Managerial Accounting	4
FRE-112	Elementary French II (or SPA 112)	3
HIS-112	World Civilization II	3
HUM-220	Human Values and Meaning	3
SOC-210	Introduction to Sociology	3

Communication Pathway

First Semester		Credits
ACA-122	College Transfer Success	1
COM-231	Public Speaking	3
ENG-111	Writing and Inquiry	3
MAT-152	Statistical Methods I	4
PSY-150	General Psychology	3

Second Semester		
ART-275	Introduction to Graphic Design	3
ENG-112	Writing/Research in the Disc	3
PHI-240	Introduction to Ethics	3
SOC-210	Introduction to Sociology	3

Third Semester (Summer)		
COM-120	Intro to Interpersonal Com	3
FRE-111	Elementary French I (or SPA 111)	3

Fourth Semester		
ART-266	Videography I	3
CIS-110	Introduction to Computers	3
COM-140	Intro Intercultural Com	3
FRE-112	Elementary French II (or SPA 112)	3

Fifth Semester		
BIO-110	Principles of Biology	4
COM-110	Introduction to Communication (or ART 267)	3
COM-150	Intro to Mass Comm	3
HIS-112	World Civilizations II	3
HUM-220	Human Values and Meaning	3

Construction Management Pathway - Western Carolina University

First Semester		Credits
ACA-122	College Transfer Success	1
COM-231	Public Speaking	3
ECO-251	Prin of Microeconomics	3
ENG-111	Writing and Inquiry	3
MAT-171	Precalculus Algebra	4

Second Semester		
ECO-252	Prin of Macroeconomics	3
MAT-172	Precalculus Trigonometry	4
MUS-110	Music Appreciation	3

Third Semester (Summer)		
BUS-137	Principles of Management	3
HIS-132	American History II	3

Fourth Semester		
BIO-111	General Biology I	4
PHY-151	College Physics I	4
PHI-240	Introduction to Ethics	3
SPA-111	Elementary Spanish I	3

Fifth Semester		
ACC-120	Prin of Financial Accounting	4
HUM-220	Human Values and Meaning	3
MAT-152	Statistical Methods I	4
SPA-112	Elementary Spanish II	3

Construction Management Pathway - Appalachian State University

First Semester		Credits
ACA-122	College Transfer Success	1
COM-231	Public Speaking	3
ECO-251	Prin of Microeconomics	3
ENG-111	Writing and Inquiry	3
MAT-171	Precalculus Algebra	4

Second Semester		
ACC-120	Prin of Financial Accounting	4
ECO-252	Prin of Macroeconomics	3
ENG-112	Writing/Research in the Disc	3
MUS-110	Music Appreciation	3

Third Semester (Summer)		
BUS-115	Business Law I	3
HIS-132	American History II	3

Fourth Semester		
BIO-111	General Biology I	4
PHI-240	Introduction to Ethics	3
PHY-151	College Physics I	4
SPA-111	Elementary Spanish I	3

Fifth Semester		
HUM-110	Technology and Society	3
HUM-220	Human Values and Meaning	3
PHY-152	College Physics II	4
SPA-112	Elementary Spanish II	3

Creative Arts Pathway

First Semester		**Credits**
ACA-122	College Transfer Success	1
ART-121	Two-Dimensional Design	3
ENG-111	Writing and Inquiry	3
MAT-152	Statistical Methods I (or MAT 143)	4
PSY-150	General Psychology	3

Second Semester		
ART-111	Art Appreciation	3
ART-114	Art History Survey I	3
ART-171	Digital Design I	3
ENG-112	Writing/Research in the Disc	3
MUS-110	Music Appreciation	3

Third Semester (Summer)		
BIO-110	Principles of Biology	4
COM-231	Public Speaking	3

Fourth Semester		
ART-115	Art History Survey II	3
ART-264	Digital Photography I	3
ART-266	Videography I	3
FRE-111	Elementary French I (or SPA 111)	3
HIS-111	World Civilizations I	3

Fifth Semester		
ART-276	Interactive Media Design	3
FRE-112	Elementary French II (or SPA 112)	3
HIS-112	World Civilizations II	3
HUM-220	Human Values and Meaning	3

Criminal Justice Pathway

First Semester		**Credits**
ACA-122	College Transfer Success	1
CJC-111	Intro to Criminal Justice	3
COM-231	Public Speaking	3
ENG-111	Writing and Inquiry	3
MAT-152	Statistical Methods I (or MAT 143)	4
PSY-150	General Psychology	3

Second Semester		
ART-111	Art Appreciation	3
BIO-110	Principles of Biology	4
CJC-121	Law Enforcement Operations	3
ENG-112	Writing/Research in the Disc	3
PED-110	Fit and Well for Life	2

Third Semester		
FRE -111	Elementary French I (or SPA 111)	3
HEA-110	Personal Health/Wellness	3
HIS-132	American History II	3
POL-120	American Government	3
PSY-281	Abnormal Psychology	3

Fourth Semester		
CJC-141	Corrections	3
HUM-220	Human Values and Meaning	3
PHI-240	Introduction to Ethics	3
ANT-220	Cultural Anthropology	3
SOC-210	Introduction to Sociology	3

English Pathway

First Semester		**Credits**
ACA-122	College Transfer Success	1
COM-231	Public Speaking	3
ENG-111	Writing and Inquiry	3
FRE-111	Elementary French I (or SPA 111)	3
MAT-143	Quantitative Literacy	3

Second Semester		**Credits**
ENG-112	Writing/Research in the Disc	3
FRE- 112	Elementary French II (or SPA 112)	3
HEA-110	Personal Health/Wellness	3
HIS-111	World Civilizations I	3
PSY-150	General Psychology	3

Third Semester (Summer)		
ENG-231	American Literature I	3
SOC-210	Introduction to Sociology	3

Fourth Semester		
ART-111	Art Appreciation	3
BIO-111	General Biology I	4
ENG-125	Creative Writing I	3
ENG-241	British Literature I	3

Fifth Semester

ENG-232	American Literature II	3
ENG-242	British Literature II	3
HIS-112	World Civilizations II	3
HUM-115	Critical Thinking	3
HUM-220	Human Values and Meaning	3

Foreign Language Pathway

First Semester		Credits
ACA-122	College Transfer Success	1
COM-231	Public Speaking	3
ENG-111	Writing and Inquiry	3
FRE-111	Elementary French I (or SPA 111)	3
MAT-143	Quantitative Literacy	3

Second Semester

BIO-110	Principles of Biology	4
ENG-112	Writing/Research in the Disc	3
FRE-112	Elementary French II (or SPA 112)	3
HIS-111	World Civilizations I	3
HUM-115	Critical Thinking	3

Third Semester

BIO-140	Environmental Biology	3
BIO-140A	Environmental Biology Lab	1
ENG-231	American Literature I	3
FRE-211	Intermediate French I (or SPA 211)	3
MUS-110	Music Appreciation	3
SOC-210	Introduction to Sociology	3

Fourth Semester

FRE-212	Intermediate French II (or SPA 212)	3
HEA-110	Personal Health/Wellness	3
HIS-112	World Civilizations II	3
HUM-220	Human Values and Meaning	3
SOC-225	Social Diversity	3

History Pathway

First Semester		Credits
ACA-122	College Transfer Success	1
ENG-111	Writing and Inquiry	3
HIS-111	World Civilizations I	3
MAT-152	Statistical Methods I	4
MUS-110	Music Appreciation	3

Second Semester

ART-111	Art Appreciation	3
BIO-110	Principles of Biology	4
COM-231	Public Speaking	3
ENG-112	Writing/Research in the Disc	3
HIS-112	World Civilizations II	3

Third Semester

BIO-140	Environmental Biology	3
BIO-140A	Environmental Biology Lab	1
ENG-232	American Literature II	3
FRE-111	Elementary French I (or SPA 111)	3
HIS-131	American History I	3
POL-120	American Government	3

Fourth Semester

ECO-251	Prin of Microeconomics	3
FRE-112	Elementary French II (or SPA 112)	3
HIS-132	American History II	3
HUM-220	Human Values and Meaning	3
PSY-150	General Psychology (or HEA-110)	3

Information Systems Pathway - Appalachian State University

First Semester		Credits
ACA -122	College Transfer Success	1
BUS-110	Introduction to Business	3
ECO-251	Prin of Microeconomics	3
ENG-111	Writing and Inquiry	3
MAT-152	Statistical Methods I	4

Second Semester

CIS-110	Introduction to Computers	3
COM-120	Intro to Interpersonal Com	3
ECO-252	Prin of Macroeconomics	3
ENG-112	Writing/Research in the Disc	3
MAT-171	Precalculus Algebra	4

Third Semester

ACC-120	Prin of Financial Accounting	4
ART-111	Art Appreciation	3
BIO-110	Principles of Biology	4
MAT-172	Precalculus Trigonometry	4

Fourth Semester

ACC-121	Prin of Managerial Accounting	4
BUS-115	Business Law I	3
HIS-131	American History I	3
HUM-220	Human Values and Meaning	3
PHI-240	Introduction to Ethics	3

Nutrition Pathway - Appalachian State University and Western Carolina University

First Semester

		Credits
ACA-122	College Transfer Success	1
COM-120	Intro to Interpersonal Com	3
ENG-111	Writing and Inquiry	3
MAT-152	Statistical Methods I	4
PSY-150	General Psychology	3

Second Semester

BIO-155	Nutrition	3
CHM-151	General Chemistry I	4
ENG-112	Writing/Research in the Disc	3
SOC-210	Introduction to Sociology	3

Third Semester (Summer)

PHI-240	Introduction to Ethics	3
MAT-171	Precalculus Algebra	4

Fourth Semester

BIO-168	Anatomy and Physiology I	4
CHM-152	General Chemistry II	4
HIS-132	American History II	3
HUM-115	Critical Thinking	3

Fifth Semester

BIO-169	Anatomy and Physiology II	4
BIO-275	Microbiology	4
HUM-220	Human Values and Meaning	3
MUS-110	Music Appreciation	3

Philosophy Pathway

First Semester

		Credits
ART-111	Art Appreciation	3
ACA -122	College Transfer Success	1
COM-231	Public Speaking	3
ENG-111	Writing and Inquiry	3
FRE -111	Elementary French I (or SPA 111)	3
MAT-143	Quantitative Literacy	3

Second Semester

BIO-110	Principles of Biology	4
ENG-112	Writing/Research in the Disc	3
FRE-112	Elementary French II (or SPA 112)	3
HIS-111	World Civilizations I	3
PHI-240	Introduction to Ethics	3

Third Semester

BIO-140	Environmental Biology	3
BIO-140A	Environmental Biology Lab	1
HIS-112	World Civilizations II	3
HUM-115	Critical Thinking	3
SOC-210	Introduction to Sociology	3

Fourth Semester

ANT-220	Cultural Anthropology	3
HUM-220	Human Values and Meaning	3
MUS-110	Music Appreciation	3
PHI-215	Philosophical Issues	3
PSY-150	General Psychology	3

Political Science Pathway

First Semester

		Credits
ACA-122	College Transfer Success	1
ENG-111	Writing and Inquiry	3
HIS-111	World Civilizations I	3
MAT-152	Statistical Methods I	4
MUS-110	Music Appreciation	3

Second Semester

ART-111	Art Appreciation	3
BIO-110	Principles of Biology	4
ENG-112	Writing/Research in the Disc	3
HIS-112	World Civilizations II	3
POL-120	American Government	3

Third Semester

BIO-140	Environmental Biology	3
BIO-140A	Environmental Biology Lab	1
COM-231	Public Speaking	3
ECO-251	Prin of Microeconomics	3
FRE-111	Elementary French I (or SPA 111)	3
HIS-131	American History I	3

Fourth Semester

ECO-252	Prin of Macroeconomics	3
FRE-112	Elementary French II (or SPA 112)	3
HIS-132	American History II	3
HUM-220	Human Values and Meaning	3
PHI-240	Intro to Ethics	3

Pre-Health Pathway

First Semester		Credits
ACA-122	College Transfer Success	1
COM-120	Intro to Interpersonal Com	3
ENG-111	Writing and Inquiry	3
MAT-152	Statistical Methods I	4
PSY-150	General Psychology	3

Second Semester

BIO-155	Nutrition	4
CHM-151	General Chemistry I	4
ENG-112	Writing/Research in the Disc	3
SOC-210	Introduction to Sociology	3

Third Semester (Summer)

PHI-240	Introduction to Ethics	3
PSY-241	Developmental Psych (WCU)	3
	Or	
CHM 152	General Chemistry II (ASU or Mars Hill)	4

Fourth Semester

BIO-168	Anatomy and Physiology I	4
BIO-275	Microbiology	4
BIO-110	Principles of Biology (WCU)	4
	Or	
CHM-132	Organic and Biochemistry (WCU)	4
	Or	
MAT-171	Precalculus (ASU or Mars Hill)	4
MUS-110	Music Appreciation	3

Fifth Semester

BIO-169	Anatomy and Physiology II	4
FRE-111	Elementary French (or SPA 111)	3
HIS-112	World Civilizations II	3
HUM-220	Human Values and Meaning	3

Psychology Pathway

First Semester		Credits
ACA-122	College Transfer Success	1
COM-120	Intro to Interpersonal Com	3
ENG-111	Writing and Inquiry	3
MAT-152	Statistical Methods I	4
PSY-150	General Psychology	3

Second Semester

BIO-110	Principles of Biology	4
ENG-112	Writing/Research in the Disc	3
FRE-111	Elementary French I (or SPA 111)	3
HIS-112	World Civilizations II	3
PSY-237	Social Psychology	3

Third Semester

FRE-112	Elementary French II (or SPA 112)	3
MUS-110	Music Appreciation	3
PHI-240	Introduction to Ethics	3
PSY-241	Developmental Psych	3
SOC-210	Introduction to Sociology	3

Fourth Semester

ANT-220	Cultural Anthropology	3
ART-111	Art Appreciation	3
FRE-211	Intermediate French I (or SPA 211)	3
HUM-220	Human Values and Meaning	3
PSY-281	Abnormal Psychology	3

Social Work Pathway

First Semester		Credits
ACA-122	College Transfer Success	1
COM-120	Intro to Interpersonal Com	3
ENG-111	Writing and Inquiry	3
MAT-152	Statistical Methods I	4
PSY-150	General Psychology	3

Second Semester

ART-114	Art History Survey I	3
BIO-110	Principles of Biology	4
ENG-112	Writing/Research in the Disc	3
FRE-111	Elementary French I (or SPA 111)	3
SOC-210	Introduction to Sociology	3

Third Semester

ANT-220	Cultural Anthropology	3
BIO-163	Basic Anat & Physiology	5
FRE-112	Elementary French II (or SPA 112)	3
HSE-110	Intro to Human Services	3
POL-120	American Government	3
PSY-241	Developmental Psych	3

Fourth Semester

HIS-132	American History II	3
HUM-220	Human Values and Meaning	3
PHI-215	Philosophical Issues	3
PSY-281	Abnormal Psychology	3
SOC-213	Sociology of the Family	3

Sociology Pathway

First Semester		**Credits**
ACA-122	College Transfer Success	1
ENG-111	Writing and Inquiry	3
MAT-152	Statistical Methods I	4
PSY-150	General Psychology	3
SOC-210	Introduction to Sociology	3

Second Semester

BIO-110	Principles of Biology	4
ENG-112	Writing/Research in the Disc	3
FRE-111	Elementary French I (or SPA 111)	3
HIS-112	World Civilizations II	3
SOC-220	Social Problems	3

Third Semester

ART-111	Art Appreciation	3
COM-120	Intro to Interpersonal Com	3
FRE-112	Elementary French II (or SPA 112)	3
MUS-110	Music Appreciation	3
SOC-213	Sociology of the Family	3

Fourth Semester

ANT-220	Cultural Anthropology	3
FRE-211	Intermediate French I (or SPA 211)	3
HUM-220	Human Values and Meaning	3
PSY-237	Social Psychology	3
SOC-225	Social Diversity	3

Associate in Fine Arts in Visual Arts (AFA) Degree (A10600)

The Associate in Fine Arts in Visual Arts degree shall be granted for a planned program of study consisting of a minimum of 60-61 semester hours of college transfer courses. Within the degree program, the institution shall include opportunities for the achievement of competence in reading, writing, oral communication, fundamental mathematical skills, and basic computer use.

Students must meet the receiving university's foreign language and/or health and physical education requirements, if applicable, prior to or after transfer to the senior institution.

Total Semester Hours Credit (SHC) in Program: 60-61. One semester hour of credit may be included in a 61 SHC Associate in Fine Arts in Visual Arts program of study. The transfer of this hour is not guaranteed.

UNIVERSAL GENERAL EDUCATION TRANSFER (UGETC) COMPONENT

All Universal General Education Transfer Component courses will transfer for equivalency credit.

General Education (25-26 Hours)

English Composition - 6 hours

ENG-111	Writing and Inquiry
ENG-112	Writing/Research in the Disc

Communication and Humanities/Fine Arts (Courses must be from two different disciplines) - 6 hours

ART-111	Art Appreciation
COM-120	Intro to Interpersonal Com
COM-231	Public Speaking
ENG-231	American Literature I
ENG-232	American Literature II
ENG-241	British Literature I
ENG-242	British Literature II
MUS-110	Music Appreciation
MUS-112	Introduction to Jazz
PHI-215	Philosophical Issues
PHI-240	Introduction to Ethics

Social / Behavioral Sciences (Courses must be from at least two disciplines) - 6 hours

ECO-251	Prin of Microeconomics
ECO-252	Prin of Macroeconomics
HIS-111	World Civilizations I

HIS-112	World Civilizations II
HIS-131	American History I
HIS-132	American History II
POL-120	American Government
PSY-150	General Psychology
SOC-210	Introduction to Sociology

Mathematics - 3-4 hours

MAT-143	Quantitative Literacy
MAT-152	Statistical Methods I
MAT-171	Precalculus Algebra
MAT-271	Calculus I

Natural Sciences - 4 hours

BIO-110	Principles of Biology
BIO-111	General Biology I
CHM-151	General Chemistry I
PHY-110	Conceptual Physics
PHY 110A	Conceptual Physics Lab

ART (15 hours)

Additional Universal General Education Transfer Courses:

ART

ART-114	Art History Survey I
ART-115	Art History Survey II

Other Required: ART

ART-121	Two-Dimensional Design
ART-122	Three-Dimensional Design
ART-131	Drawing I

Other Required Hours (2 hours)

ACA-122	College Transfer Success
ART-214	Portfolio and Resume

An additional 17-19 SHC of courses should be selected from the courses classified as pre-major, elective, general education, or UGETC within the Comprehensive Articulation Agreement. Students should select these courses based on their intended major and Transfer University.

Pre-Major: ART (15 hours)

Select five courses from the following:

ART-171	Digital Design I
ART-231	Printmaking I
ART-240	Painting I
ART-244	Watercolor
ART-261	Photography I
ART-264	Digital Photography I
ART-266	Videography I
ART-267	Videography II
ART-275	Introduction to Graphic Design
ART-276	Interactive Media Design
ART-283	Ceramics I
ART-284	Ceramics II

Additional hours from the list below (3-4 hours)

ACC-120
ACC-121
ANT-220
ART-111
ART-114
ART-115
ART-121
ART-122
ART-131
ART-171
ART-214
ART-231
ART-240
ART-244
ART-261
ART-264
ART-266
ART-267
ART-275
ART-276
ART-283
ART-284
BIO-110
BIO-111
BIO-112
BIO-120
BIO-130
BIO-140
BIO-140A
BIO-155
BIO-163
BIO-168
BIO-169
BIO-175
BIO-275
BUS-110
BUS-115
BUS-137
CHM-130
CHM130A
CHM-132
CHM-151
CHM-152
CHM-251
CHM-252
CHM-271
CIS-110
CIS-115
CJC-111
CJC-113
CJC-121
CJC-141
COM-110
COM-120
COM-140
COM-150
COM-231
CSC-134
CSC-151
CTS-115
DFT-170
ECO-251
ECO-252
EDU-144
EDU-145
EDU-216
EDU-221
EGR-150
EGR-212
EGR-215
EGR-216
EGR-220
EGR-228
ENG-114
ENG-125
ENG-231
ENG-232
ENG-241
ENG-242
FRE-111
FRE-112
FRE-211
FRE-212
GIS-111
HEA-110
HEA-112
HIS-111
HIS-112
HIS-131
HIS-132
HSE-110
HUM-110
HUM-115
HUM-220
MAT-143
MAT-152
MAT-171
MAT-172
MAT-175
MAT-252
MAT-263
MAT-271
MAT-272
MAT-273
MAT-280
MAT-285
MUS-110
MUS-112
PED-110
PED-117
PED-118
PED-122
PED-123
PED-211
PED-217
PHI-215
PHI-240
PHY-110
PHY-110A
PHY-151
PHY-152
PHY-251
PHY-252
POL-120
PSY-150
PSY-237
PSY-241
PSY-281
SOC-210
SOC-213
SOC-220
SOC-225
SPA-111
SPA-112
SPA-211
SPA-212

Associate in Fine Arts in Visual Arts - Film Pathway

First Semester		**Credits**
ACA-122	College Transfer Success	1
ART-121	Two-Dimensional Design	3
ART-131	Drawing I	3
COM-120	Intro to Interpersonal Com	3
ENG-111	Writing and Inquiry	3

Second Semester		
ART-122	Three-Dimensional Design	3
ART-171	Digital Design I	3
ENG-112	Writing/Research in the Disc	3
MAT-143	Quantitative Literacy	3

Third Semester		
MUS-110	Music Appreciation	3
PSY-150	General Psychology	3

Fourth Semester		
ART-114	Art History Survey I	3
ART-214	Portfolio and Resume	1
ART-266	Videography I	3
ART-276	Interactive Media Design	3
BIO-110	Principles of Biology	4

Fifth Semester		
ART-115	Art History Survey II	3
ART-264	Digital Photography I	3
ART-267	Videography II	3
ENG-125	Creative Writing I	3
HIS-112	World Civilizations II	3

Associate in Fine Arts in Visual Arts - Graphic Design Pathway

First Semester		**Credits**
ACA-122	College Transfer Success	1
ART-121	Two-Dimensional Design	3
ART-131	Drawing I	3
ENG-111	Writing and Inquiry	3
MUS-110	Music Appreciation	3

Second Semester		
ART-122	Three-Dimensional Design	3
ART-171	Digital Design I	3
ENG-112	Writing/Research in the Disc	3
MAT-143	Quantitative Literacy	3

Third Semester (Summer)		
COM-120	Intro to Interpersonal Com	3
PSY-150	General Psychology	3

Fourth Semester		
ART-114	Art History Survey I	3
ART-214	Portfolio and Resume	1
ART-275	Introduction to Graphic Design	3
BIO-110	Principles of Biology	4
	ART Elective	3

Fifth Semester		
ART-115	Art History Survey II	3
ART-276	Interactive Media Design	3
HIS-111	World Civilizations I	3
	ART Elective	3
	UGETC/GenEd Elective	3

Associate in Fine Arts in Visual Arts - Interior Design Pathway

First Semester		**Credits**
ACA-122	College Transfer Success	1
ART-121	Two-Dimensional Design	3
ART-131	Drawing I	3
ENG-111	Writing and Inquiry	3
MUS-110	Music Appreciation	3

Second Semester		
ART-122	Three-Dimensional Design	3
ART-171	Digital Design I	3
ENG-112	Writing/Research in the Disc	3
MAT-143	Quantitative Literacy	3

Third Semester (Summer)		
COM-120	Intro to Interpersonal Com	3
PSY-150	General Psychology	3

Fourth Semester

ART-114	Art History Survey I	3
ART-214	Portfolio and Resume	1
ART-275	Introduction to Graphic Design	3
ART-276	Interactive Media Design	3
BIO-110	Principles of Biology	4

Fifth Semester

ART-115	Art History Survey II	3
ART-264	Digital Photography I	3
BUS-110	Introduction to Business	3
HIS-112	World Civilizations II	3
	ART elective	3

Associate in Fine Arts in Visual Arts - Studio Art Pathway

First Semester		Credits
ACA-122	College Transfer Success	1
ART-121	Two-Dimensional Design	3
ART-131	Drawing I	3
ART-171	Digital Design I	3
ENG-111	Writing and Inquiry	3

Second Semester

ART-122	Three-Dimensional Design	3
ENG-112	Writing/Research in the Disc	3
MAT-143	Quantitative Literacy	3
MUS-110	Music Appreciation	3
	ART Elective	3

Third Semester (Summer)

COM-120	Intro to Interpersonal Com	3
PSY-150	General Psychology	3

Fourth Semester

ART-114	Art History Survey I	3
ART-214	Portfolio and Resume	1
BIO-110	Principles of Biology	4
	ART Elective	3
	ART Elective	3

Fifth Semester

ART-115	Art History Survey II	3
HIS-112	World Civilizations II	3
	ART Elective	3
	ART Elective	3
	UGETC/GenEd Elective	3

Associate in Engineering (AE) Degree (A10500)

The Associate in Engineering (AE) degree shall be granted for a planned program of study consisting of a minimum of 60 semester hours of credit (SHC) of courses. Within the degree program, the institution shall include opportunities for the achievement of competence in reading, writing, oral communication, fundamental mathematical skills, and basic computer use.

The degree plan includes required general education and prerequisite courses that are acceptable to all state funded Bachelor of Engineering programs. Students who follow the degree progression plan will meet the entrance requirements at all of the North Carolina public Bachelor of Science Engineering programs. Associate in Engineering graduates may then apply to any of these programs without taking additional and sometimes duplicative courses. Admission to Engineering programs is highly competitive and admission is not guaranteed.
To be eligible for the transfer of credits under the AE to the Bachelor of Science in Engineering Articulation Agreement, community college graduates must obtain a grade of "C" or better in each course and an overall GPA of at least 2.5 on a 4.0 scale.

Total Semester Hours Credit (SHC) in Program: 60-61.
One semester hour of credit may be included in a 61 SHC Associate in Engineering program of study. The transfer of this hour is not guaranteed.

Students must meet the receiving university's foreign language and/or health and physical education requirements, if applicable, prior to or after transfer to the senior institution.

General Education (45-46 Hours)

English Composition - 6 hours

ENG-111	Writing and Inquiry
ENG-112	Writing/Research in the Disc

Communication and Humanities/Fine Arts (Courses must be from two different categories) - 6 hours

Humanities

ENG-231	American Literature I
ENG-232	American Literature II
ENG-241	British Literature I
ENG-242	British Literature II
PHI-215	Philosophical Issues
PHI-240	Introduction to Ethics

Fine Arts and Communication

ART-111	Art Appreciation
ART-114	Art History Survey I
ART-115	Art History Survey II
COM- 231	Public Speaking
MUS-110	Music Appreciation
MUS-112	Introduction to Jazz

Social / Behavioral Sciences - 6 hours

Required:

ECO-251	Prin of Microeconomics

Choose One:

HIS-111	World Civilizations I
HIS-112	World Civilizations II
HIS-131	American History I
HIS-132	American History II
POL-120	American Government
PSY-150	General Psychology
SOC-210	Introduction to Sociology

Mathematics - 12 hours
Students who are not calculus-ready will need to take additional math courses.

MAT-271	Calculus I
MAT-272	Calculus II
MAT-273	Calculus III

Natural Sciences - 12 hours

CHM-151	General Chemistry I
PHY-251	General Physics I
PHY-252	General Physics II

Other General Education Hours (3-4 hours)

BIO-111
CHM-152
COM-110
COM-231
ECO-252
HUM-110
PHI-240

Other Required Hours (14-15 Hours)

Academic Transition

ACA-122	College Transfer Success

Pre-major Elective

EGR-150	Intro to Engineering

Other General Education and Pre-major Elective Hours

BIO-111
CHM-152
CHM-251
CHM-252
COM-110
COM-231
CSC-134
CSC-151
DFT-170
ECO-252
EGR-210
EGR-212
EGR-215
EGR-216
EGR-220
EGR-225
EGR-228
HSE-110
HUM-110
MAT-175
MAT-280
MAT-285
PED-110

The Associate in Engineering program is designed to be taken in the Fall and Spring semesters for transfer to Western Carolina University's Bachelor of Science in Engineering (BSE) with a concentration in Manufacturing or Mechanical. For Summer semesters and/or transfer to other universities, see your advisor.

Associate in Engineering - General Pathway

First Semester (Fall)		**Credits**
ACA-122	College Transfer Success	1
CHM-151	General Chemistry I	4
EGR-150	Introduction to Engineering	2
ENG-111	Writing and Inquiry	3
MAT-271	Calculus I	4

Second Semester (Spring)

DFT-170	Engineering Graphics	3
ENG-112	Writing/Research in the Disc	3
MAT-272	Calculus II	4
PHY-251	General Physics I	4

Third Semester (Fall)

COM-231	Public Speaking	3
HUM-110	Technology and Society	3
MAT-273	Calculus III	4
PHI-240	Introduction to Ethics	3
PHY-252	General Physics II	4

Fourth Semester (Spring)

CSC-134	C++ Programming	3
ECO-251	Prin of Microeconomics	3
EGR-220	Engineering Statics	3
HIS-112	World Civilizations II	3
MAT-280	Linear Algebra	3

Associate in Engineering - Chemical Engineering Pathway

First Semester (Fall)		Credits
ACA-122	College Transfer Success	1
CHM-151	General Chemistry I	4
EGR-150	Introduction to Engineering	2
ENG-111	Writing and Inquiry	3
MAT-271	Calculus I	

Second Semester (Spring)

CHM-152	General Chemistry II	4
ENG-112	Writing/Research in the Disc	3
MAT-272	Calculus II	4
PHY-251	General Physics I	4

Third Semester (Fall)

CHM-251	Organic Chemistry I	4
COM-231	Public Speaking	3
MAT-273	Calculus III	4
PHY-252	General Physics II	4

Fourth Semester (Spring)

CHM-252	Organic Chemistry II	4
DFT-170	Engineering Graphics	3
ECO-251	Prin of Microeconomics	3
HIS-112	World Civilizations II	3
PHI-240	Introduction to Ethics	3

Associate in Engineering - Civil Engineering Pathway

First Semester (Fall)		Credits
ACA -122	College Transfer Success	1
CHM-151	General Chemistry I	4
EGR-150	Introduction to Engineering	2
ENG-111	Writing and Inquiry	3
MAT-271	Calculus I	4

Second Semester (Spring)

DFT-170	Engineering Graphics	3
ENG-112	Writing/Research in the Disc	3
MAT-272	Calculus II	4
PHY-251	General Physics I	4

Third Semester (Fall)

COM-231	Public Speaking	3
HUM-110	Technology and Society (or BIO 111)	3
MAT-273	Calculus III	4
PHI-240	Introduction to Ethics	3
PHY-252	General Physics II	4

Fourth Semester (Spring)

CSC-134	C++ Programming	3
ECO-251	Prin of Microeconomics	3
EGR-220	Engineering Statics	3
HIS-112	World Civilizations II	3
MAT-285	Differential Equations	3

Associate in Science (AS) Degree (A10400)

The Associate in Science degree shall be granted for a planned program of study consisting of a minimum of 60 semester hours of credit (SHC) of college transfer courses. Within the degree program, the institution shall include opportunities for the achievement of competence in reading, writing, oral communication, fundamental mathematical skills, and the basic computer use.

The Comprehensive Articulation Agreement (CAA) and the Independent Comprehensive Articulation Agreement (ICAA) enables North Carolina community college graduates of two-year associate in science programs who are admitted to constituent institutions of The University of North Carolina and to Signatory Institutions of North Carolina Independent Colleges and Universities to transfer with junior status.

Community college graduates must obtain a grade of "C" or better in each course and an overall GPA of at least 2.0 on a 4.0 scale in order to transfer with a junior status. Courses may also transfer through bilateral agreements between institutions.

General Education (45 Hours)

English Composition - 6 hours

ENG-111	Writing and Inquiry
ENG-112	Writing/Research in the Disc

Humanities/Fine Arts (Courses must be from two different disciplines) - 6 hours

COM-120	Intro to Interpersonal Com OR
COM-231	Public Speaking

ART-111	Art Appreciation
ART-114	Art History Survey I
ART-115	Art History Survey II
ENG-231	American Literature I
ENG-232	American Literature II
ENG-241	British Literature I
ENG-242	British Literature II
MUS-110	Music Appreciation
MUS-112	Introduction to Jazz
PHI-215	Philosophical Issues
PHI-240	Introduction to Ethics

Social / Behavioral Sciences (Courses must be from at least two disciplines) - 6 hours

Pick one of the following:

HIS-111	World Civilizations I
HIS-112	World Civilizations II
HIS-131	American History I
HIS-132	American History II

Pick one of the following:

ECO-251	Prin of Microeconomics
ECO-252	Prin of Macroeconomics
POL-120	American Government
PSY-150	General Psychology
SOC-210	Introduction to Sociology

Mathematics - 8 hours

MAT-171	Precalculus Algebra
MAT-172	Precalculus Trigonometry
MAT 175	Precalculus
MAT-263	Brief Calculus
MAT-271	Calculus I
MAT-272	Calculus II

Natural Sciences - 8 hours

BIO-110	Principles of Biology
BIO-111	General Biology I and BIO 112 General Biology II
CHM-151	General Chemistry I and CHM 152 General Chemistry II
PHY-110	Conceptual Physics and PHY 110A Conceptual Physics Lab
PHY-151	College Physics I and PHY 152 College Physics II
PHY-251	General Physics I and PHY 252 General Physics II

Additional General Education Requirements- 11 hours

HUM 220 Human Values and Meaning

Additional General Education courses as designated in pathway. Courses listed in bold meet this requirement.

Other Required Hours -15 hours

ACA-122 College Transfer Success

Additional hours from the list to the right (14 hours)
AA and AS degrees require completion of a minimum of 60 semester hours of credit, but pathways may include extra hours to meet university baccalaureate degree plans. Completion of hours beyond 60 may not be required to meet AA or AS graduation requirements but is recommended based on programs offered by intended transfer institutions.
The following pathways are for full-time students. Please see the Program Advising Center or an advisor for part-time pathways.

ACC-120
ACC-121
ANT-220
ART-111
ART-114
ART-115
ART-121
ART-122
ART-131
ART-171
ART-214
ART-231
ART-240
ART-244
ART-261
ART-264
ART-266
ART-267
ART-275
ART-276
ART-283
ART-284
BIO-110
BIO-111
BIO-112
BIO-120
BIO-130
BIO-140
BIO-140A
BIO-155
BIO-163
BIO-168
BIO-169
BIO-175
BIO-275
BUS-110
BUS-115
BUS-137
CHM-130
CHM130A
CHM-132
CHM-151
CHM-152
CHM-251
CHM-252
CHM-271
CIS-110
CIS-115
CJC-111
CJC-113
CJC-121
CJC-141
COM-110
COM-120
COM-140
COM-150
COM-231
CSC-134
CSC-151
CTS-115
DFT-170
ECO-251
ECO-252
EDU-144
EDU-145
EDU-216
EDU-221
EGR-150
EGR-212
EGR-215
EGR-216
EGR-220
EGR-228
ENG-114
ENG-125
ENG-231
ENG-232
ENG-241
ENG-242
FRE-111
FRE-112
FRE-211
FRE-212
GIS-111
HEA-110
HEA-112
HIS-111
HIS-112
HIS-131
HIS-132
HSE-110
HUM-110
HUM-115
HUM-220
MAT-143
MAT-152
MAT-171
MAT-172
MAT-175
MAT-252
MAT-263
MAT-271
MAT-272
MAT-273
MAT-280
MAT-285
MUS-110
MUS-112
PED-110
PED-117
PED-118
PED-122
PED-123
PED-211
PED-217
PHI-215
PHI-240
PHY-110
PHY-110A
PHY-151
PHY-152
PHY-251
PHY-252
POL-120
PSY-150
PSY-237
PSY-241
PSY-281
SOC-210
SOC-213
SOC-220
SOC-225
SPA-111
SPA-112
SPA-211
SPA-212

General AS Pathway

First Semester		**Credits**
ACA-122	College Transfer Success	1
BIO-111	General Biology I (or CHM 151 or PHY 151)	4
COM-231	Public Speaking	3
ENG-111	Writing and Inquiry	3
MAT-171	Precalculus Algebra (or MAT 172 or MAT 271)	4

Second Semester		
BIO-112	General Biology II (or CHM 152 or PHY 152)	4
ENG-112	Writing/Research in the Disc	3
HIS-112	World Civilizations II	3
MAT-172	Precalculus Trigonometry (or MAT 271 or MAT 272)	4
PHI-240	Introduction to Ethics	3

Third Semester		
ECO-251	Prin of Microeconomics	3
SPA-111	Elementary Spanish I (or FRE 111)	3
	Guided Elective: math or science	4
	Guided Elective: math or science	4

Fourth Semester		
HUM-220	Human Values and Meaning	3
MAT-152	Statistical Methods I	4
SPA-112	Elementary Spanish II (or FRE 112)	3
	Guided Elective: math or science	4

Architecture Pathway

First Semester		**Credits**
ACA-122	College Transfer Success	1
ART-121	Two-Dimensional Design	3
COM-120	Intro to Interpersonal Com	3
ENG-111	Writing and Inquiry	3
MAT-171	Precalculus Algebra	4

Second Semester		
ART-122	Three-Dimensional Design	3
ENG-112	Writing/Research in the Disc	3
HIS-112	World Civilization II	3
MAT-172	Precalculus Trigonometry	4

Summer Semester		
ART-114	Art History Survey I (or FRE 111 or SPA 111)	3
PHI-240	Introduction to Ethics	3

Third Semester		
ART-115	Art History Survey II (or FRE 112 or SPA 112)	3
ART-131	Drawing I	3
HUM-110	Technology and Society	3
PHY-151	College Physics I	4

Fourth Semester		
ART-171	Digital Design I	3
ART-214	Portfolio and Resume	1
ECO-251	Prin of Microeconomics	3
HUM-220	Human Values and Meaning	3
PHY-152	College Physics II	4

Biology Pathway - Appalachian State University, Mars Hill University, and Western Carolina University

First Semester		**Credits**
ACA-122	College Transfer Success	1
BIO-111	General Biology I	4
COM-231	Public Speaking	3
ENG-111	Writing and Inquiry	3
MAT-171	Precalculus Algebra (or MAT 172 or MAT 271)	4

Second Semester		
BIO-112	General Biology II	4
ENG-112	Writing/Research in the Disc	3
HIS-111	World Civilizations I	3
MAT-172	Precalculus Trigonometry (MAT 271 or MAT 272)	4

Third Semester (Summer)		
CHM-151	General Chemistry I	4

Fourth Semester		
BIO-275	Microbiology	4
CHM-152	General Chemistry II	4
MAT-271	Calculus I	4
PHY-151	College Physics I	3

Fifth Semester		
ART-111	Art Appreciation	3
HUM-220	Human Values and Meaning	3
PHY-152	College Physics II	3
PSY-150	General Psychology	3

Biology Pathway - UNC Asheville

First Semester		**Credits**
ACA-122	College Transfer Success	1
BIO-111	General Biology I	4
COM-231	Public Speaking	3
ENG-111	Writing and Inquiry	3
MAT-171	Precalculus Algebra (or MAT 172 or MAT 271)	4

Second Semester		
BIO-112	General Biology II	4
ENG-112	Writing/Research in the Disc	3
HIS-112	World Civilizations II	3
MAT-172	Precalculus Trigonometry (or MAT 271)	4

Third Semester (Summer)		
CHM-151	General Chemistry I	4

Fourth Semester		
BIO-120	Introductory Botany	4
CHM-152	General Chemistry II	4
PSY-150	General Psychology	3
SPA-111	Elementary Spanish I (or FRE 111)	3

Fifth Semester		
ART-111	Art Appreciation	3
BIO-130	Introductory Zoology	4
HUM-220	Human Values and Meaning	3
SPA-112	Elementary Spanish II (or FRE 112)	3

Chemistry Pathway

First Semester		**Credits**
ACA-122	College Transfer Success	1
CHM-151	General Chemistry I	4
COM-231	Public Speaking	3
ENG-111	Writing and Inquiry	3
MAT-172	Precalculus Trigonometry (or MAT 271)	4

Second Semester		
CHM-152	General Chemistry II	4
ENG-112	Writing/Research in the Disciplines	3
MAT-271	Calculus I (or MAT 272)	4
PSY-150	General Psychology	3

Third Semester (Summer)		
ART-111	Art Appreciation	3
HIS-112	World Civilizations II	3

Fourth Semester		
CHM-251	Organic Chemistry I	4
MAT-272	Calculus II	4
PHY-251	General Physics I	4

Fifth Semester		
CHM-252	Organic Chemistry II	4
HEA-110	Personal Health/Wellness	3
HUM-220	Human Values and Meaning	3
PHY-252	General Physics II	4

Computer Science: Computer Systems Concentration Pathway - UNC Asheville

First Semester		**Credits**
ACA-122	College Transfer Success	1
COM-120	Intro to Interpersonal Com	3
ECO-251	Prin of Microeconomics	3
ENG-111	Writing and Inquiry	3
MAT-171	Precalculus Algebra	4

Second Semester		
CIS-115	Intro to Prog & Logic	3
ENG-112	Writing/Research in the Disc	3
HIS-111	World Civilizations I	3
MAT-172	Precalculus Trigonometry	4

Third Semester (Summer)		
MAT-271	Calculus I	4

Fourth Semester		
ART-111	Art Appreciation	3
MAT-272	Calculus II	4
PHY-151	College Physics I	4
SPA-111	Elementary Spanish I (or FRE 111)	3

Fifth Semester		
CSC-134	C++ Programming	3
HUM-220	Human Values and Meaning	3
MAT-152	Statistical Methods I	4
PHY-152	College Physics II	4
SPA-112	Elementary Spanish II (or FRE 112)	3

Computer Science - Appalachian State University Western Carolina University and Mars Hill University

First Semester		Credits
ACA-122	College Transfer Success	1
COM-231	Public Speaking	3
ECO-251	Prin of Microeconomics	3
ENG-111	Writing and Inquiry	3
MAT-171	Precalculus Algebra	4

Second Semester

CIS-115	Intro to Prog & Logic	3
ENG-112	Writing/Research in the Disc	3
HIS-111	World Civilizations I	3
MAT-172	Precalculus Trigonometry	4

Third Semester (Summer)

MAT-271	Calculus I	4

Fourth Semester

CSC-151	JAVA Programming	3
HEA-110	Personal Health/Wellness	3
MAT-272	Calculus II	4
PHY-151	College Physics I	4

Fifth Semester

ART-111	Art Appreciation	3
CSC-134	C++ Programming	3
HUM-220	Human Values and Meaning	3
MAT-280	Linear Algebra	3
PHY-152	College Physics II	4

Environmental Science Pathway - Appalachian State University

First Semester		Credits
ACA-122	College Transfer Success	1
CHM-151	General Chemistry I	4
COM-231	Public Speaking	3
ENG-111	Writing and Inquiry	3
MAT-171	Precalculus Algebra	4

Second Semester

CHM-152	General Chemistry II	4
ECO-251	Prin of Microeconomics	3
ENG-112	Writing/Research in the Disc	3
MAT-172	Precalculus Trigonometry	4

Third Semester (Summer)

BIO-111	General Biology I	4

Fourth Semester

ART-111	Art Appreciation	3
BIO-112	General Biology II	4
BIO-140	Environmental Biology	3
BIO-140A	Environmental Biology Lab	1
MAT-271	Calculus I	4

Fifth Semester

HIS-112	World Civilizations II	3
HUM-220	Human Values and Meaning	3
MAT-152	Statistical Methods I	4
PHY-251	General Physics I	4

Environmental Science Pathway - UNC Asheville

First Semester		Credits
ACA-122	College Transfer Success	1
CHM-151	General Chemistry I	4
COM-231	Public Speaking	3
ENG-111	Writing and Inquiry	3
MAT-171	Precalculus Algebra	4

Second Semester

CHM-152	General Chemistry II	4
ENG-112	Writing/Research in the Disc	3
FRE-111	Elementary French I (or SPA 111)	3
MAT-172	Precalculus Trigonometry	4

Third Semester (Summer)

HIS-111	World Civilizations I	3

Fourth Semester

ART-111	Art Appreciation	3
BIO-111	General Biology I	4
ECO-251	Prin of Microeconomics	3
FRE-112	Elementary French II (or SPA 112)	3

Fifth Semester

BIO-112	General Biology II	4
BIO-130	Introductory Zoology	4
BIO-140	Environmental Biology	3
BIO-140A	Environmental Biology Lab	1
HUM-220	Human Values and Meaning	3

Math Pathway

First Semester		Credits
ACA-122	College Transfer Success	1
COM-231	Public Speaking	3
ECO-251	Prin of Microeconomics	3
ENG-111	Writing and Inquiry	3
MAT-171	Precalculus Algebra (or MAT-172 or MAT-271)	4

Second Semester		
ENG-112	Writing/Research in the Disc	3
HEA-110	Personal Health/Wellness	3
HIS-112	World Civilizations II	3
MAT-172	Precalculus Trigonometry (or MAT-271 or MAT-272)	4
PHI-240	Introduction to Ethics	3

Third Semester (Summer)		
MAT-271	Calculus I (or MAT 272 or MAT-273)	4

Fourth Semester		
CHM-151	General Chemistry I (or PHY-251)	4
FRE-111	Elementary French I (or SPA-111)	3
MAT-272	Calculus II (or MAT-273)	4
MAT-280	Linear Algebra	3

Fifth Semester		
CHM-152	General Chemistry II (or PHY-252)	4
FRE-112	Elementary French II (or SPA-112)	3
HUM-220	Human Values and Meaning	3
MAT-273	Calculus III (or ECO-252)	4

Physics Pathway

First Semester		Credits
ACA-122	College Transfer Success	1
CHM-151	General Chemistry I	4
COM-231	Public Speaking	3
ENG-111	Writing and Inquiry	3
MAT-271	Calculus I (or MAT-171)	4

Second Semester		
ART-111	Art Appreciation	3
ENG-112	Writing/Research in the Disc	3
HIS-112	World Civilizations II	3
MAT-272	Calculus II (or MAT-172)	4

Third Semester		
MAT-273	Calculus III (or MAT-271)	4

Fourth Semester		
ECO-251	Prin of Microeconomics	3
FRE-111	Elementary French I (or SPA 111)	3
HIS-111	World Civilizations I (or MAT-272)	3
PHY-251	General Physics I	4

Fifth Semester		
FRE-112	Elementary French II (or SPA 112)	3
HUM-220	Human Values and Meaning	3
MAT-285	Differential Equations (or MAT-273)	3
PED-110	Fit and Well for Life	2
PHY-252	General Physics II	4

Pre-Dental Pathway

First Semester		Credits
ACA-122	College Transfer Success	1
CHM-151	General Chemistry I	4
COM-231	Public Speaking	3
ENG-111	Writing and Inquiry	3
MAT-171	Precalculus Algebra	4

Second Semester		
CHM-152	General Chemistry II	4
ENG-112	Writing/Research in the Disc	3
MAT-172	Precalculus Trigonometry	4
PSY-150	General Psychology	3

Third Semester (Summer)		
BIO-111	General Biology I	4

Fourth Semester		
BIO-112	General Biology II	4
CHM-251	Organic Chemistry I	4
PHI-240	Introduction to Ethics	3
PHY-151	College Physics I	4

Fifth Semester

CHM-252	Organic Chemistry II	4
HIS-112	World Civilizations II	3
HUM-220	Human Values and Meaning	3
PHY-152	College Physics II	4

Pre-Engineering Pathway

First Semester

		Credits
ACA -122	College Transfer Success	1
CHM-151	General Chemistry I	4
EGR-150	Introduction to Engineering	2
ENG-111	Writing and Inquiry	3
MAT-171	Precalculus Algebra	4
	(or MAT-271)	

Second Semester

COM-231	Public Speaking	3
DFT-170	Engineering Graphics	3
ENG-112	Writing/Research in the Disc	3
MAT-172	Precalculus Trigonometry	4
	(or MAT-272)	
PHY -151	College Physics I	4
	(or PHY-251)	

Third Semester

CSC-134	C++ Programming	3
MAT-271	Calculus I	4
	(or MAT-273)	
PHI-240	Introduction to Ethics	3
PHY-152	College Physics II	4
	(or PHY-252)	

Fourth Semester

ECO-251	Prin of Microeconomics	3
HIS-112	World Civilizations II	3
HUM-110	Technology and Society	3
HUM-220	Human Values and Meaning	3
MAT-272	Calculus II	4
	(or MAT 285)	

Pre-Med Pathway

First Semester

		Credits
ACA-122	College Transfer Success	1
CHM-151	General Chemistry I	4
ENG-111	Writing and Inquiry	3
MAT-171	Precalculus Algebra	4
PSY-150	General Psychology	3

Second Semester

CHM-152	General Chemistry II	4
ENG-112	Writing/Research in the Disc	3
MAT-172	PreCalculus Trigonometry	4
PHI-240	Introduction to Ethics	3

Third Semester (Summer)

BIO-111	General Biology I	4

Fourth Semester

BIO-112	General Biology II	4
CHM-251	Organic Chemistry I	4
ENG-232	American Literature II	3
PHY-151	College Physics I	4

Fifth Semester

CHM-252	Organic Chemistry II	4
HIS-131	American History I	3
HUM-220	Human Values and Meaning	3
PHY-152	College Physics II	4

Pre-Pharmacy Pathway

First Semester

		Credits
ACA-122	College Transfer Success	1
CHM-151	General Chemistry I	4
COM-231	Public Speaking	3
ENG-111	Writing and Inquiry	3
MAT-172	Precalculus Trigonometry	4

Second Semester

CHM-152	General Chemistry II	4
ECO-251	Prin of Microeconomics	3
ENG-112	Writing/Research in the Disc	3
MAT-271	Calculus I	4

Third Semester (Summer)

BIO-111	General Biology I	4

Fourth Semester

CHM-251	Organic Chemistry I	4
MAT-152	Statistical Methods I	4
MUS-110	Music Appreciation	3
PHY-151	College Physics I (or PHY 251)	4

Fifth Semester

BIO-275	Microbiology (or BIO 163 or BIO 168)	4
CHM-252	Organic Chemistry II	4
HIS-112	World Civilization II	3
HUM-220	Human Values and Meaning	3

Pre-Physical Therapy Pathway

First Semester		Credits
ACA-122	College Transfer Success	1
CHM-151	General Chemistry I	4
COM-231	Public Speaking	3
ENG-111	Writing and Inquiry	3
MAT-171	Precalculus Algebra	4

Second Semester

CHM-152	General Chemistry II	4
ENG-112	Writing/Research in the Disc	3
MAT-172	Precalculus Trigonometry	4
PSY-150	General Psychology	3

Third Semester (Summer)

BIO-111	General Biology I	4

Fourth Semester

BIO-112	General Biology II	4
BIO-168	Anatomy & Physiology I	4
PHI-240	Introduction to Ethics	3
PHY-151	College Physics I	4

Fifth Semester

BIO-169	Anatomy & Physiology II	4
HIS-132	American History II	3
HUM-220	Human Values and Meaning	3
PHY-152	College Physics II	4

Pre-Physician's Assistant Pathway

First Semester		Credits
ACA-122	College Transfer Success	1
CHM-151	General Chemistry I	4
COM-231	Public Speaking	3
ENG-111	Writing and Inquiry	3
MAT-171	Precalculus Algebra	4

Second Semester

CHM-152	General Chemistry II	4
ENG-112	Writing/Research in the Disc	3
MAT-172	Precalculus Trigonometry	4
PSY-150	General Psychology	3

Third Semester (Summer)

BIO-168	Anatomy and Physiology I	4

Fourth Semester

BIO-111	General Biology I	4
BIO-169	Anatomy & Physiology II	4
CHM-251	Organic Chemistry I	4
MUS-110	Music Appreciation	3

Fifth Semester

BIO-175	General Microbiology (or BIO 275, CHM 271, or BIO 112)	3
HIS-112	World Civilizations II	3
HUM-220	Human Values and Meaning	3
MAT-152	Statistical Methods I	4

BIO requirements vary according to the university. Consult your advisor before registering for a BIO course.

Pre-Veterinarian Pathway

First Semester		Credits
ACA-122	College Transfer Success	1
COM-231	Public Speaking	3
CHM-151	General Chemistry I	4
ENG-111	Writing and Inquiry	3
MAT-171	Precalculus Algebra	4

Second Semester

CHM-152	General Chemistry II	4
ENG-112	Writing/Research in the Disc	3
MAT-172	Precalculus Trigonometry	4
PSY-150	General Psychology	3

Third Semester (Summer)

BIO-111	General Biology I	4

Fourth Semester

CHM-251	Organic Chemistry I	4
BIO-275	Microbiology	4
	(or BIO-112)	
MUS-110	Music Appreciation	3
PHY-151	College Physics I	4

Fifth Semester

CHM-252	Organic Chemistry II	4
HIS-111	World Civilizations I	3
HUM-220	Human Values and Meaning	3
PHY-152	College Physics II	4

Associate in Arts In Teacher Preparation (AATP) Degree (A1010T)

The Associate in Arts in Teacher Preparation degree shall be granted for a planned program of study consisting of a minimum of 60 semester hours of credit (SHC) of college transfer courses. Within the degree program, the institution shall include opportunities for the achievement of competence in reading, writing, oral communication, fundamental mathematical skills, and basic computer use.

The Comprehensive Articulation Agreement (CAA) and the Independent Comprehensive Articulation Agreement (ICAA) enables North Carolina community college graduates of two-year associate in arts programs who are admitted to constituent institutions of The University of North Carolina and to Signatory Institutions of North Carolina Independent Colleges and Universities to transfer with junior status.

Community college graduates must obtain a grade of "C" or better in each course and an overall GPA of at least 2.7 on a 4.0 scale in order to transfer with a junior status. Courses may also transfer through bilateral agreements between institutions.

The Associate of Arts in Teacher Preparation degree is appropriate for students pursuing licensure in Elementary Education (K-6) and Special Education (K-12).

Specific Program Requirements:

1. In order to obtain employment in the field in North Carolina, students must pass a criminal background check and be approved by their district's Board of Education.
2. Students must be able to pass a background check conducted through the respective school system to be eligible for Level II entry into school facilities. Failure to obtain Level II entry may result in the student's inability to complete course requirements. The College does not guarantee placement for students unable to obtain Level II entry.

General Education (45 Hours)

English Composition - 6 hours

ENG-111	Writing and Inquiry
ENG-112	Writing/Research in the Disc

Humanities/Fine Arts (Courses must be from at least two different disciplines) - 9 hours

COM-120	Intro to Interpersonal Com	OR
COM-231	Public Speaking	

ART-111	Art Appreciation
ART-114	Art History Survey I
ART-115	Art History Survey II
ENG- 231	American Literature I
ENG-232	American Literature II
ENG-241	British Literature I
ENG-242	British Literature II
MUS -110	Music Appreciation
MUS-112	Introduction to Jazz
PHI-215	Philosophical Issues
PHI-240	Introduction to Ethics

Social / Behavioral Sciences (Courses must be from at least two disciplines) - 6 hours
Pick two of the following:

HIS-111	World Civilizations I
HIS-112	World Civilizations II
HIS-131	American History I
HIS-132	American History II
ECO-251	Prin of Microeconomics
ECO-252	Prin of Macroeconomics
POL-120	American Government
PSY-150	General Psychology
SOC-210	Introduction to Sociology

Mathematics - 3-4 hours

MAT-143	Quantitative Literacy
MAT-152	Statistical Methods I
MAT-171	Precalculus Algebra

Natural Sciences - 4 hours

BIO-110	Principles of Biology
BIO-111	General Biology
CHM-151	General Chemistry I
PHY-110	Conceptual Physics
PHY-110A	Conceptual Physics Lab

Additional General Education Requirements - 17-18 hours

SOC-225	Social Diversity

Additional General Education courses as designated in pathway. Courses listed in bold meet this requirement.

Other Required Hours - 15

Education (14 hours)

EDU-187	Teaching and Learning for All	4
EDU-216	Foundations of Education	3
EDU-279	Literacy Development and Instruction	4
EDU-250	Teacher Licensure Preparation	3

Academic Transition (1 hour)

ACA-122	College Transfer Success

Additional hours from the list below (14 hours)

ACC-120
ACC-121
ANT-220
ART-111
ART-114
ART-115
ART-121
ART-122
ART-131
ART-171
ART-214
ART-231
ART-240
ART-244
ART-261
ART-264
ART-266
ART-267
ART-275
ART-276
ART-283
ART-284
BIO-110
BIO-111
BIO-112
BIO-120
BIO-130
BIO-140
BIO-140A
BIO-155
BIO-163
BIO-168
BIO-169
BIO-175
BIO-275
BUS-110
BUS-115
BUS-137
CHM-130
CHM130A
CHM-132
CHM-151
CHM-152
CHM-251
CHM-252
CHM-271
CIS-110
CIS-115
CJC-111
CJC-113
CJC-121
CJC-141
COM-110
COM-120
COM-140
COM-150
COM-231
CSC-134
CSC-151
CTS-115
DFT-170
ECO-251
ECO-252
EDU-144
EDU-145
EDU-216
EDU-221
EGR-150
EGR-212
EGR-215
EGR-216
EGR-220
EGR-228
ENG-114
ENG-125
ENG-231
ENG-232
ENG-241
ENG-242
FRE-111
FRE-112
FRE-211
FRE-212
GIS-111
HEA-110
HEA-112
HIS-111
HIS-112
HIS-131
HIS-132
HIS-236
HSE-110
HUM-110
HUM-115
HUM-220
MAT-143
MAT-152
MAT-171
MAT-172
MAT-175
MAT-252
MAT-263
MAT-271
MAT-272
MAT-273
MAT-280
MAT-285
MUS-110
MUS-112
PED-110
PED-117
PED-118
PED-122
PED-123
PED-211
PED-217
PHI-215
PHI-240
PHY-110
PHY-110A
PHY-151
PHY-152
PHY-251
PHY-252
POL-120
PSY-150
PSY-237
PSY-241
PSY-281
SOC-210
SOC-213
SOC-220
SOC-225
SPA-111
SPA-112
SPA-211
SPA-212

Total Semester Hours Credit (SHC) in Program: 60-61

One semester hour of credit may be included in a 61 SHC associate in arts program of study. The transfer of this hour is not guaranteed.

Associate in Arts in Teacher Preparation (AATP) (A1010T)

Courses requiring a grade of "C" or better: ACA, ART, BIO, COM, EDU, ENG, HUM, MAT, PHI, PSY, and SOC

First Semester (Fall)		**Credits**
ACA-122	College Transfer Success	1
EDU-216	Foundations of Education	3
ENG-111	Writing and Inquiry	3
MAT-143	Quantitative Literacy	3
	GenEd Elective (see advisor)	6

Second Semester (Spring)

BIO-110	Principles of Biology	4
ENG-112	Writing/Research in the Disc	3
PHI-240	Introduction to Ethics	3
PSY-150	General Psychology	3
SOC-210	Intro to Sociology	3

Third Semester (Fall)

EDU-187	Teaching and Learning for All	4
EDU-250	Teacher Licensure Preparation	3
SOC-225	Social Diversity	3
	GenEd Elective (see advisor)	6

Fourth Semester (Spring)

ART-111	Art Appreciation	3
COM-231	Public Speaking	3
EDU-279	Literacy Develop and Instruct	4
HUM-220	Human Values and Meaning	3
Total Credit Hours Required		**61**

Associate in Science In Teacher Preparation (ASTP) Degree (A1040T)

The Associate in Science in Teacher Preparation degree shall be granted for a planned program of study consisting of a minimum of 60 semester hours of credit (SHC) of college transfer courses. Within the degree program, the institution shall include opportunities for the achievement of competence in reading, writing, oral communication, fundamental mathematical skills, and the basic computer use.

The Comprehensive Articulation Agreement (CAA) and the Independent Comprehensive Articulation Agreement (ICAA) enables North Carolina community college graduates of two-year associate in science programs who are admitted to constituent institutions of The University of North Carolina and to Signatory Institutions of North Carolina Independent Colleges and Universities to transfer with junior status.

Community college graduates must obtain a grade of “C” or better in each course and an overall GPA of at least 2.7 on a 4.0 scale in order to transfer with a junior status. Courses may also transfer through bilateral agreements between institutions.

The Associate of Arts in Teacher Preparation degree is appropriate for students pursuing licensure in Elementary Education (K-6) and Special Education (K-12).

Specific Program Requirements:

1. In order to obtain employment in the field in North Carolina, students must pass a criminal background check and be approved by their district’s Board of Education.
2. Students must be able to pass a background check conducted through the respective school system to be eligible for Level II entry into school facilities. Failure to obtain Level II entry may result in the student’s inability to complete course requirements. The College does not guarantee placement for students unable to obtain Level II entry.

General Education (45 Hours)

English Composition - 6 hours

ENG-111	Writing and Inquiry
ENG-112	Writing/Research in the Disc

Humanities/Fine Arts (Courses must be from at least two different disciplines) - 9 hours

COM-120	Intro to Interpersonal Com	OR
COM-231	Public Speaking	
ART-111	Art Appreciation	
ART-114	Art History Survey I	
ART-115	Art History Survey II	
ENG- 231	American Literature I	
ENG-232	American Literature II	
ENG-241	British Literature I	
ENG-242	British Literature II	
MUS -110	Music Appreciation	
MUS-112	Introduction to Jazz	
PHI-215	Philosophical Issues	
PHI-240	Introduction to Ethics	

**Social / Behavioral Sciences - 3 hours
Pick one of the following:**

HIS-111	World Civilizations I
HIS-112	World Civilizations II
HIS-131	American History I
HIS-132	American History II
ECO-251	Prin of Microeconomics
ECO-252	Prin of Macroeconomics
POL-120	American Government
PSY-150	General Psychology
SOC-210	Introduction to Sociology

Mathematics - 8 hours

MAT-171	Precalculus Algebra
MAT-172	Precalculus Trigonometry
MAT-263	Brief Calculus
MAT-271	Calculus I
MAT-272	Calculus II

Natural Sciences - 8 hours

BIO-110 Principles of Biology

BIO-111 General Biology and BIO-112 General Biology II

CHM-151 General Chemistry I and CHM 252 General Chemistry II

PHY-110 Conceptual Physics and PHY 110A Conceptual Physics Lab

PHY-151 College Physics I and PHY 152 College Physics II

PHY-251 General Physics I and PHY 252 General Physics II

Additional General Education Requirements - 14-15 hours

SOC-225 Social Diversity

Additional General Education courses as designated in pathway. Courses listed in bold meet this requirement.

Other Required Hours - 15

Education (14 hours)

EDU-187	Teaching and Learning for All	4
EDU-216	Foundations of Education	3
EDU-279	Literacy Development and Instruction	4
EDU-250	Teacher Licensure Preparation	3

Academic Transition (1 hour)

ACA-122 College Transfer Success

Additional hours from the list below (14 hours)

ACC-120
ACC-121
ANT-220
ART-111
ART-114
ART-115
ART-121
ART-122
ART-131
ART-171
ART-214
ART-231
ART-240
ART-244
ART-261
ART-264
ART-266
ART-267
ART-275
ART-276
ART-283
ART-284
BIO-110
BIO-111
BIO-112
BIO-120
BIO-130
BIO-140
BIO-140A
BIO-155
BIO-163
BIO-168
BIO-169
BIO-175
BIO-275
BUS-110
BUS-115
BUS-137
CHM-130
CHM130A
CHM-132
CHM-151
CHM-152
CHM-251
CHM-252
CHM-271
CIS-110
CIS-115
CJC-111
CJC-113
CJC-121
CJC-141
COM-110
COM-120
COM-140
COM-150
COM-231
CSC-134
CSC-151
CTS-115
DFT-170
ECO-251
ECO-252
EDU-144
EDU-145
EDU-216
EDU-221
EGR-150
EGR-212
EGR-215
EGR-216
EGR-220
EGR-228
ENG-114
ENG-125
ENG-231
ENG-232
ENG-241
ENG-242
FRE-111
FRE-112
FRE-211
FRE-212
GIS-111
HEA-110
HEA-112
HIS-111
HIS-112
HIS-131
HIS-132
HSE-110
HUM-110
HUM-115
HUM-220
MAT-143
MAT-152
MAT-171
MAT-172
MAT-175
MAT-252
MAT-263
MAT-271
MAT-272
MAT-273
MAT-280
MAT-285
MUS-110
MUS-112
PED-110
PED-117
PED-118
PED-122
PED-123
PED-211
PED-217
PHI-215
PHI-240
PHY-110
PHY-110A
PHY-151
PHY-152
PHY-251
PHY-252
POL-120
PSY-150
PSY-237
PSY-241
PSY-281
SOC-210
SOC-213
SOC-220
SOC-225
SPA-111
SPA-112
SPA-211
SPA-212

Total Semester Hours Credit (SHC) in Program: 60-61

One semester hour of credit may be included in a 61 SHC associate in arts program of study. The transfer of this hour is not guaranteed.

Associate in Science in Teacher Preparation (ASTP) (A1040T)

Courses requiring a grade of "C" or better: ACA, ART, CHM, COM, EDU, ENG, HUM, MAT, PSY, and SOC

First Semester (Fall)		**Credits**
ACA-122	College Transfer Success	1
CHM-151	General Chemistry I (or BIO-111)	4
EDU-216	Foundations of Education	3
ENG-111	Writing and Inquiry	3
MAT -171	Precalculus Algebra	4
Second Semester (Spring)		
CHM-152	General Chemistry II (or BIO-112)	4
ENG-112	Writing/Research in the Disc	3
MAT-172	Precalculus Trigonometry	4
PSY-150	General Psychology	3
	GenEd Elective (see advisor)	3
Third Semester (Fall)		
ART-111	Art Appreciation	3
EDU-187	Teaching and Learning for All	4
EDU-250	Teacher Licensure Preparation	3
SOC-225	Social Diversity	3
	GenEd Elective (see advisor)	3
Fourth Semester (Spring)		
COM-231	Public Speaking	3
EDU-279	Literacy Develop and Instruct	4
HUM-220	Human Values and Meaning	3
	GenEd Elective (see advisor)	3
Total Credit Hours Required		**61**

Associate in General Education Degree (A10300)

The Associate in General Education curriculum is designed for the academic enrichment of students who wish to broaden their education, with emphasis on personal interest, growth and development.

Course work includes study in the areas of humanities and fine arts, social and behavioral sciences, natural sciences and mathematics, and English composition. Opportunities for the achievement of competence in reading, writing, oral communication, fundamental mathematical skills, and the basic use of computers will be provided.

Through these skills, students will have a sound base for lifelong learning. Graduates are prepared for advancements within their field of interest and become better qualified for a wide range of employment opportunities.

Certificates and diplomas are not allowed under this degree program.

General Education (15 Hours)

The associate in general education curriculum program shall include a minimum of 15 semester hours of credit from general education curriculum courses selected from the Combined Course Library, including six hours in communications, three hours in humanities/fine arts, three hours in social/behavioral sciences, and three hours in natural sciences or mathematics.

Courses must be at the 110-199 or 210-299 level

General Education (15 hours)

ENG-111 Writing and Inquiry (or ENG-110)	3
Communication/English	3
Humanities/Fine Arts	3
Social/Behavioral Sciences	3
Natural Sciences/Mathematics	3

Other Major Hours (49-50 Hours)

ACA-115 (or approved substitute)	1
Additional Credits	48-49

A maximum of 7 SHC in health (HEA), physical education (PED), college orientation, and/or study skills (ACA) may be included. Selected topics (SEL) or seminar courses (SEM) may be included in a program of study up to a maximum of three-semester hours credit.

TOTAL SEMESTER HOURS CREDIT (SHC) IN PROGRAM: 64-65

General Education for the Associate of Applied Science

As part of the Associate in Applied Science (AAS) degree, students take courses in General Education. These courses provide students with a knowledge base of historical, societal, and environmental contexts for succeeding in the changing global community. General Education courses represent a full spectrum of communication, humanities and fine arts, social and behavioral sciences, and natural sciences and mathematics courses. General Education courses facilitate student acquisition and sharing of knowledge, encourage social interaction, and promote an educated citizenry. General Education courses also develop broad, cross-curriculum knowledge and skill sets that prepare the student for the challenges of post-graduation endeavors.
The General Education Student Learning Objectives at A-B Tech indicate:

Students will critically evaluate information.
- Students will demonstrate information literacy.
- Students will critique works of human expression.
- Students will analyze scientific literature.

Students will solve problems.
- Students will identify processes.
- Students will analyze problems.
- Students will interpret results.
- Students will recommend appropriate strategies or solutions.

Students will effectively communicate.
- Students will communicate appropriately for the subject.
- Students will communicate appropriately for the audience.
- Students will communicate appropriately for the medium.

AAS programs require specific general education courses and will vary by program. These courses are listed below.

Communication	**Humanities/Fine Arts**	**Social/Behaviorial Science**	**Natural Science/ Mathematics**
COM 110	ART 111	ECO 251	BIO 161
COM 120	ART 114	ECO 252	BIO 163
COM 231	ART 115	HIS 111	BIO 168
ENG 110	HUM 110	HIS 112	MAT 110
ENG 111	HUM 115	HIS 131	MAT 121
ENG 112	MUS 110	HIS 132	MAT 143
ENG 114	MUS 112	POL 120	MAT 152
	PHI 215	PSY 150	MAT 171
	PHI 240	SOC 210	PHY 110/110A
		SOC 225	PHY 121

Associate of Applied Science Degrees, Diplomas, and Certificates

Associate in Applied Science (AAS)
Accounting and Finance
Air Conditioning, Heating & Refrigeration Technology
Automotive Systems Technology
Aviation Management & Career Pilot Technology - Aviation Management
Aviation Management & Career Pilot Technology - Career Pilot
Biomedical Equipment Technology
Brewing, Distillation and Fermentation
Business Administration: General Business Administration
Business Administration: Marketing & Retailing
Business Administration: Sports Management
Cardiovascular Sonography
Computer Engineering Technology
Computer-Integrated Machining
Construction Management Technology
Cosmetology
Criminal Justice Technology
Culinary Arts
Dental Hygiene
Diesel and Heavy Equipment Technology
Early Childhood Education
Early Childhood: Licensure Transfer Track
Early Childhood: Non-Licensure Transfer Track
Electrical Systems Technology
Electronics Engineering Technology
Emergency Medical Science
Emergency Medical Science Bridge Program
Geomatics Technology
Health and Fitness Science
Hospitality Management
Information Technology: Information Systems
Information Technology: Network Management
Information Technology: Software and Web Development
Information Technology: Systems Security
Information Technology: Artificial Intelligence
Mechanical Engineering Technology
Mechatronics Engineering Technology
Medical Laboratory Technology
Medical Laboratory Technology: Accelerated
Medical Office Administration
Medical Sonography
Nursing - Associate Degree
Nursing - RIBN
Nursing - LPN to ADN Advanced Placement Option
Nursing - Paramedic to ADN Advanced Placement Option
Occupational Therapy Assistant
Office Management: General Office
Office Management: Finance
Radiography
Social and Human Services: Addiction & Recovery Transfer Track
Social and Human Services: Mental Health Transfer Track
Social and Human Services: Child Advocacy Studies Transfer Track
Social and Human Services: Addiction & Recovery Career Track
Social and Human Services: Mental Health Career Track
Social and Human Services: Child Advocacy Studies Career Track
Social and Human Services: Generalist Track
Surgical Technology
Surgical Technology Bridge
Veterinary Medical Technology
Welding Technology

Diplomas
Air Conditioning, Heating & Refrigeration Technology
Automotive Systems Technology
Biomedical Equipment Technology
Brewing Methods and Operations
Building Construction Science
Computer Engineering Technology
Computer-Integrated Machining
Cosmetology
Dental Assisting
Diesel and Heavy Equipment Technology
Distillation Methods and Operations
Electrical Systems Technology
Mechatronics Engineering Technology - Maintenance & Reliability
Medical Assisting
Medical Office Administration
Office Management
Nursing - Practical Nursing
Social and Human Services
Welding Technology

Certificates
Accounting and Finance
Addiction & Recovery Studies
Advanced Electrical Wiring
Advanced Machine Operator
Automotive Systems Technology - Certificate I
Automotive Systems Technology - Certificate II
Aviation - Instrument Rating
Aviation - Private Pilot
Baking and Pastry Arts
Basic Emergency Medical Science
Basic Law Enforcement Training
Basic Welding
Biomedical Equipment Technology
Building Instrumentation & Control
Business Administration
CNC Machine Programmer
Computer Aided Drafting
Computer Engineering Technology
Construction & Millwork
Construction Management Technology
Cooling
Cosmetology Instructor
Culinary Studies
Craft Beverage Lab
Criminal Justice Technology
Diesel and Heavy Equipment Technology
Early Childhood
Early Childhood Administration
EDM & Fixture Specialist
Electrical Construction
Electrical Fundamentals
Electrical Wiring
Electronics Manufacturing
Entrepreneurship
Essentials to Social Media Marketing
Essentials of Sports Management

Esthetics Instructor
Esthetics Technology
Food Truck Operations
Foundations of Business and Financial Literacy
Foundations of Economics and Financial Literacy
Geomatics Technology Land Surveying Fundamentals
Green Building & Carpentry
Group Fitness Instructor
Heating
Hospitality Management
Infant/Toddler Care
Information Technology: Computer Fundamentals
Information Technology: GIS Fundamentals
Information Technology: PC Installation & Maintenance
Information Technology: Network Systems Administration
Information Technology: CCNA Preparation
Information Technology: Database Management
Information Technology: Front-End Developer
Information Technology: Back-End Developer
Information Technology: Cyber Forensics Analyst
Information Technology: Systems Security
Information Technology: Artificial Intelligence
Manicuring Instructor
Manicuring/Nail Technology
Mechanical Engineering Technology: Automation & Robotics
Mechatronics Engineering Technology: Basic Industrial Maintenance
Medical Office Administration: Medical Coding
Mental Health Studies
Office Management
Office Management: Virtual Office
Online Hospitality Management
Practical Meat Cutting
Quality & Lean Six-Sigma
Retail Marketing
Residential Design
Restaurant Management
Robotics & Multi-Axis Machining
Robotic Welding
Solar Photovoltaic Energy Technology
Solid Modeling
Sustainability
Sustainable Agriculture and Construction
Therapeutic Baking
Therapeutic Culinary

Accounting and Finance

The Accounting and Finance curriculum is designed to provide students with the knowledge and the skills necessary for employment and growth in the accounting and finance profession. Accountants and finance professionals assemble and analyze, process, and communicate essential information about financial operations.

Course work may include accounting, finance, ethics, business law, computer applications, financial planning, insurance, marketing, real estate, selling, and taxation. Related skills are developed through the study of communications, computer applications, financial analysis, critical thinking skills, and ethics.

Graduates should qualify for entry level accounting and finance positions in many types of organizations including accounting firms, small businesses, manufacturing firms, banks, hospitals, school systems, and governmental agencies.

Accounting and Finance Associate in Applied Science Degree (A25800)

Courses requiring a grade of "C" or better: ACA, ACC, BUS, CIS, CTS, ECO, and MKT

First Semester (Fall)		**Credits**
ACA-115	Success & Study Skills	1
ACC-120	Prin of Financial Accounting	4
CIS-110	Introduction to Computers	3
ENG-111	Writing and Inquiry	3
MAT-143	Quantitative Literacy	3
Second Semester (Spring)		
ACC-121	Prin of Managerial Accounting	4
ACC-150	Accounting Software Appl	2
BUS-110	Introduction to Business	3
CTS-130	Spreadsheet	3
MKT-120	Principles of Marketing	3
Third Semester (Summer)		
BUS-137	Principles of Management	3
COM-231	Public Speaking	3
ECO-251	Principles of Microeconomics	3
HUM-115	Critical Thinking	3
Fourth Semester (Fall)		
ACC-129	Individual Income Taxes	3
ACC-140	Payroll Accounting	2
ACC-220	Intermediate Accounting I	4
BUS-125	Personal Finance	3
ECO-252	Principles of Macroeconomics	3
Fifth Semester (Spring)		
ACC-130	Business Income Taxes	3
ACC-180	Practices in Bookkeeping	3
BUS-115	Business Law I	3
BUS-147	Business Insurance	3
Total Credit Hours Required		**68**

Accounting and Finance Certificate (C25800L1)

The Accounting Certificate is designed for students who wish to further their education in the accounting field. It provides training for students who currently hold a degree in another discipline and are interested in pursuing an accounting degree or for students who are currently working in an accounting or bookkeeping position and need additional instruction. This certificate is not designed for students seeking entry-level employment in the accounting field.

Courses requiring a grade of "C" or better: ACC

First Semester (Fall)		**Credits**
ACC-120	Principles of Financial Accounting	4
ACC-129	Individual Income Taxes	3
Second Semester (Spring)		
ACC-121	Principles of Managerial Accounting	4
ACC-140	Payroll Accounting	2
ACC-150	Accounting Software Applications	2
ACC-180	Practices in Bookkeeping	3
Total Credit Hours Required		**18**

Foundations of Business and Financial Literacy Certificate (C25800L2)

The Foundations of Business and Financial Literacy Certificate offers students a comprehensive introduction to essential business concepts, financial accounting, and taxation. This program emphasizes practical skills in managing personal and business finances, understanding tax systems, and utilizing computer applications in a business setting. By completing this certificate, students will gain valuable knowledge in financial planning, business operations, and the preparation of individual and business taxes. This program is ideal for students seeking to build a strong foundation for entry-level roles in business and finance or to enhance their academic qualifications for further study.

Courses requiring a grade of "C" or better: ACC, BUS, and CIS

First Semester (Fall)		**Credits**
ACC-120	Principles of Financial Accounting	4
ACC-129	Individual Income Taxes	3
CIS-110	Introduction to Computers	3

Second Semester (Spring)		
ACC-130	Business Income Taxes	3
BUS-110	Introduction to Business	3
Total Credit Hours Required		**16**

The Foundations of Business and Financial Literacy Certificate is offered in a 100% online format. Distance learning allows the certificate to be completed around the student's personal schedule without the need to travel to a physical location.

Foundations of Economics & Financial Literacy Certificate (C25800L3)

The Foundations of Economics and Financial Literacy Certificate provides students with a comprehensive knowledge of personal finance, economic principles, and financial accounting. This program is designed to develop financial literacy and economic understanding, equipping students with the skills to make informed decisions in both personal and professional contexts. By completing this certificate, students will gain insights into financial planning, taxation, and the foundational principles of micro- and macroeconomics, preparing them for responsible financial stewardship, career advancement, and further academic pursuits.

Courses requiring a grade of "C" or better: ACC, BUS, and ECO

First Semester (Fall)		Credits
ACC-120	Principles of Financial Accounting	4
ACC-129	Individual Income Taxes	3

Second Semester (Spring)		
BUS-125	Personal Finance	3
ECO-251	Principles of Microeconomics	3
ECO-252	Principles of Macroeconomics	3
Total Credit Hours Required		**16**

The Foundations of Economics and Financial Literacy Certificate is offered in a 100% online format. Distance learning allows the certificate to be completed around the student's personal schedule without the need to travel to a physical location.

Air Conditioning, Heating & Refrigeration Technology

The Air Conditioning, Heating, and Refrigeration Technology curriculum provides the basic knowledge to develop skills necessary to work with residential and light commercial systems.

Topics include mechanical refrigeration, heating and cooling theory, electricity, controls, and safety. The diploma program covers air conditioning, furnaces, heat pumps, tools and instruments. In addition, the AAS degree covers residential building codes, residential system sizing, and advanced comfort systems.

Diploma graduates should be able to assist in the start-up, preventive maintenance, service, repair, and/or installation of residential and light commercial systems. AAS degree graduates should be able to demonstrate an understanding of system selection and balance and advanced systems.

The Air Conditioning, Heating & Refrigeration program is designed for the student to complete the Cooling Certificate the first year, the Heating Certificate the second year, and then complete the Diploma and AAS in the third year. Students may begin the certificates in either the Fall or the Spring semesters.

Cooling Certificate (C35100L3) - Fall Start

The Cooling Certificate program teaches the student concepts and skills needed to install and service various types of domestic cooling systems. The material for the EPA's CFC certification(s) will be covered, and the exam will be given during the program.

Courses requiring a grade of "C" or better: AHR and WBL

Required Courses		Credits
AHR-110	Intro to Refrigeration	5
AHR-113	Comfort Cooling	4
AHR-160	Refrigerant Certification	1
AHR-171	Comfort Cooling Lab	1
AHR-114	Heat Pump Technology	4
WBL-111	Work-Based Learning I	1
Total Credit Hours Required		**16**

Cooling Certificate (C35100L3) - Spring Start

The Cooling Certificate program teaches the student concepts and skills needed to install and service various types of domestic cooling systems. The material for the EPA's CFC certification(s) will be covered, and the exam will be given during the program.

Courses requiring a grade of "C" or better: AHR and WBL

Required Courses		Credits
AHR-110	Intro to Refrigeration	5
AHR-113	Comfort Cooling	4
AHR-160	Refrigerant Certification	1
AHR-114	Heat Pump Technology	4
AHR-171	Comfort Cooling Lab	1
WBL-111	Work-Based Learning I	1
Total Credit Hours Required		**16**

Heating Certificate (C35100L4) - Fall or Spring Start

The Heating Certificate program teaches students concepts and skills needed to service and repair domestic and light commercial heat pumps, air conditioning, and heating units.

Courses requiring a grade of "C" or better: AHR and ELC

Required Courses		**Credits**
AHR-111	HVACR Electricity	3
AHR-112	Heating Technology	4
AHR-170	Heating Lab	1
WLD-113	Soldering and Brazing	2
AHR-130	HVAC Controls	3
ELC-132	Electrical Drawings	2
Total Credit Hours Required		**15**

Air Conditioning, Heating & Refrigeration Technology Diploma (D35100)

Students must complete the Cooling Certificate and the Heating Certificate before beginning the Diploma and AAS.

Courses requiring a grade of "C" or better: AHR, ELC, and WBL

Required Courses		**Credits**
AHR-213	HVACR Building Code	2
COM-120	Intro Interpersonal Com	3
MAT-110	Math Measurement & Literacy	3

Air Conditioning, Heating & Refrigeration Technology Associate in Applied Science Degree Degree (A35100)

Students must complete the Cooling Certificate and the Heating Certificate before beginning the Diploma and AAS. Courses listed in bold are AAS courses.

Courses requiring a grade of "C" or better: AHR, ELC, and WBL

Year One (Cooling Certificate)		**Credits**
AHR-110	Intro to Refrigeration	5
AHR-113	Comfort Cooling	4
AHR-114	Heat Pump Technology	4
AHR-160	Refrigerant Certification	1
AHR-171	Comfort Cooling Lab	1
WBL-111	Work-Based Learning I	1
Year Two (Heating Certificate)		
AHR-111	HVACR Electricity	3
AHR-112	Heating Technology	4
AHR-130	HVAC Controls	3
AHR-170	Heating Lab	1
ELC-132	Electrical Drawings	2
WLD-113	Soldering and Brazing	2
Year Three (Including Diploma courses)		
AHR-115	Refrigeration Systems	2
AHR-211	Residential Systems Design	3
AHR-212	Advanced Comfort Systems	4
AHR-213	HVACR Building Code	2
COM-120	Intro Interpersonal Com	3
ENG-110	Freshman Composition	3
ELC-117	Motors and Controls	4
ELN-260	Prog Logic Controllers	4
HUM-110	Technology and Society	3
MAT-110	Math Measurement & Literacy	3
PSY-150	General Psychology	3
Total Credit Hours Required		**65**

Associate in General Occupational Technology Degree (A55280)

The General Occupational Technology curriculum provides individuals with an opportunity to upgrade skills and to earn an associate degree, diploma, and/or certificate by taking courses suited for individual occupational interests and/or needs.

The curriculum content will be customized for students according to occupational interests and needs. A program of study for each student will be selected from any non-developmental level courses offered by the College.

Graduates will become more effective workers, better qualified for advancements within their field of employment, and become qualified for a wide range of entry-level employment opportunities.

AAS Requirements

General Education (Minimum 15 Hours)
Degree programs must contain a minimum of 15 semester hours including at least one course from each of the following areas: humanities/fine arts, social/behavioral sciences, and natural sciences/mathematics. Degree programs must contain a minimum of 6 semester hours of communications.

General Education (15 hours)

ENG-111 Writing and Inquiry (or ENG-110)	3
Communication/English	3
Humanities/Fine Arts	3
Social/Behavioral Sciences	3
Natural Sciences/Mathematics	3

Major Hours (Minimum 49 Hours)
AAS programs must include courses which offer specific job knowledge and skills. Work-based learning may be included in associate in applied science degrees up to a maximum of 8 semester hours of credit.

ACA-115 (or approved substitute)	1
Additional Credits	48

Other Required Hours (0-7 Hours)
A college may include courses to meet graduation or local employer requirements in a certificate, diploma, or associate in applied science program. These curriculum courses shall be selected from the Combined Course Library and must be approved by the System Office prior to implementation. Restricted, unique, or free elective courses may not be included as other required hours.

Total Semester Hours Credit (SHC) in AAS Degree: 64-76

Diploma Requirements

General Education (Minimum 6 Hours)
Diploma programs must contain a minimum of 6 semester hours of general education; 3 semester hours must be in communications.

General Education (6 hours)

ENG-111 Writing and Inquiry (or ENG-110)	3
Additional credits	3

(Communication/English, Humanities/Fine Arts, Social/Behavioral Sciences, Natural Sciences/Mathematics)

Major Hours (Minimum 30 Hours)
Diploma programs must include courses which offer specific job knowledge and skills. Work-based learning may be included in associate in applied science degrees up to a maximum of 4 semester hours of credit.

Other Required Hours (0-4 Hours)
A college may include courses to meet graduation or local employer requirements in a certificate, diploma, or associate in applied science program. These curriculum courses shall be selected from the Combined Course Library and must be approved by the System Office prior to implementation. Restricted, unique, or free elective courses may not be included as other required hours.

Total Semester Hours Credit (SHC) in Diploma: 36-48

Certificate Requirements

General Education (Optional)

General education is optional in certificate programs. (Communication/English, Humanities/Fine Arts, Social/Behavioral Sciences, Natural Sciences/Mathematics)

Major Hours (Minimum 12 Hours)
Diploma programs must include courses which offer specific job knowledge and skills. Work-based learning may be included in associate in applied science degrees up to a maximum of 4 semester hours of credit.

Other Required Hours (0-1 Hours)

A college may include courses to meet graduation or local employer requirements in a certificate, diploma, or associate in applied science program. These curriculum courses shall be selected from the Combined Course Library and must be approved by the System Office prior to implementation. Restricted, unique, or free elective courses may not be included as other required hours.

Total Semester Hours Credit (SHC) in Certificate: 12-18

Automotive Systems Technology

The Automotive Systems Technology program prepares individuals to apply technical knowledge and skills to repair, service, and maintain all types of automobiles. Includes instruction in brake systems, electrical systems, engine performance, engine repair, suspension and steering, automatic and manual transmissions and drive trains, and heating and air conditioning systems.

Automotive Systems Technology Associate in Applied Science Degree (A60160)

Courses requiring a grade of "C" or better: ACA, AUT, TRN, and WBL

First Semester (Fall)		**Credits**
ACA-115	Success & Study Skills	1
AUT-116	Engine Repair	3
AUT-116A	Engine Repair Lab	1
PHY-121	Applied Physics 1	4
TRN-110	Intro to Transport Tech	2
TRN-120	Basic Transp Electricity	5
WBL-110	World of Work	1

Second Semester (Spring)		
AUT-151	Brake Systems	3
AUT-151A	Brake Systems Lab	1
AUT-181	Engine Performance I	3
AUT-281	Advanced Engine Performance	3
ENG-110	Freshman Composition	3
TRN-145	Adv Transp Electronics	3

Third Semester (Summer)		
AUT-141	Suspension and Steering	3
AUT-141A	Suspension and Steering Lab	1
TRN-130	Intro to Sustainable Transp	3
TRN-140	Transp Climate Control	2
TRN-140A	Transp Climate Cont Lab	2

Fourth Semester (Fall)		
AUT-231	Man Trans/Axles/Drtrains	3
AUT-231A	Man Trans/Ax/Drtrains Lab	1
COM-120	Intro Interpersonal Communication	3
HUM-110	Technology and Society	3
WBL-112	Work Based Learning I	2

Fifth Semester (Spring)		
AUT-221	Auto Transm/Transaxles	3
AUT-221A	Auto Transm/Transax Lab	1
PSY-150	General Psychology	3
WBL-122	Work Based Learning II	2
Total Credit Hours Required		**65**

Automotive Systems Technology Diploma (D60160)

Courses requiring a grade of "C" or better: ACA, AUT, TRN, and WBL

First Semester (Fall)		**Credits**
ACA-115	Success & Study Skills	1
AUT-116	Engine Repair	3
AUT-116A	Engine Repair Lab	1
PHY-121	Applied Physics 1	4
TRN-110	Intro to Transport Tech	2
TRN-120	Basic Transp Electricity	5
WBL-110	World of Work	1

Second Semester (Spring)		
AUT-151	Brake Systems	3
AUT-151A	Brake Systems Lab	1
AUT-181	Engine Performance I	3
AUT-281	Adv Engine Performance	3
ENG-110	Freshman Composition	3
TRN-145	Adv Transp Electronics	3

Third Semester (Summer)		
AUT-141	Suspension and Steering Sys	3
AUT-141A	Suspension and Steering Lab	1
TRN-130	Intro to Sustainable Transp	3
TRN-140	Transp Climate Control	2
TRN-140A	Transp Climate Control Lab	2
Total Credit Hours Required		**44**

Automotive Systems Technology - Certificate I (C60160L6)

Courses requiring a grade of "C" or better: AUT, TRN, and WBL

First Semester (Fall)		Credits
AUT-116	Engine Repair	3
AUT-116A	Engine Repair Lab	1
TRN-110	Intro to Transport Tech	2
TRN-120	Basic Transp Electricity	5
WBL-110	World of Work	1
Total Credit Hours Required		**12**

Automotive Systems Technology - Certificate II (C60160L7)

The Automotive Systems Technology Certificate I program must be completed successfully before beginning this program.

Courses requiring a grade of "C" or better: AUT and TRN

Second Semester (Spring)		Credits
AUT-151	Brake Systems	3
AUT-151A	Brake Systems Lab	1
AUT-181	Engine Performance I	3
AUT-281	Adv Engine Performance	3
TRN-145	Adv Transp Electronics	3
Total Credit Hours Required		**13**

Aviation Management & Career Pilot Technology

The Aviation Management and Career Pilot Technology curriculum prepares individuals for a variety of aviation and aviation-related careers including the commercial airlines, general aviation, the aerospace industry, the military, and state and federal aviation organizations.

Course work includes fundamentals of flight, aerodynamics, aircraft performance, meteorology, navigation, federal regulations, aviation management, and instrument and commercial ground training. Course options include flight and simulator training or business management training.

Graduates will hold a Commercial Pilot certificate with an Instrument Rating or specialize in aviation management. Graduates may find employment as commercial, corporate, and military pilots, fixed-base operators, airport managers, flight instructors, and flight dispatchers.

The Aviation Management & Career Pilot Technology program is approved by:

Federal Aviation Administration
800 Independence Avenue
Washington, DC 20591
Phone: (703) 230-1664
www.faa.gov

Federal Aviation Administration
Charlotte Flight Standards District Office (FSDO)
3800 Arco Corporate Drive, Suite 233
Charlotte, NC 28273
Phone: (704) 319-7020
www.faa.gov/about/office_org/field_offices/fsdo/clt/

Specific Program Requirements:

1. Degree students will be required to purchase and wear uniforms while attending class. First year students will wear blue shirts (captain shirt for Career Pilot degree students and button down "oxford" shirt for Aviation Management degree students) and navy blue pants. Second year students will wear white shirts (captain shirt for Career Pilot degree students and button down "oxford" shirt for Aviation Management degree students) and navy blue pants. Both Aviation Management and Career Pilot uniforms also include a black leather belt and black leather shoes. Uniforms include the A-B Tech Aviation logo and must be purchased at Read's Uniforms in Asheville, NC. Students must purchase at least one (1) complete uniform appropriate to their year and pathway. Students are encouraged to purchase more than one uniform. Uniforms vary in price from approximately $150 (Aviation Management uniform) to $225 (Career Pilot uniform). Additional uniforms can be purchased at a discounted cost.

2. For Career Pilot students, the cost of flight training is a separate cost paid to WNC Aviation. The cost of flight training is estimated to be at least $12,600 for the Private Pilot license, $13,721 for the Instrument Rating, and $31,680 for the Commercial Pilot license. These estimates reflect the minimum hours required by the FAA for each credential. Many flight students will require training beyond the minimum hours to meet FAA standards. Payment for flight training is billed by and paid directly to the flight school, not A-B Tech. The College is only responsible for collecting tuition and fees for academic courses. Note that Aviation Management students do not incur the added expense of flight training. Payment arrangements for flight lessons must be made prior to the start of any flight lessons.

3. Career Pilot students must obtain an FAA Medical Certificate. A list of local aviation medical examiners (AMEs) can be found at http://www.faa.gov/Pilots/amelocator/. The FAA Medical Certificate is not required prior to starting academic courses, but is required prior to starting flight training. The cost is approximately $200. Veterans utilizing their benefits for flight/academic training must obtain a 2nd Class Medical Certificate prior to starting flight lessons.

4. Students seeking the Career Pilot option must complete their Private Pilot flight training, and possess a current and valid FAA Private Pilot certificate prior to being admitted into this degree pathway. Students aspiring to enter the Career Pilot

pathway can still enter the Aviation program as Aviation Management students initially. Once the Private Pilot certificate (license) is obtained, the student may switch into the Career Pilot pathway. Students in this scenario can, and should, still perform regular flight lessons to progress through flight training for the Private Pilot certificate.

Aviation Management and Career Pilot Technology - Aviation Management (A60180AM)

Courses requiring a grade of "C" or better: ACA and AER

First Semester (Fall)		Credits
ACA-115	Success & Study Skills	1
AER-110	Air Navigation	3
AER-113	History of Aviation	2
AER-150	Private Pilot Flight Theory	3
ENG-111	Writing and Inquiry	3
MAT-121	Algebra/Trigonometry I	3
Second Semester (Spring)		
AER-111	Aviation Meteorology	3
AER-160	Instrument Flight Theory	3
COM-231	Public Speaking	3
PHY-110	Conceptual Physics	3
PHY-110A	Conceptual Physics Lab	1
Third Semester (Summer)		
AER-114	Aviation Management	3
AER-215	Flight Safety	3
AER-218	Human Factors in Aviation	2
Fourth Semester (Fall)		
AER-112	Aviation Laws and FARs	2
AER-170	Commercial Flight Theory	3
AER-216	Engines & Systems	3
BUS-110	Introduction to Business	3
CIS-110	Introduction to Computers	3
PSY-150	General Psychology	3
Fifth Semester (Spring)		
AER-210	Flight Dynamics	3
AER-211	Air Traffic Control	2
AER-217	Air Transportation	3
BUS-137	Principles of Management	3
HUM-115	Critical Thinking	3
Total Credit Hours Required		**67**

Aviation Management & Career Pilot Technology - Career Pilot (A60180CP)

Courses requiring a grade of "C" or better: ACA and AER

Preadmission Requirements		Credits
AER-151	Flight - Private Pilot *	1
First Semester (Fall)		
ACA-115	Success & Study Skills	1
AER-110	Air Navigation	3
AER-113	History of Aviation	2
AER-150	Private Pilot Flight Theory	3
ENG-111	Writing and Inquiry	3
MAT-121	Algebra/Trigonometry I	3
Second Semester (Spring)		
AER-111	Aviation Meteorology	3
AER-160	Instrument Flight Theory	3
AER-161	Flight-Instrument Pilot	2
COM-231	Public Speaking	3
PHY-110	Conceptual Physics	3
PHY-110A	Conceptual Physics Lab	1
Third Semester (Summer)		
AER-114	Aviation Management	3
AER-215	Flight Safety	3
AER-218	Human Factors in Aviation	2
Fourth Semester (Fall)		
AER-112	Aviation Laws and FARs	2
AER-170	Commercial Flight Theory	3
AER-216	Engines & Systems	3
CIS-110	Introduction to Computers	3
PSY-150	General Psychology	3
Fifth Semester (Spring)		
AER-171	Flight-Commercial Pilot	3
AER-210	Flight Dynamics	3
AER-211	Air Traffic Control	2
AER-217	Air Transportation	3
HUM-115	Critical Thinking	3
Total Credit Hours Required		**67**

Aviation - Private Pilot Certificate (C60180C1)

The Private Pilot certificate is designed for non-career track students to earn their Private Pilot certification without entering the degree program. Courses taken within this certification are also stackable within the degree program.

Courses requiring a grade of "C" or better: AER

First Semester (Fall)		**Credits**
AER-110	Air Navigation	3
AER-150	Private Pilot Flt Theory	3
Second Semester (Spring)		
AER-112	Aviation Laws and FARs	2
AER-151	Flight – Private Pilot*	1
AER-215	Flight Safety	3
Total Credit Hours Required		**12**

Aviation - Instrument Rating Certificate (C60180C2)

The Instrument Rating certificate is designed for non-career track students to earn their Private Pilot certification while adding on the Instrument Rating without entering the degree program. Courses taken within this certification are also stackable within the degree program.

Courses requiring a grade of "C" or better: AER

First Semester (Spring)		**Credits**
AER-111	Aviation Meteorology	3
AER-112	Aviation Laws and FARs	2
AER-151	Flight - Private Pilot *	1
AER-160	Instrument Flight Theory	3
AER-161	Flight – Instrument Rating	2
Second Semester (Summer)		
AER- 215	Flight Safety	3
Total Credit Hours Required		**14**

Students who have an FAA Private Pilot Certificate will be given credit for AER-110, AER-150, and AER-151.

Students who have an FAA Instrument Rating Certificate will be given credit for AER-160 and AER-161.

Students who have an FAA Commercial Pilot Certificate will be given credit for AER-170 and AER-171.

*Note, A-B Tech does not offer AER 151.

Basic Law Enforcement Training

Basic Law Enforcement Training (BLET) is designed to give students essential skills required for entry-level employment as law enforcement officers with state, county, or municipal governments, or with private enterprise.

This program utilizes State commission-mandated topics and methods of instruction. General subjects include, but are not limited to, criminal, juvenile, civil, traffic, and alcoholic beverage laws; investigative, patrol, custody, and court procedures; emergency responses; and ethics and community relations.

Students must successfully complete and pass all units of study which include the certification examination by the North Carolina Criminal Justice Education and Training Standards Commission and the North Carolina Sheriffs' Education and Training Standards Commission to receive a certificate.

The BLET program is accredited by the:

North Carolina Criminal Justice Education and Training Standards Commission

PO Drawer 149
Raleigh, NC 27602
Phone: (919) 661-5980
www.ncdoj.gov

Specific Program Requirements

1. General college admission requirements.
2. Meet all state and federal employment eligibility requirements.
3. Meet all minimum entry requirements as established in 12 NCAC 09B .0203.
4. Possess and maintain a valid driver's license
5. Submit to the School Director a TABE, Accu-Placer or other accepted reading comprehension test indicating a minimum 10th grade reading level.
6. Obtain sponsorship through a certified law enforcement agency. Sponsorship must be maintained throughout the training program.
7. Submit to the School Director a completed BLET Enrollment packet.
    a. Obtain a packet at https://www.abtech.edu/criminal-justice/basic-law-enforcement-training-overview or contact the BLET school Director at 828-782-2841.
    b. Applicants are admitted on a first-come, first-served basis with preference being afforded to applicants already employed by a law enforcement agency.
    c. Packets must be submitted at least two weeks prior to the scheduled start date.

Basic Law Enforcement Training Certificate Program (C55120)

Courses requiring a grade of "C" or better: LET

Major Requirements		**Credits**
LET-110	Basic Law Enforcement BLET	37
Total Credit Hours Required		**37**

Biomedical Equipment Technology

A course of study that prepares the students to use basic engineering principles and technical skills to install, operate, troubleshoot, and repair sophisticated devices and instrumentation used in the health care delivery system.

Includes instruction in instrument calibration, design and installation testing, system safety and maintenance procedures, procurement and installation procedures, and report preparation.

With an AAS degree and two years' experience, an individual should be able to become a certified Biomedical Equipment Technician.

Biomedical Equipment Technology Associate in Applied Science Degree (A50100)

Courses requiring a grade of "C" or better: BMT, EGR, ELC, and ELN

First Semester (Fall)		**Credits**
EGR-110	Intro to Engineering Tech	2
ELC-111	Intro to Electricity	3
ENG-111	Writing and Inquiry	3
MAT-121	Algebra/Trigonometry	3
Second Semester (Spring)		
BMT-111	Intro to Biomed field	2
CET-111	Computer Upgrade/Repair I	3
DFT-151	CAD I	3
ELC-131	Circuit Analysis I	4
ELN-152	Fabrication Techniques	2
Third Semester (Summer)		
COM-231	Public Speaking	3
ELC-117	Motors and Controls	4
HUM-115	Critical Thinking	3
PSY-150	General Psychology	3
Fourth Semester (Fall)		
ELN-131	Analog Electronics I	4
ELN-133	Digital Electronics	4
ELN-260	Prog Logic Controllers	4
Fifth Semester (Spring)		
BMT-212	BMET Instrumentation I	6
DFT-151	CAD I	3
ELC-228	PLC Applications	4
ELN-232	Intro to Microprocessors	4
ELN-234	Communication Systems	4
Total Credit Hours Required		**71**

Biomedical Equipment Technology Diploma (D50100)

Courses requiring a grade of "C" or better: BMT, EGR, ELC, and ELN

First Semester (Fall)		**Credits**
EGR-110	Intro to Engineering Tech	2
ELC-111	Intro to Electricity	3
MAT-121	Algebra/Trigonometry	3
Second Semester (Spring)		
BMT-111	Intro to Biomed field	2
BMT-212	BMET Instrumentation I	6
ELC-131	Circuit Analysis I	4
ELN-152	Fabrication Techniques	2
Third Semester (Summer)		
COM-231	Public Speaking	3
ELC-117	Motors and Controls	4
Fourth Semester (Fall)		
ELN-131	Analog Electronics I	4
ELN-133	Digital Electronics	4
Total Credit Hours Required		**37**

Biomedical Equipment Technology Certificate (C50100L1)

Courses requiring a grade of "C" or better: BMT, ELC, and ELN

First Semester (Fall)		**Credits**
ELC-111	Intro to Electricity	3
Second Semester (Spring)		
BMT-111	Intro to Biomed field	2
BMT-212	BMET Instrumentation I	6
ELC-131	Circuit Analysis I	4
ELN-152	Fabrication Techniques	2
Total Credit Hours Required		**17**

Brewing, Distillation and Fermentation

This curriculum is designed to prepare individuals for various careers in the brewing, distillation and fermentation industry. Classroom instruction, practical laboratory applications of brewing, distillation and fermentation principles and practices are included in the program of study.

Course work in brewing, distillation and fermentation includes production, operations, safety and sanitation and associated process technologies. Related course work is offered in fermentation production, safety and sanitation, applied craft beverage microbiology, agriculture, marketing, management, equipment, packaging and maintenance

Graduates should qualify for employment opportunities in the brewing, distillation and fermentation industry. Students may be eligible to sit for the professional Institute of Brewing and Distilling (IBD) certification exams which correspond to the program of study.

The Brewing, Distillation and Fermentation program prepares individuals to apply technical knowledge and skills to brew, distill and ferment various products, including beverages. Includes instruction in production of fermented products, cultivating, marketing, management, legal issues, inspection, maintenance, service and repair of equipment, facility operations, packaging, and sanitation.

Specific Program Requirements

1. General college admissions requirements
2. Brewing, Distillation and Fermentation is a capped program due to a limited amount of classroom and lab availability. This program has a limited selection process. See the Business & Hospitality Education section on the Competitive and Limited Programs page of the A-B Tech website. www.abtech.edu/admissions/selective-and-limited-programs. Requirements do include but are not limited to:
    a. Documentation of successful completion of High School Chemistry or CHM-092.
    b. Demonstrate college level placement in English and math as outlined in selection criteria.
    c. NCCCS requires that all students must be 21 years of age or older by the start of classes.
    d. Student applicants must be able to work in a physically demanding environment including but not limited to standing in a hot and wet work area for extending lengths of time; climbing stairs; repeatedly lifting equipment and product weighing up to 55 lbs., and safely maneuvering by hand equipment that weighs up to 170lbs.
    e. Brewing and Distillation facilities may require a criminal background check and/or drug testing prior to employment or co-op. In addition, national and/or state regulations may prohibit employment or co-op opportunities based on criminal records.

Brewing, Distillation and Fermentation Associate in Applied Science Degree (A15250)

Brewing Pathway & Distillation Pathway

Courses requiring a grade of "C" or better: BDF, HRM, SST, and WBL

First Semester (Fall)		**Credits**
BDF-111	BDF Safety & Sanitation	2
BDF-114	Craft Beer Brewing	2
BDF-125	Bev Tech & Calculations	2
BDF-220	Applied Craft Bev Chemistry	4
ENG-111	Writing and Inquiry	3
HRM-225	Beverage Management	3

Second Semester (Spring)		
BDF-110	Fermentation Production	4
BDF-115	Applied Craft Bev Microbiology	4
BDF-180	Sensory Evaluation	3
BDF-261	Bev Marketing & Sales	3
HRM-135	Facilities Management	3

Third Semester (Summer)		
MAT-110	Math Measurement & Literacy	3
WBL-112	Work-Based Learning I	2

Brewing Pathway:

Fourth Semester (Fall) - Brewing Pathway		
BDF-150	Craft Bev Lab Methods	3
BDF-215	Legal Issues-Fermentation	3
BDF-240	Seasonal Beer Production	4
BDF-250	BDF Packaging & Materials	3
HUM-115	Critical Thinking	3
SST-110	Intro to Sustainability	3

Fifth Semester (Spring) - Brewing Pathway		
BDF-170	Bev Tour & Tasting Mgt	3
BDF-230	Advanced Brewing	3
BDF-230A	Advanced Brewing Lab	1
COM-231	Public Speaking	3
ECO-151	Survey of Economics	3
HRM-220	Cost Control-Food & Bev	3

Distillation Pathway:

Fourth Semester (Fall) - Distillation Pathway

BDF-150	Craft Bev Lab Methods	3
BDF-215	Legal Issues-Fermentation	3
BDF-240	Seasonal Beer Production	4
BDF-250	BDF Packaging & Materials	3
HUM-115	Critical Thinking	3
SST-110	Intro to Sustainability	3

Fifth Semester (Spring) - Distillation Pathway

BDF-170	Bev Tour & Tasting Mgt	3
BDF-175	Distillation Operations	4
BDF-230	Advanced Brewing	3
BDF-230A	Advanced Brewing Lab	1
COM-231	Public Speaking	3
ECO-151	Survey of Economics	3
HRM-220	Cost Control-Food & Bev	3
Total Credit Hours Required for each Pathway		**70**

Students may take BDF-150 or BDF-170.

BDF-240 Is an optional class for the distillation pathway.

Brewing Methods and Operations Diploma

This curriculum is designed to prepare individuals for careers in the brewing industry. Classroom instruction, practical laboratory applications, fermentation principles and practices are included in the program of study.

Course work includes production, operations, safety and sanitation and associated process technologies. Related course work is offered in fermentation production and applied craft beverage microbiology and lab methods.

Graduates should qualify for employment opportunities in the brewing industry. Students may be eligible to sit for the professional Institute of Brewing and Distilling (IBD) certification exams which correspond to the program of study.

Specific Program Requirements

1. General college admissions requirements.
2. Brewing Methods and Operations is a capped program due to a limited amount of classroom and lab availability. See Selection Criteria and Procedures for Brewing, Distillation and Fermentation on the college admissions office web page for full details. Requirements do include but are not limited to:
   a. Documentation of successful completion of High School Chemistry or CHM-092.
   b. Demonstrate college level placement in English and math as outlined in selection criteria.
   c. NCCCS requires that all students must be 21 years of age or older by the start of classes.
   d. Student applicants must be able to work in a physically demanding environment including but not limited to standing in a hot and wet work area for extending lengths of time; climbing stairs; repeatedly lifting equipment and product weighing up to 55 lbs., and safely maneuvering by hand equipment that weighs up to 170 lbs.
   e. Brewing facilities may require a criminal background check and/or drug testing prior to employment or co-op. In addition, national and/or state regulations may prohibit employment or co-op opportunities based on criminal records.

Brewing Methods and Operations Diploma (D15250L1)

Courses requiring a grade of "C" or better: BDF, HRM, and WBL

First Semester (Fall)		**Credits**
BDF-111	BDF Safety & Sanitation	2
BDF-114	Craft Beer Brewing	2
BDF-125	Bev Tech & Calculations	2
BDF-220	Applied Craft Bev Chemistry	4
HRM-225	Beverage Management	3
MAT-110	Math Measurement & Literacy	3
Second Semester (Spring)		
BDF-110	Fermentation Production	4
BDF-115	Applied Craft Bev Microbiology	4
BDF-180	Sensory Evaluation	3
BDF-261	Bev Marketing & Sales	3
ENG-111	Writing and Inquiry	3
HRM-135	Facilities Management	3
Third Semester (Summer)		
WBL 112	Work-Based Learning I	2
Total Credit Hours Required		**38**

Distillation Methods and Operations Diploma

This curriculum is designed to prepare individuals for careers in the distillation industry. Classroom instruction, practical laboratory applications distillation principles and practices are included in the program of study.

Course work includes production, operations, safety and sanitation and associated process technologies. Related course work is offered in fermentation production and applied craft beverage microbiology and lab methods.

Graduates should qualify for employment opportunities in the distillation industry. Students may be eligible to sit for the professional Institute of Brewing and Distilling (IBD) certification exams which correspond to the program of study.

Specific Program Requirements

1. General college admissions requirements.
2. Distillation Methods and Operations is a capped program due to a limited amount of classroom and lab availability. See Selection Criteria and Procedures for Brewing, Distillation and Fermentation on the college admissions office web page for full details. Requirements do include but are not limited to:
    a. Documentation of successful completion of High School Chemistry or CHM-092.
    b. Demonstrate college level placement in English and math as outlined in selection criteria.
    c. NCCCS requires that all students must be 21 years of age or older by the start of classes.
    d. Student applicants must be able to work in a physically demanding environment including but not limited to standing in a hot and wet work area for extending lengths of time; climbing stairs; repeatedly lifting equipment and product weighing up to 55 lbs., and safely maneuvering by hand equipment that weighs up to 170 lbs.
    e. Distillation facilities may require a criminal background check and/or drug testing prior to employment or co-op. In addition, national and/or state regulations may prohibit employment or co-op opportunities based on criminal records.

Distillation Methods and Operations Diploma (D15250L2)

Courses requiring a grade of "C" or better: BDF and WBL

First Semester (Fall)		**Credits**
BDF-111	BDF Safety & Sanitation	2
BDF-117	Distillation Methods	2
BDF-125	Bev Tech & Calculations	2
BDF-150	Craft Bev Lab Methods	3
BDF-215	Legal Issues-Fermentation	3
BDF-220	Applied Craft Bev Chemistry	4
Second Semester (Spring)		
BDF-110	Fermentation Production	4
BDF-115	Applied Craft Bev Microbiology	4
BDF-175	Distillation Operations	4
BDF-180	Sensory Evaluation	3
COM-231	Public Speaking	3
MAT-110	Math Measurement & Literacy	3
Third Semester (Summer)		
WBL-112	Work-Based Learning I	2
Total Credit Hours Required		**39**

Craft Beverage Lab Certificate

The Craft Beverage Lab certificate provides beverage industry employees the concepts and skills to upgrade or cross-train in their careers in the beverage industry. In addition, successful completion of the certificate will allow previously trained lab technicians in other fields such as medical to learn new concepts and skills and to transfer knowledge to the beverage industry.

Specific Program Requirements

1. General college admissions requirements
2. Brewing, Distillation and Fermentation is a capped program due to a limited amount of classroom and lab availability. This program has a limited selection process. See the Business & Hospitality Education section on the Competitive and Limited Programs page of the A-B Tech website. www.abtech.edu/admissions/selective-and-limited-programs. Requirements do include but are not limited to:
    a. Documentation of successful completion of High School Chemistry or CHM-092.
    b. Demonstrate college level placement in English and math as outlined in selection criteria.
    c. NCCCS requires that all students must be 21 years of age or older by the start of classes.
    d. Student applicants must be able to work in a physically demanding environment including but not limited to standing in a hot and wet work area for extending lengths of time; climbing stairs; repeatedly lifting equipment and product weighing up to 55 lbs., and safely maneuvering by hand equipment that weighs up to 170 lbs.
    e. Brewing and Distillation facilities may require a criminal background check and/or drug testing prior to employment or co-op. In addition, national and/or state regulations may prohibit employment or co-op opportunities based on criminal records.

Craft Beverage Lab Certificate (C15250L1)

Courses requiring a grade of "C" or better: BDF

First Semester (Fall)		**Credits**
BDF-114	Craft Beer Brewing	2
BDF-150	Craft Bev Lab Methods	3
BDF-220	Applied Craft Bev Chemistry	4
Second Semester (Spring)		
BDF-110	Fermentation Production	4
BDF-115	Applied Craft Bev Microbiology	4
Total Credit Hours Required		**17**

Business Administration

The Business Administration curriculum is designed to introduce students to the various aspects of the free enterprise system. Students will be provided with a fundamental knowledge of business functions, processes, and an understanding of business organizations in today's global economy.

Course work includes business concepts such as accounting, business law, economics, management, and marketing. Skills related to the application of these concepts are developed through the study of computer applications, communication, team building, and decision making.

Through these skills, students will have a sound business education base for lifelong learning. Graduates are prepared for employment opportunities in government agencies, financial institutions, and large to small business or industry.

Business Administration: General Business Administration Associate in Applied Science (A25120BA)

Courses requiring a grade of "C" or better: ACA, ACC, BUS, CIS, ECO, MKT, and WEB

First Semester (Fall)		**Credits**
ACA-115	Success & Study Skills	1
BUS-110	Introduction to Business	3
CIS-110	Introduction to Computers	3
ENG-111	Writing and Inquiry	3
MAT-143	Quantitative Literacy	3
Second Semester (Spring)		
ACC-120	Prin of Financial Accounting	4
BUS-270	Professional Development	3
ECO-251	Prin of Microeconomics	3
ETR-210	Intro to Entrepreneurship	3
MKT-120	Principles of Marketing	3
Third Semester (Summer)		
ENG-112	Writing/Research in the Disc	3
HUM-115	Critical Thinking	3
SOC-210	Introduction to Sociology	3
Fourth Semester (Fall)		
ACC-121	Prin of Managerial Accounting	4
BUS-115	Business Law I	3
BUS-137	Principles of Management	3
BUS-153	Human Resource Management	3
ECO-252	Principles of Macroeconomics	3
Fifth Semester (Spring)		
BUS-147	Business Insurance	3
BUS-230	Small Business Management	3
CTS-130	Spreadsheet	3
MKT-223	Customer Experience	3
WEB-140	Web Development Tools	3
Total Credit Hours Required		**69**

The Business Administration AAS is offered in a 100% online format. Distance learning allows the degree to be completed around the student's personal schedule without the need to travel to a physical location.

Business Administration Certificate (C25120L4)

The Business Administration Certificate provides students with the opportunity to begin to develop an understanding of the various aspects of the free enterprise system. The certificate is applicable across a wide range of potential businesses both for-and-not-for-profit and all coursework can be applied toward the Business Administration: General Business Administration Associate in Applied Science.

Courses requiring a grade of "C" or better: BUS, ECO, and MKT

First Semester (Fall)		**Credits**
BUS-110	Introduction to Business	3
ECO-251	Prin of Microeconomics	3
MKT-120	Principles of Marketing	3
Second Semester (Spring)		
BUS-137	Principles of Management	3
BUS-153	Human Resources Management	3
MKT-223	Customer Experience	3
Total Credit Hours Required		**18**

The Business Administration Certificate is offered in a 100% online format. Distance learning allows the certificate to be completed around the student's personal schedule without the need to travel to a physical location.

Entrepreneurship Certificate (C25120L5)

The Entrepreneurship Certificate is designed for aspiring entrepreneurs, early-stage business owners, and innovative thinkers seeking to transform ideas into actionable business opportunities. Students will gain the foundational knowledge, practical skills, and the entrepreneurial framework necessary to start, grow, and sustain a business in today's dynamic and competitive environment. Coursework is designed to foster and embrace the entrepreneurial mindset.

Courses requiring a grade of "C" or better: BUS and ETR

First Semester (Fall)		Credits
BUS-110	Introduction to Business	3
BUS-115	Business Law I	3
BUS-139	Entrepreneurship I	3
Second Semester (Spring)		
BUS-175	Contract Negotiations	3
ETR-210	Intro to Entrepreneurship	3
ETR-220	Innovation and Creativity	3
Total Credit Hours Required		**18**

The Entrepreneurship Certificate is offered in a 100% online format. Distance learning allows the certificate to be completed around the student's personal schedule without the need to travel to a physical location.

Business Administration: Marketing and Retailing Associate in Applied Science Degree (A25120MK)

Marketing and Retailing is a concentration under the curriculum title of Business Administration. This curriculum is designed to provide students with fundamental skills in marketing and retailing, while embracing the digital landscapes of modern marketing techniques.

Course work includes marketing, retailing, merchandising, selling, advertising, computer technology, and management.

Graduates should qualify for marketing positions within manufacturing, retailing, and service organizations.

Courses requiring a grade of "C" or better: ACA, ACC, BUS, CIS, ECO, and MKT

First Semester (Fall)		Credits
ACA-115	Success & Study Skills	1
ACC-120	Prin of Financial Accounting	4
BUS-110	Introduction to Business	3
CIS-110	Introduction to Computers	3
ENG-111	Writing and Inquiry	3
MAT-143	Quantitative Literacy	3
Second Semester (Spring)		
BUS-137	Principles of Management	3
ETR-210	Intro to Entrepreneurship	3
MKT-120	Principles of Marketing	3
MKT-121	Retailing	3
MKT-123	Fundamentals of Selling	3
Third Semester (Summer)		
ECO-251	Prin of Microeconomics	3
ENG-112	Writing/Research in the Disc	3
HUM-115	Critical Thinking	3
Fourth Semester (Fall)		
BUS-115	Business Law I	3
MKT-221	Consumer Behavior	3
MKT -232	Social Media Marketing	3
MKT-234	Digital Marketing	3
SOC-210	Introduction to Sociology	3
Fifth Semester (Spring)		
ETR-220	Innovation and Creativity	3
MKT-220	Advertising and Sales Promotion	3
MKT-223	Customer Experience	3
MKT-225	Marketing Research	3
MKT-227	Marketing Applications	3
Total Credit Hours Required		**71**

Retail Marketing Certificate (C25120M1)

The Retail Marketing Certificate is designed to equip students with essential skills and strategies to understand the competitive retail landscape. Students will learn the fundamentals of marketing goods and services. Each course delves into the latest trends and techniques, providing practical insights to thrive in the competitive retail landscape. All coursework can be applied toward the Business Administration: Marketing and Retailing Associate in Applied Science Degree.

Courses requiring a grade of "C" or better: BUS and MKT

First Semester (Fall)		Credits
BUS-110	Introduction to Business	3
MKT-120	Principles of Marketing	3
MKT-221	Consumer Behavior	3
Second Semester (Spring)		
MKT-121	Retailing	3
MKT-123	Fundamentals of Selling	3
MKT-223	Customer Experience	3
Total Credit Hours Required		**18**

Essentials to Social Media Marketing Certificate (C25120M2)

The Essentials of Social Media Marketing Certificate equips students with the knowledge and skills needed to excel in the fast-paced and ever-evolving world of digital marketing. This program focuses on key principles of marketing, consumer behavior, and advertising, with a strong emphasis on social media and digital platforms. Students will learn how to create, implement, and analyze effective social media strategies, develop digital advertising campaigns, and understand the psychology behind consumer decision-making. This certificate prepares students for entry-level roles in marketing, social media management, and digital strategy, or for further study in related fields.

Courses requiring a grade of "C" or better: BUS and MKT

Required Courses		Credits
BUS-110	Introduction to Business	3
MKT-120	Principles of Marketing	3
MKT-220	Advertising & Sales Promotion	3
MKT-221	Consumer Behavior	3
MKT-232	Social Media Marketing	3
MKT-234	Digital Marketing	3
Total Credit Hours Required		**18**

Business Administration: Sports Management Associate in Applied Science Degree (A25120SM)

Sports Management is a concentration under the curriculum title of Business Administration. This curriculum is designed to provide students with the fundamental skills in sports management. The program is designed for individuals who are interested in the business-side of sports. In doing so, this program will provide knowledge needed for management of sports organizations, events planning, overseeing facilities, and recognizing the growing field of esports. Coursework covers areas in sports marketing, financial and business management, and the logistical aspects of sports operations.

Graduates of this program would be qualified to work within professional or college athletic departments, recreational centers, sports complexes, fitness organizations, and esports companies.

Courses requiring a grade of "C" or better: ACA, ACC, BUS, CIS, ECO, and MKT

First Semester (Fall)		**Credits**
ACA-115	Success & Study Skills	1
BUS-110	Introduction to Business	3
BUS-115	Business Law I	3
CIS-110	Introduction to Computers	3
ENG-111	Writing and Inquiry	3
MAT-143	Quantitative Literacy	3
Second Semester (Spring)		
ACC-120	Prin of Financial Accounting	4
BUS-132	Sports Management Marketing	3
ECO-251	Prin of Microeconomics	3
ETR-210	Intro to Entrepreneurship	3
MKT-120	Principles of Marketing	3
Third Semester (Summer)		
ENG-112	Writing/Research in the Disc	3
HUM-115	Critical Thinking	3
SOC-210	Introduction to Sociology	3
Fourth Semester (Fall)		
BUS-131	Sports Management Logistics	3
BUS-133	Sports Facility/Rec Mgmt	3
BUS-136	Introduction to Esports Management	3
BUS-137	Principles of Management	3
CTS-130	Spreadsheets	3
Fifth Semester (Spring)		
BUS-147	Business Insurance	3
BUS-153	Human Resource Management	3
BUS-270	Professional Development	3
ECO-252	Prin of Macroeconomics	3
MKT-223	Customer Experience	3
Total Credit Hours Required		**71**

Essentials of Sports Management Certificate (C25120S1)

The Essentials of Sports Management Certificate provides students with the foundational knowledge and skills necessary for careers in the field of sports management. This program introduces students to the process of managing sports organizations, marketing strategies, logistics, and facility operations, with a focus on practical applications in both traditional and emerging areas like esports. Students will also gain an understanding of business law and management principles, preparing them for entry-level roles in sports and recreation management or further academic study in business and sports-related fields.

Courses requiring a grade of "C" or better: BUS

Required Courses		Credits
BUS-115	Business Law I	3
BUS-131	Sports Management Logistics	3
BUS-132	Sports Management Marketing	3
BUS-133	Sports Facility/Rec Mgmt	3
BUS-136	Introduction to Esports Management	3
BUS-137	Principles of Management	3
Total Credit Hours Required		**18**

The Essentials of Sports Management Certificate is offered in a 100% online format. Distance learning allows the certificate to be completed around the student's personal schedule without the need to travel to a physical location.

Cardiovascular Sonography

The Cardiovascular Sonography curriculum provides the individual with the knowledge and skills necessary to acquire, process, and evaluate the human heart and vascular structures. A cardiovascular sonographer uses high frequency sound waves to produce images of the heart and vascular structures.

Course work includes effective communication and patient care skills combined with a knowledge of physics, human anatomy, physiology, and pathology, all of which are essential to obtaining high quality sonographic images.

Graduates may be eligible to apply to the American Registry of Diagnostic Medical Sonographers for examinations in physics, cardiovascular physics, vascular physics, vascular, and adult echocardiography. Graduates may find employment in hospitals, physicians' offices, mobile services, and educational institutions.

The Diagnostic Medical Sonography Program is accredited in Abdomen Extended, OB/GYN, Adult Cardiac and Vascular concentrations. The following are the accrediting agencies:

Commission on Accreditation of Allied Health Education Programs (CAAHEP)
9355 113th St. N. #7709
Seminole, FL 33775 Phone: (727) 210-2350
Fax: (727) 210-2354
www.caahep.org

Joint Review Committee on Education in Diagnostic Medical Sonography (JRC-DMS)
6021 University Boulevard, Suite 500 Ellicott City, MD 21043
Phone: (443) 973-3251
www.jrcdms.org

Specific Program Requirements:

1. General college admission requirements.
2. This program has a selective selection process. See Selective Allied Health Program Criteria on the Selective and Limited Programs page of the A-B Tech website. www.abtech.edu/selective-limited-programs
3. Keyboarding skills are highly recommended.
4. Final admission to the Sonography program shall be contingent upon documentation of physical and emotional health that would provide evidence indicative of the applicant's ability to provide safe care to the public. Completed medical and immunization records must be submitted before classes begin.
5. Either first dose of Hepatitis B vaccine or completion of series.
6. Current American Heart Association (AHA) Basic Life Support (BLS) for Healthcare Providers certification is a prerequisite to full admission and must be maintained throughout the program. This certification must include hands-on skills components, AED use, and other lifesaving skills. Course certifications from any other providers will not be accepted.
7. Satisfactory completion of required immunizations prior to admission to clinical sites. Affiliated clinical sites for Sonography will require an on boarding process, which will include a criminal background check and drug screen prior to the term in which the first clinical experience will occur. If any clinical facility refuses to allow the student to participate in clinical experiences, for any reason, the student will not be able to progress in the program.
8. Sonography students will be required to complete clinical rotations that may require them to travel as much as two hours from campus.
9. Students applying to the Cardiovascular Sonography program must have successfully completed BIO 163 (or advisor-approved substitution-COM-120, and MAT 110 with a "C" or better prior to program application. Students applying to the Cardiovascular Sonography program must have successfully completed PHY-125 with a "C" or better prior to full acceptance to the program. Students applying to the Cardiovascular Sonography program are encouraged to have successfully completed: ENG-111, PHI-240, and PSY-150 prior to program admission due to the rigorous nature of the Cardiovascular Sonography curriculum.

Cardiovascular Sonography Associate in Applied Science Degree (A45160)

Courses requiring a grade of "C" or better: BIO, COM, CVS, ENG, MAT, PHY, and SON

Preadmission Requirements		**Credits**
BIO-163	Basic Anatomy and Physiology	5
COM-120	Intro Interpersonal Communication	3
MAT-110	Math Measurement & Literacy	3
PHY-125	Health Sciences Physics	4
First Semester (Fall)		
CVS-160	CVS Clinical Ed I	5
CVS-163	Echo I	4
SON-111	Sonographic Physics	4
Second Semester (Spring)		
ENG-111	Writing and Inquiry	3
CVS-161	CVS Clinical Education II	8
CVS-164	Echo II	4

Third Semester (Summer)		
CVS-162	CVS Clinical Education III	5

Fourth Semester (Fall)		
CVS-260	CVS Clinical Education IV	5
PSY-150	General Psychology	3
SON-250	Vascular Sonography	2

Fifth Semester (Spring)		
CVS-261	CVS Clinical Education V	8
CVS-277	Cardiovascular Topics	2
PHI-240	Introduction to Ethics	3
Total Credit Hours Required		**74**

Program total includes 12 credit hours of successful completion of BIO-163, COM-120, and MAT-110 with a grade of "C" or better prior to application and 4 hours of successful completion of PHY-125 with a grade of "C" or better as a prerequisite to full admission into the Cardiovascular Sonography Program.

Computer Engineering Technology

A course of study that prepares the students to use basic engineering principles and technical skills for installing, servicing, and maintaining computers, peripherals, networks, and microprocessor and computer controlled equipment.

Includes instruction in mathematics, computer electronics and programming, prototype development and testing, systems installation and testing, solid state and microminiature circuitry, peripheral equipment, and report preparation.

Graduates should qualify for employment opportunities in electronics technology, computer service, computer networks, server maintenance, programming, and other areas requiring knowledge of electronic and computer systems. Graduates may also qualify for certification in electronics, computers, or networks.

Computer Engineering Technology Associate in Applied Science Degree (A40160)

Courses requiring a grade of "C" or better: CET, ELC, and ELN

First Semester (Fall)		**Credits**
CIS-110	Introduction to Computers	3
ELC-111	Intro to Electricity	3
ENG -111	Writing and Inquiry	3
MAT-121	Algebra/Trigonometry	3
NOS-110	Operating System Concepts	3

Second Semester (Spring)		
CET-111	Computer Upgrade/Repair I	3
ELC-131	Circuit Analysis I	4
NET-125	Introduction to Networks	3
NOS-120	Linux Single User	3

Third Semester (Summer)		
COM-231	Public Speaking	3
HUM -115	Critical Thinking	3
NET-126	Switching and Routing	3
PSY-150	General Psychology	3

Fourth Semester (Fall)		
ATR-112	Intro to Automation	3
ELN-131	Analog Electronics I	4
ELN-133	Digital Electronics	4
NET-225	Enterprise Networking	3

Fifth Semester (Spring)		
CSC-121	Python Programming	3
ELN-152	Fabrication Techniques	2
ELN-232	Intro to Microprocessors	4
ELN-260	Prog Logic Controllers	4
Total Credit Hours Required		**67**

Computer Engineering Technology Diploma (D40160)

The Computer Engineering Technology Diploma equips students with a robust foundation in computer engineering principles. Students will engage with coursework covering electronics applications, computer hardware, networking, operating systems, and automation. Emphasis is placed on practical skills ensuring students are prepared for a career in the installation, maintenance, and repair of computer systems.

Courses requiring a grade of "C" or better: CET, ELC, and ELN

First Semester (Fall)		**Credits**
ELC-111	Intro to Electricity	3
MAT-121	Algebra/Trigonometry	3
NOS-110	Operating System Concepts	3

Second Semester (Spring)		
CET-111	Computer Upgrade/Repair I	3
ELC-131	Circuit Analysis I	4
NET-125	Introduction to Networks	3

Third Semester (Summer)		
COM-231	Public Speaking	3
NET-126	Switching and Routing	3

Fourth Semester (Fall)		
ELN-131	Analog Electronics I	4t
ELN-133	Digital Electronics	4
ELN-260	Prog Logic Controllers	4
Total Credit Hours Required		**43**

Computer Engineering Technology Certificate (C40160L2)

The Computer Engineering Technology Certificate program offers a concentrated curriculum to prepare students with the concepts and skills needed to troubleshoot computer hardware issues. Key areas of study include electrical concepts and troubleshooting, microprocessors, and network technologies. This program is designed to provide hands-on experience and technical knowledge, paving the way for entry-level positions or further study in the field of computer engineering.

Courses requiring a grade of "C" or better: CET, ELC, and ELN

First Semester (Fall)		**Credits**
CET-111	Computer Upgrade/Repair I	3
ELC-111	Intro to Electricity	3
NOS-110	Operating System Concepts	3

Second Semester (Spring)		
ELN-152	Fabrication Techniques	2
ELN-232	Intro to Microprocessors	4
NET-125	Introduction to Networks	3
Total Credit Hours Required		**18**

Computer-Integrated Machining

The Computer-Integrated Machining curriculum prepares students with the analytical, creative and innovative skills necessary to take a production idea from an initial concept through design, development, and production, resulting in a finished product.

Coursework may include manual machining, computer applications, engineering design, computer-aided drafting (CAD), computer-aided machining (CAM), blueprint interpretation, advanced computerized numeric control (CNC) equipment, basic and advanced machining operations, precision measurement, and high-speed multi-axis machining.

Graduates should qualify for employment as machining technicians in high-tech manufacturing, rapid-prototyping and rapid-manufacturing industries, specialty machine shops, fabrication industries, and high-tech or emerging industries such as aerospace, aviation, medical, and renewable energy, and to sit for machining certification examinations.

Computer-Integrated Machining Associate in Applied Science Degree (A50210)

Courses requiring a grade of "C" or better: ATR, EGR, ISC, MAC, and MEC

First Semester (Fall)		**Credits**
EGR-110	Intro to Engineering Technology	2
MAC-122	CNC Turning	2
MAC-124	CNC Milling	2
MAC-131	Blueprint Reading/Mach I	2
MAC-141	Machining Applications I	4
MAC-171	Measure/Material & Safety	1
MEC-110	Intro to CAD/CAM	2

Second Semester (Spring)		
ISC-116	Lean Mfg Principles/Practices	1
ISC-132	Mfg Quality Control	3
MAC-132	Blueprint Reading/Mach II	2
MAC-142	Machining Applications II	4
MAC-228	Advanced CNC Processes	3
MAT-110	Math Measurement & Literacy	3

Third Semester (Summer)		
ENG-110	Freshman Composition	3
MAC-160	Coordinate Measuring Mach	3
MAC-248	Production Procedures	2

Fourth Semester (Fall)		
ATR-112	Intro to Automation	3
COM-120	Intro Interpersonal Com	3
HUM-115	Critical Thinking	3
MAC-226	CNC EDM Machining	2
MAC-245	Mold Construction I	4

Fifth Semester (Spring)		
ATR-212	Industrial Robots	3
EGR-285	Design Project	2
MAC-234	Adv Four/Five-Axis Machining	3
MAC-234A	Adv Four/Five-Axis Machining Lab	1
PSY-150	General Psychology	3
Total Credit Hours Required		**68**

Computer-Integrated Machining Diploma (D50210)

Courses requiring a grade of "C" or better: EGR, ISC, MAC, and MEC

First Semester (Fall)		**Credits**
EGR-110	Intro to Engineering Technology	2
MAC-122	CNC Turning	2
MAC-124	CNC Milling	2
MAC-131	Blueprint Reading/Mach I	2
MAC -141	Machining Applications I	4
MAC-171	Measure/Material & Safety	1
MEC-110	Intro to CAD/CAM	2
Second Semester (Spring)		
ISC-116	Lean Mfg Principles/Practices	1
ISC-132	Mfg Quality Control	3
MAC-132	Blueprint Reading/Mach II	2
MAC-142	Machining Applications II	4
MAC-228	Advanced CNC Processes	3
MAT-110	Math Measurement & Literacy	3
Third Semester (Summer)		
ENG-110	Freshman Composition	3
MAC-160	Coordinate Measuring Mach	3
MAC-248	Production Procedures	2
Total Credit Hours Required		**41**

Advanced Machine Operator Certificate (C50210L6)

The Advance Machining Operator Certificate program provides a foundational knowledge in manufacturing and machining operations, print reading, CNC, industrial safety, 5S, Lean manufacturing, quality control, and Total Productive Maintenance (TPM) with an emphasis on preventative maintenance. Students learn the foundational theory and practical understanding of manufacturing with machining operations through lectures and intensive hands-on lab activities with real industry equipment. The program can be completed in one semester and integrates numerous third-party credentials such as First Aid, CPR, AED, Forklift, Personal Protective Equipment, Test Meters, and the Society of Manufacturing Engineers Certified Manufacturing Associate (CMfgA).

The program also serves as a Department of Labor approved Pre-Apprenticeship Program. Graduates have the option of completing the Computer-Integrated Machining and CNC Programing Certificate in the following Spring semester, with just a few additional courses.

Courses requiring a grade of "C" or better: MAC, MEC, and ISC

First Semester (Fall)		**Credits**
MAC-131	Blueprint Reading/Mach I	2
MAC-141	Machining Applications I	4
MAC-171	Measure/Material & Safety	1
MEC-110	Intro to CAD/CAM	2
Second Semester (Spring)		
ISC-116	Lean Mfg Principles/Practices	1
ISC-121	Envir Health & Safety	3
ISC-132	Mfg Quality Control	3
Total Credit Hours Required		**16**

CNC Machine Programmer Certificate (C50210L7)

Courses requiring a grade of "C" or better: EGR, MAC, and MEC

First Semester (Fall)		**Credits**
EGR-110	Intro to Engineering Technology	2
MAC-122	CNC Turning	2
MAC-124	CNC Milling	2
MAC-131	Blueprint Reading/Mach I	2
MAC-141	Machining Applications I	4
MAC-171	Measure/Material & Safety	1
MEC-110	Intro to CAD/CAM	2
Total Credit Hours Required		**17**

Quality & Lean Six-Sigma Certificate (C50210L8)

Courses requiring a grade of "C" or better: ISC, MAC, and MEC

First Semester (Fall)		**Credits**
MAC-131	Blueprint Reading/Mach I	2
MAC-141	Machining Applications I	4
MAC-171	Measure/Material & Safety	1
Second Semester (Spring)		
MAC-132	Blueprint Reading/Mach II	2
MEC-110	Intro to CAD/CAM	2
ISC-116	Lean Mfg Principles/Practices	1
ISC-132	Mfg Quality Control	3
Total Credit Hours Required		**17**

EDM & Fixture Specialist Certificate (C50210L9)

Courses requiring a grade of "C" or better: MAC and MEC

First Semester (Fall)		
MAC-124	CNC Milling	2
MAC-131	Blueprint Reading/Mach I	2
MAC-141	Machining Applications I	4
MAC-226	CNC EDM Machining	2
MAC-245	Mold Construction I	4
MEC-110	Intro to CAD/CAM	2
Total Credit Hours Required		**18**

Robotics & Multi-Axis Machining Certificate (C50210C1)

Courses requiring a grade of "C" or better: ATR and MAC

First Semester (Fall)		**Credits**
ATR-112	Intro to Automation	3
MAC-122	CNC Turning	2
MAC-124	CNC Milling	2
Second Semester (Spring)		
ATR-212	Industrial Robots	3
MAC-228	Advanced CNC Processes	3
MAC-234	Adv Four/Five-Axis Machining	3
MAC-234A	Adv Four/Five-Axis Machining Lab	1
Total Credit Hours Required		**17**

Construction Management Technology

The Construction Management Technology program prepares individuals to supervise, manage, and inspect construction sites, buildings, and associated facilities. Includes instruction in site safety, personnel supervision, labor relations, diversity training, construction documentation, scheduling, resource and cost control, bid strategies, rework prevention, construction insurance and bonding, accident management and investigation, applicable law and regulations, and communication skills.

Graduates will qualify for entry-level positions in the field of construction management.

CMT students are eligible for entry-level management positions in traditional commercial and residential construction projects as well as non-traditional construction projects such as large wind turbine and photovoltaic solar projects.

Construction Management Technology Associate in Applied Science (A35190)

Courses requiring a grade of "C" or better: ALT, ARC, BPR, BUS, CST, CMT, ELC, SPA, and SST

First Semester (Fall)		**Credits**
ARC-112	Const Matls & Methods	4
CST-150	Building Science	3
	Major Elective	8
Second Semester (Spring)		
ARC-131	Building Codes	3
DFT-151	CAD I	3
ENG-111	Writing and Inquiry	3
SST-140	Green Bldg & Design Concepts	3
	Major Elective	4
Third Semester (Summer)		
BPR-130	Print Reading-Construction	3
COM-120	Intro Interpersonal Com	3
SOC-210	Introduction to Sociology	3
Fourth Semester (Fall)		
CMT-210	Construction Management Fund	3
CMT-212	Total Safety Performance	3
HUM-115	Critical Thinking	3
MAT-110	Math Measurement & Literacy	3
SPA-120	Spanish for the Workplace	3
Fifth Semester (Spring)		
BUS-139	Entrepreneurship I	3
CMT-214	Planning & Scheduling	3
CMT-216	Cost & Productivity	3
CST-241	Planning/Estimating I	3
SST-120	Energy Use Analysis	3
Total Credit Hours Required		**70**

Major Electives: AGR-267, ALT-120, CAB-119, CST-111, CST-112, ELC-111, SST-110

Academic Programs

Building Construction Science Diploma (D35190)

This program focuses on live projects and hands-on activities to teach students energy efficient construction materials and methods associated with high-performance buildings. Students will learn advanced framing methods. Students will also learn energy auditing techniques and software associated with building energy analysis. Students will graduate from this program with the skills required to build high-performance buildings and monitor their energy use. As the construction industry reinvents itself around more sustainable building concepts, the Building Construction Science Program at A-B Tech is the "go to" place for training.

All credits in this program can transfer into the Associates Degree in Construction Management Technology, which would allow a student to graduate in two years with a diploma and a degree. Some credits will transfer into four-year programs.

Courses requiring a grade of "C" or better: ARC, BPR, CMT, CST, and SST

First Semester (Fall)		**Credits**
ARC-112	Constr Matls & Methods	4
CMT-210	Construction Management Fund	3
CST-111	Construction I	4
CST-112	Construction II	4
CST-150	Building Science	3
Second Semester (Spring)		
ARC-131	Building Codes	3
CST-241	Planning/ Estimating I	3
SST-120	Energy Use Analysis	3
SST-140	Green Bldg & Design Concepts	3
Third Semester (Summer)		
BPR-130	Print Reading - Construction	3
ENG-111	Writing and Inquiry	3
MAT-121	Algebra/Trigonometry I	3
Total Credit Hours Required		**39**

Construction Management Technology Certificate (C35190L1)

The Construction Management Technology certificate is designed for the skilled tradesperson who is experienced in the construction industry and has the desire to advance to construction management. Courses from this certificate may also apply towards the CMT AAS degree and/or the Building Science diploma.

Courses requiring a grade of "C" or better: BPR, CMT, and CST

First Semester (Fall)		**Credits**
BPR-130	Print Reading/Construction	3
CMT-210	Construction Management Fund	3
CMT-212	Total Safety Performance	3
Second Semester (Spring)		
CMT-214	Planning and Scheduling	3
CMT-216	Costs and Productivity	3
CST-241	Planning/Estimating I	3
Total Credit Hours Required		**18**

Construction & Millwork Certificate (C35190L2)

Whether you are building your own home or just looking for practical skills to help with projects around the house, the Basic Construction & Millwork Certificate program is consolidated and focuses on hands on construction cabinetmaking/woodworking skill-sets.

Students who want to gain applicable skills for personal construction projects or to become more employable in the construction industry can look no further…the Basic Construction & Millwork program focuses on four classes that will help you become the handy person you've always wanted to be.

One way to manage the affordable housing issue in our area is to have skills that can provide sweat equity in your own home or perhaps help pay the rent. These are practical skills that can be taken anywhere while providing the security of a labor force that is difficult to outsource in the global economy. Come utilize our great shop & equipment resources & see why A-B Tech is the community's Community College.

Courses requiring a grade of "C" or better: BPR and CST

First Semester (Fall)		**Credits**
BPR-130	Print Reading - Construction	3
CAB-119	Cabinetry/ Millworking	7
CST-111	Construction I	4
CST-112	Construction II	4
Total Credit Hours Required		**18**

Green Building & Carpentry Certificate - (C35190L5)

Our training provides hands-on skills in advanced framing to build high performance buildings. Whether you want to join the workforce or build your own shelter, we welcome all regardless of skill-level and experience.

Courses requiring a grade of "C" or better: CST and SST

First Semester (Fall)		Credits
CST-111	Construction I	4
CST-150	Building Science	3
SST-110	Intro to Sustainability	3
Second Semester (Spring)		
SST-120	Energy Use Analysis	3
SST-140	Green Bldg & Design Concepts	3
Total Credit Hours Required		**16**

Residential Design Certificate (C35190L7)

This state-recognized curriculum credential introduces students to sustainable design concepts and strategies for anyone interested in residential design. Students will develop an understanding of the built environment and how building science and sustainability are incorporated into design considerations for high performance buildings and energy efficiency.

Courses requiring a grade of "C" or better: ARC, BPR CST, DFT, and SST

First Semester (Fall)		Credits
ARC-112	Constr Matls & Methods	4
BPR-130	Print Reading - Construction	3
CST-150	Building Science	3
Second Semester (Spring)		
DFT-151	CAD I	3
SST-140	Green Bldg & Design Concepts	3
Total Credit Hours Required		**16**

Sustainable Agriculture and Construction Certificate (C35190L6)

This certificate introduces students to permaculture concepts and hands-on carpentry, two essential skill-sets for anyone interested in homesteading and self-sufficiency.

Courses requiring a grade of "C" or better: ALT, AGR, CST and SST

First Semester (Fall)		Credits
AGR-267	Permaculture	3
ALT-120	Renewable Energy Techn	3
CST-111	Construction I	4
Second Semester (Spring)		
SST-110	Intro to Sustainability	3
SST-120	Energy Use Analysis	3
Total Credit Hours Required		**16**

Sustainability Certificate (C35190L4)

Sustainability concepts permeate many different disciplines and industries. This certificate provides a solid foundation & concepts that can be incorporated into a variety of career options to help solve some of the biggest challenges facing society.

Courses requiring a grade of "C" or better: AGR, ALT, and SST

First Semester (Fall)		Credits
AGR-267	Permaculture	3
ALT-120	Renewable Energy Techn	3
SST-110	Intro to Sustainability	3
Second Semester (Spring)		
SST-120	Energy Use Analysis	3
SST-140	Green Bldg & Design Concepts	3
SST-210	Issues in Sustainability	3
Total Credit Hours Required		**18**

Cosmetology

The Cosmetology curriculum is designed to provide competency-based knowledge, scientific/artistic principles, and hands-on fundamentals associated with the cosmetology industry. The curriculum provides a simulated salon environment which enables students to develop manipulative skills.

Course work includes instruction in all phases of professional imaging, hair design, chemical processes, skin care, nail care, multi-cultural practices, business/computer principles, product knowledge, and other selected topics.

Graduates should qualify to sit for the State Board of Cosmetic Arts examination. Upon successfully passing the State Board exam, graduates will be issued a license. Employment is available in beauty salons and related businesses.

The Mountain Tech Spa, an on-campus spa facility, provides practical experience for Cosmetology students under the direction of College faculty.

The Cosmetology program is approved by the:
North Carolina Board of Cosmetic Art Examiners
121 Edinburgh South Drive, Suite 209
Cary, NC 27511
Phone: (919) 736-6123
Fax: (919) 678-3012
www.nccosmeticarts.com

Specific Program Requirements

1. General college admission requirements.
2. Submission of proper documentation is required by the Spa Therapies and Operations Department and the NC Board of Cosmetic Art Examiners prior to class start. Required documentation includes Hepatitis B record, current government-issued photo ID showing date of birth, and social security card, tax ID card, or Department of Homeland Security ID.
3. Completion of required Hepatitis B vaccine. First dose to be completed by the first day of class. Second Hepatitis B vaccine to be completed at least one month after the first dose. Third dose must be completed six months after the first.
4. To earn hours, Cosmetology students must be physically present in the laboratory. When leaving a laboratory, students must clock out.
5. Students must be able to differentiate between colors with or without reasonable accommodations and be comfortable working directly with chemicals found in products used in the cosmetology industry.
6. Students should be able to use cosmetology equipment such as clippers and shears and be able to stand for prolonged periods with or without reasonable accommodations.

Cosmetology Associate in Applied Science (A55140)

Courses requiring a grade of "C" or better: ACA, BUS, CIS, and COS

First Semester (Fall)		**Credits**
ACA-115	Success & Study Skills	1
CIS-110	Introduction to Computers	3
COS-111	Cosmetology Concepts I	4
COS-112	Salon I	8
Second Semester (Spring)		
COS-113	Cosmetology Concepts II	4
COS-114	Salon II	8
ENG-111	Writing and Inquiry	3
Third Semester (Summer)		
COM-120	Intro Interpersonal Com	3
COS-115	Cosmetology Concepts III	4
COS-116	Salon III	4
Fourth Semester (Fall)		
COS-117	Cosmetology Concepts IV	2
COS-118	Salon IV	7
MAT-110	Math Measurement & Literacy	3
Fifth Semester (Spring)		
BUS-139	Entrepreneurship I	3
BUS-270	Professional Development	3
COS-260	Design Applications	2
HUM-115	Critical Thinking	3
PSY-150	General Psychology	3
Total Credit Hours Required		**68**

Cosmetology Diploma (D55140)

Courses requiring a grade of "C" or better: ACA and COS

First Semester (Fall)		**Credits**
ACA-115	Success & Study Skills	1
COS-111	Cosmetology Concepts I	4
COS-112	Salon I	8
Second Semester (Spring)		
COS-113	Cosmetology Concepts II	4
COS-114	Salon II	8
Third Semester (Summer)		
COM-120	Intro Interpersonal Com	3
COS-115	Cosmetology Concepts III	4
COS-116	Salon III	4
Fourth Semester (Fall)		
COS-117	Cosmetology Concepts IV	2
COS-118	Salon IV	7
PSY-150	General Psychology	3
Total Credit Hours Required		**48**

Students who have a current NC Cosmetologist License will receive credit for COS-111, COS-112, COS-113, COS-114, COS-115, and COS-116.

Cosmetology Instructor

The Cosmetology Instructor curriculum provides a course of study for learning the skills needed to teach the theory and practice of cosmetology as required by the North Carolina Board of Cosmetic Arts.

Course work includes requirements for becoming an instructor, introduction to teaching theory, methods and aids, practice teaching, and development of evaluation instruments.

Graduates of the program may be employed as cosmetology instructors in public or private education and business.

The Cosmetology Instructor program is approved by the:
North Carolina Board of Cosmetic Art Examiners
121 Edinburgh South Drive, Suite 209
Cary, NC 27511
Phone: (919) 736-6123
Fax: (919) 678-3012
www.nccosmeticarts.com

Specific Program Requirements

1. General college admission requirements.
2. Should have a high school diploma or a high school graduation equivalency.
3. Submission of proper documentation is required by the Spa Therapies and Operations Department and the NC Board of Cosmetic Art Examiners prior to class start. Required documentation includes Hepatitis B record, current government-issued photo ID showing date of birth, and social security card Tax ID card, or Department of Homeland Security ID.
4. Completion of required Hepatitis B vaccine. First dose to be completed by the first day of class. Second Hepatitis B vaccine to be completed at least one month after the first dose. Third dose must be completed six months after the first.
5. To earn hours, Cosmetology Instructor students must be physically present in the laboratory. When leaving a laboratory, students must clock out.
6. Students must be able to differentiate between colors with or without reasonable accommodations and be comfortable working directly with chemicals found in products used in the cosmetology industry.
7. Students should be able to use cosmetology equipment such as clippers and shears and be able to stand for prolonged periods with or without reasonable accommodations.
8. Applicants of the Cosmetology Instructor program should hold a current NC Board of Cosmetic Arts Examiners Cosmetologist license.

Cosmetology Instructor Certificate (C55160)

Courses requiring a grade of "C" or better: COS

First Semester (Fall)		Credits
COS-271	Instructor Concepts I	5
COS-272	Instructor Practicum I	7
Second Semester (Spring)		
COS-273	Instructor Concepts II	5
COS-274	Instructor Practicum II	7
Total Credit Hours Required		**24**

Criminal Justice Technology

The Criminal Justice Technology curriculum is designed to provide knowledge of criminal justice systems and operations. Study will focus on local, state, and federal law enforcement, judicial processes, corrections and security services. The criminal justice system's role within society will be explored.

Emphasis is on criminal justice systems, criminology, juvenile justice, criminal and constitutional law, investigative principles, ethics, and community relations. Additional study may include issues and concepts of government, counseling, communications, computers, and technology.

Employment opportunities exist in a variety of local, state, and federal law enforcement, corrections, and security fields. Examples include police officer, deputy sheriff, county detention officer, state trooper, intensive probation/parole surveillance officer, correctional officer, and loss prevention specialist.

Criminal Justice Technology Associate in Applied Science Degree (A55180)

Courses requiring a grade of "C" or better: ACA and CJC

First Semester (Fall)		Credits
ACA-122	College Transfer Success	1
CIS-110	Introduction to Computers	3
CJC-111	Intro to Criminal Justice	3
CJC-113	Juvenile Justice	3
CJC-231	Constitutional Law	3
ENG-111	Writing and Inquiry	3
Second Semester (Spring)		
CJC-112	Criminology	3
CJC-121	Law Enforcement Operations	3
CJC-131	Criminal Law	3
HUM-115	Critical Thinking	3
MAT-143	Quantitative Literacy	3
PSY-150	General Psychology	3

Third Semester (Fall)

CJC-132	Court Procedure & Evidence	3
CJC-170	Critical Incident Management	3
CJC-221	Investigative Principles	4
ENG-114	Prof Research & Reporting	3
SOC-225	Social Diversity	3

Fourth Semester (Spring)

CJC-122	Community Policing	3
CJC-141	Corrections	3
CJC-212	Ethics & Comm Relations	3
CJC-222	Criminalistics	3
CJC-255	Issues in Crim Justice Appl	3
SPA-120	Spanish for the Workplace	3
Total Credit Hours Required		**68**

Students who have successfully completed a curriculum offering of Basic Law Enforcement Training within 10 years of their application to the Criminal Justice Technology Program will receive credit for CJC-121, CJC-131, CJC-132, CJC-221, and CJC-231.

Students who have successfully completed the WNC Law Enforcement Leadership Academy will receive credit for CJC-111, CJC-221, CJC-231, and CJC-255.

Criminal Justice Certificate (C55180L7)

The Criminal Justice Technology Certificate is designed to provide knowledge of criminal justice systems and operations. This certificate program focuses on local, state, and federal law enforcement, judicial processes, corrections, and security services to give students an opportunity to explore possible interest of a career in criminal justice.

The certificate can also be a building block toward an AAS degree in Criminal Justice Technology.

Courses requiring a grade of "C" or better: CJC

Required Courses		Credits
CJC-111	Introduction to Criminal Justice	3
CJC-113	Juvenile Justice	3
CJC-121	Law Enforcement Operations	3
CJC-131	Criminal Law	3
CJC-141	Corrections	3
CJC-212	Ethics & Comm Relations	3
Total Credit Hours Required		**18**

Culinary Arts

This curriculum provides specific training required to prepare students to assume positions as trained culinary professionals in a variety of foodservice settings including full service restaurants, hotels, resorts, clubs, catering operations, contract foodservice and health care facilities.

Students will be provided theoretical knowledge/practical applications that provide critical competencies to meet industry demands, including environmental stewardship, operational efficiencies and professionalism. Courses include sanitation/safety, baking, garde manger, culinary fundamentals/production skills, nutrition, customer service, purchasing/cost control, and human resource management.

Graduates should qualify for entry-level opportunities including prep cook, line cook, and station chef. American Culinary Federation certification may be available to graduates. With experience, graduates may advance to positions including sous chef, pastry chef, executive chef, or foodservice manager.

The Culinary Arts program is accredited by:

American Culinary Federation Education Foundation Accrediting Commission (ACFEF)
6816 Southpoint Pkwy, Suite 400
Jacksonville, FL 32216
Phone: (904) 824-4468
www.acfchefs.org/ACF/Education/Accreditation/ACF/Education/Accreditation/

Culinary Arts Associate in Applied Science Degree (A55150)

Courses requiring a grade of "C" or better: ACA, CUL, HRM, and WBL

First Semester (Fall)		Credits
ACA-115	Success & Study Skills	1
CUL-110	Sanitation & Safety	2
CUL-140	Culinary Skills I	5
CUL-140A	Culinary Skills I Lab	1
CUL-150	Food Science	2
ENG-111	Writing and Inquiry	3
MAT-110	Math Measurement & Literacy	3

Second Semester (Spring)

CUL-160	Baking I	3
CUL-170	Garde Manger I	3
CUL-240	Culinary Skills II	5
CUL-240A	Culinary Skills II Lab	1
HRM-245	Human Resource Mgmt - Hosp	3

Third Semester (Summer)

WBL-112	Work-Based Learning I	2

Fourth Semester (Fall)

CUL-112	Nutrition for Food Service	3
CUL-230	Global Cuisines	5
CUL-260	Baking II	3
CUL-270	Garde Manger II	3
HRM-225	Beverage Management	3

Fifth Semester (Spring)

COM-231	Public Speaking	3
CUL-135	Food & Beverage Service	2
CUL-135A	Food & Beverage Service Lab	1
CUL-250	Classical Cuisine	5
HRM-220	Cost Control - Food & Bev	3
HUM-115	Critical Thinking	3
PSY-150	General Psychology	3
Total Credit Hours Required		**71**

Culinary Studies Certificate (C55150L1)

This certificate offers students an introductory opportunity to foodservice industry and culinary operations. The certificate is designed to enhance the professional knowledge of individuals who desire to obtain entry-level employment in industrial, institutional and commercial foodservice operations.

The Culinary Studies Certificate course work can be of particular value to:

1. Individuals already employed in the fields of hospitality or foodservice who desire to increase their knowledge of culinary techniques within a professional kitchen.
2. Students who are currently completing or who have previously completed the requirements of the ACEF (American Culinary Federation Education Foundation) Apprenticeship or USDL Journeyworker Apprenticeship.

Students interested in completing the Culinary Studies Certificate have the following options.

1. The Culinary Studies Certificate course work can be applied toward the course requirements for the College’s associate degree in Culinary Arts. Students can graduate with both the certificate and the AAS.
2. Students can earn the certificate and then complete the requirements of the Culinary Arts A.A.S degree at a later time.
3. Students may choose to pursue additional credentials offered by the College, including certificates, diplomas and associate degrees offered within the Hospitality Education Department.

Specific Requirements

1. General college admission requirements must be met.
2. At least 50% of the credit hours toward this certificate must be earned at the College.
3. Students must pass all courses required to earn the certificate with a grade of “C” or higher.
4. Students must satisfy any course prerequisite requirements and pass such courses with a grade of “C” or higher.
5. Students pursuing the certificate should be aware that employers in Hospitality or Foodservice can require prospective volunteers, interns, and employees to pass criminal background, drug screen, and citizenship verification checks before they are allowed to work at an organization.

Courses requiring a grade of “C” or better: CUL

Required Courses

CUL-110	Sanitation & Safety	2
CUL-140	Culinary Skills I	5
CUL-140A	Culinary Skills I Lab	1
CUL-150	Food Science	2
CUL-170	Garde Manger I	3
CUL-240	Culinary Skills II	5
Total Credit Hours Required		**18**

Practical Meat Cutting Certificate (C55150L3)

This certificate is designed to offer students advanced culinary skills, an understanding of food costing, and an in-depth look at the skills needed for retail and restaurant meat cutting and charcuterie. In only three semesters, students will earn a certificate that will provide both culinary and specialized protein skills that retail butchers and independent restaurants value in employees.

The Practical Meat Cutting Certificate course work can be of particular value to:

1. Individuals already employed in the field of foodservice who desire to increase their understanding of advanced culinary skills as well as the art of meat cutting, curing, pricing, sourcing, and preserving meat products.
2. Current students or program graduates who are seeking to increase skillsets and enhance their marketability in the industry.
3. Students who are currently completing or who have previously completed the requirements of the ACEF (American Culinary Federation Education Foundation) Apprenticeship or USDL Journeyworker Apprenticeship.

Students interested in completing the Practical Meat Cutting Certificate have the following options:

1. The Practical Meat Cutting Certificate course work can be applied toward the course requirements for the College's associate degree in Culinary Arts. Students can graduate with both the certificate and the AAS.
2. Students can earn the certificate and then complete the requirements of the Culinary Arts AAS degree at a later time.
3. Students may choose to pursue additional credentials offered by the College, including certificates, diplomas, and associate degrees offered within the Hospitality Education Department.

Specific Requirements:

1. General college admission requirements must be met.
2. At least 50% of the credit hours toward this certificate must be earned at this college.
3. Students must have successful completion of the Culinary Studies Certificate to pursue the Practical Meat Cutting Certificate.
4. Students must pass all courses required to earn this certificate with a grade of "C" or higher.
5. Students must satisfy any course prerequisite requirements and pass such courses with a grade of "C" or higher.
6. Students pursuing this certificate should be aware that employers in Hospitality or Foodservice can require perspective volunteers, interns, and employees to pass criminal background, drug screen, and citizenship verification checks before they are allowed to work at an organization.

Courses requiring a grade of "C" or better: CUL and HRM

First Semester (Fall)		**Credits**
CUL-112	Nutrition for Food Service	3
CUL-270	Garde Manger II	3
Second Semester (Spring)		
HRM-220	Cost Control - Food & Bev	3
Third Semester (Summer)		
CUL-288	Practical Meat Cutting	5
Total Credit Hours Required		**14**

Students who have successfully completed the ServSafe Certification will receive credit for CUL-110.

Therapeutic Culinary Certificate (C55150L2)

This certificate is designed to offer students basic culinary skills, an understanding of food safety and sanitation, nutrition, food science, and an in-depth look at specialized dietary needs through therapeutic cuisine. In only three semesters of study, students will earn a certificate that will provide a range of skillsets that employers value in healthcare fields as well as traditional restaurant venues.

The Therapeutic Culinary Certificate course work can be of particular value to:

1. Individuals already employed in the fields of healthcare foodservice who desire to increase their understanding of specialized and restrictive diets.
2. Students who are currently completing or who have previously completed the requirements of the ACEF (American Culinary Federation Education Foundation) Apprenticeship or USDL Journeyworker Apprenticeship.

Students interested in completing the Therapeutic Culinary Certificate have the following options.

1. The Therapeutic Culinary Certificate course work can be applied toward the course requirements for the College's associate degree in Culinary Arts. Students can graduate with both the certificate and the AAS.
2. Students can earn the certificate and then complete the requirements of the Culinary Arts AAS degree at a later time
3. Students may choose to pursue additional credentials offered by the College, including certificates, diplomas, and associate degrees offered within the Hospitality Education Department.

Specific Requirements:

1. General college admission requirements must be met.
2. At least 50% of the credits hours toward this certificate must be earned at the College.
3. Students must pass all courses required to earn the certificate with a grade of "C" or higher
4. Students must satisfy any course prerequisite requirements and pass such courses with a grade of "C" or higher
5. Students pursuing the certificate should be aware that employers in Hospitality or Foodservice can require perspective volunteers interns, and employees to pass criminal background, drug screen, and citizenship verification checks before they are allowed to work at an organization.

Courses requiring a grade of "C" or better: CUL

First Semester (Fall)		Credits
CUL-110	Sanitation & Safety	2
CUL-140	Culinary Skills I	5
CUL-140A	Culinary Skills I Lab	1
Second Semester (Spring)		
CUL-112	Nutrition for Food Service	3
CUL-150	Food Science	2
Third Semester (Summer)		
CUL -165	Therapeutic Cuisine	3
Total Credit Hours Required		**16**

Baking and Pastry Certificate (C55150L4)

This certificate will provide students with a strong skill set of basic baking techniques. Emphasis will be on food safety, baking skills of a wide variety, production baking, breads, and pastries. Students who earn this certificate will bring a range of baking skills that will appeal to industry partners.

Courses requiring a grade of "C" or better: BPA and CUL

Course Requirements

BPA-120	Petit Fours & Pastries	3
BPA-150	Artisan & Specialty Bread	4
CUL-110	Sanitation & Safety	2
CUL-150	Food Science	2
CUL-160	Baking I	3
CUL-160A	Baking I Lab	1
CUL-260	Baking II	3
Total Credit Hours Required		**18**

Students who have the ServSafe Manager Certification will receive credit for CUL-110

Therapeutic Baking Certificate (C55150L5)

This certificate is designed to offer students an understanding of sanitation and safety, food science, basic and advanced baking skills in pastry and breads, plus an in-depth look at baking for specialized dietary needs. In three semesters, students will earn a certificate that provides valuable skills for restaurant and healthcare food service venues.

Courses requiring a grade of "C" or better: BPA and CUL

Required Courses

BPA-150	Artisan & Specialty Bread	4
BPA-180	Therapeutic Baking	3
CUL-110	Sanitation & Safety	2
CUL-150	Food Science	2
CUL-160	Baking I	3
CUL-160A	Baking I Lab	1
CUL-260	Baking II	3
Total Credit Hours Required		**18**

Students who have the ServSafe Manager Certification will receive credit for CUL-110.

Dental Assisting

This curriculum prepares individuals to assist the dentist in the delivery of dental treatment and to function as integral members of the dental team while performing chair-side and related office and laboratory procedures.

Course work includes instruction in general studies, biomedical sciences, dental sciences, clinical sciences, and clinical practice. A combination of lecture, laboratory, and clinical experiences provide students with knowledge in infection/hazard control, radiography, dental materials, preventive dentistry, and clinical procedures.

Graduates of this program may be eligible to take the Dental Assisting National Board Examination to become Certified Dental Assistants. As Dental Assistant IIs, defined by the dental laws of North Carolina, graduates work in dental offices and other related areas.

This program is accredited by:
American Dental Association Commission on Dental Accreditation (CODA)
211 East Chicago Avenue
Chicago, IL 60611
Phone: (800) 232-6108
coda.ada.org

Specific Program Requirements:

1. General college admission requirements.
2. This program has a selective admission process. See Selective Allied Health Program Criteria on the Selective and Limited Programs page of the A-B Tech website. www.abtech.edu/selective-limited-programs
3. Acceptable report of medical examination by first day of class.
4. Completion of required immunizations by first day of class, including first two doses of Hepatitis B vaccine.

5. Students applying to the Dental Assisting program are encouraged to have successfully completed all General Education requirements prior to program admission due to the rigorous nature of the Dental Assisting curriculum.
6. Students must earn a grade of "C" or better in all Dental Assisting core curriculum courses in order to proceed to the next semester.

Dental Assisting Diploma (D45240)

Courses requiring a grade of "C" or better: ACA, BIO, and DEN

First Semester (Fall)		**Credits**
ACA-115	Success and Study Skills	1
DEN-100	Basic Orofacial Anatomy	2
DEN-101	Preclinical Procedures	7
DEN-103	Dental Sciences	2
DEN-111	Infection/Hazard Control	2
DEN-112	Dental Radiography	3
Second Semester (Spring)		
COM-120	Intro Interpersonal Communications	3
DEN-102	Dental Materials	4
DEN-104	Dental Health Education	3
DEN-105	Practice Management	2
DEN-106	Clinical Practice I	6
Third Semester (Summer)		
BIO-161	Intro to Human Biology1	3
DEN-107	Clinical Practice II	5
PSY-150	General Psychology	3
Total Credit Hours Required		**46**

[1]For students planning to pursue a Dental Hygiene AAS, BIO 163 is recommended in place of BIO 161.

Dental Hygiene

This curriculum provides individuals with the knowledge and skills to assess, plan, implement, and evaluate dental hygiene care for the individual and the community.

Students will learn to prepare the operatory, take patient histories, note abnormalities, plan care, teach oral hygiene, clean teeth, take x-rays, apply preventive agents, complete necessary chart entries, and perform other procedures related to dental hygiene care.

Graduates of this program may be eligible to take national and state/regional examinations for licensure, which are required to practice dental hygiene. Employment opportunities include dental offices, clinics, schools, public health agencies, industry, and professional education.

This program is accredited by:
American Dental Association Commission on Dental Accreditation (CODA)
211 East Chicago Avenue
Chicago, IL 60611
Phone: (800) 232-6108
coda.ada.org

Specific Program Requirements:

1. General college admission requirements.
2. This program has a selective admission process. See Selective Allied Health Program Criteria on the Selective and Limited Programs page of the A-B Tech website. www.abtech.edu/selective-limited-programs
3. High school chemistry or equivalent from A-B Tech or other regionally-accredited college.
4. Acceptable report of medical examination by the first day of class.
5. Completion of required immunizations by first day of class, including first two doses of Hepatitis B vaccine or sign a declination.
6. Students applying to the Dental Hygiene program are encouraged to have successfully completed all General Education requirements prior to program admission due to the rigorous nature of the Dental Hygiene curriculum.
7. The North Carolina Board of Dental Examiners may deny a license to individuals convicted of a felony or any other crime involving moral turpitude.
8. BIO-163 Basic Anatomy & Physiology must be completed with a "C" or better within 5 years of application to the program.
9. Students must earn a grade of a "C" or better in all Dental Hygiene core curriculum courses in order to proceed to the next semester.

Dental Hygiene Associate in Applied Science Degree (A45260)

Courses requiring a grade of "C" or better: BIO, CHM, and DEN

Preapplication Requirement		Credits
BIO-163	Basic Anatomy & Physiology	5
CHM-130	General, Organic and Biochemistry	3
CHM-130A	Gen, Org & Biochem Lab	1
First Semester (Fall)		
DEN-110	Orofacial Anatomy	3
DEN-111	Infection/Hazard Control	2
DEN-112	Dental Radiography	3
DEN-120	Dental Hy Preclinic Lec	2
DEN-121	Dental Hygiene Precl Lab	2
Second Semester (Spring)		
BIO-175	General Microbiology	3
DEN-124	Periodontology	2
DEN-125	Dental Office Emergencies	1
DEN-130	Dental Hygiene Theory I	2
DEN-131	Dental Hygiene Clinic I	3
DEN-223	Dental Pharmacology	2
ENG-111	Writing and Inquiry	3
Third Semester (Summer)		
COM-120	Intro Interpersonal Communication	3
DEN-123	Nutrition/Dental Health	2
DEN-140	Dental Hygiene Theory II	2
DEN-141	Dental Hygiene Clinic II	2
DEN-222	General & Oral Pathology	2
Fourth Semester (Fall)		
DEN-220	Dental Hygiene Theory III	2
DEN-221	Dental Hygiene Clinic III	4
DEN-224	Materials and Procedures	2
DEN-232	Community Dental Health	3
SOC-210	Introduction to Sociology	3
Fifth Semester (Spring)		
DEN-230	Dental Hygiene Theory IV	1
DEN-231	Dental Hygiene Clinic IV	4
DEN-233	Professional Development	2
HUM-115	Critical Thinking	3
PSY-150	General Psychology	3
Total Credit Hours Required		**75**

Diesel and Heavy Equipment Technology

The Diesel and Heavy Equipment program prepares individuals to apply technical knowledge and skills to repair, service, and maintain diesel engines in vehicles such as Heavy Duty Trucks over one ton classification, buses, ships, railroad locomotives, and equipment; as well as stationary diesel engines in electrical generators and related equipment.

Diesel and Heavy Equipment Technology Associate in Applied Science (A60460)

Courses requiring a grade of "C" or better: ACA, HET, MEC, TRN, and WBL

First Semester (Fall)		Credits
ACA-115	Success & Study Skills	1
HET-110	Diesel Engines	6
HET-125	Preventative Maintenance	2
PHY-121	Applied Physics I	4
TRN-110	Intro to Transport Tech	2
TRN-170	PC Skills for Transp	2
Second Semester (Spring)		
ENG-110	Freshman Composition	3
HET-115	Electronic Engines	3
HET-119	Mechanical Transmissions	3
TRN-120	Basic Transp Electricity	5
TRN-120A	Basic Transp Electrical Lab	1
WLD-112	Basic Welding Processes	2
Third Semester (Summer)		
HET-231	Med/Hvy. Duty Brake Systems	2
HET-233	Suspension and Steering	4
HYD-112	Hydraulics-Med/Heavy Duty	2
TRN-140	Transp Climate Control	2
Fourth Semester (Fall)		
COM-120	Intro Interpersonal Communication	3
HET-114AB	Power Trains	3
HUM-110	Technology and Society	3
WBL-112	Work Based Learning I	2
Fifth Semester (Spring)		
HET-114BB	Power Trains	2
PSY-150	General Psychology	3
TRN-130	Intro to Sustainable Transp	3
WBL-122	Work Based Learning I	2
Total Credit Hours Required		**65**

Diesel and Heavy Equipment Diploma (D60460)

Courses requiring a grade of "C" or better: ACA, HET, and TRN

First Semester (Fall)		**Credits**
ACA-115	Success & Study Skills	1
HET-110	Diesel Engines	6
HET-125	Preventative Maintenance	2
PHY-121	Applied Physics I	4
TRN-110	Intro to Transport Tech	2
TRN-170	PC Skills for Transportation	2
Second Semester (Spring)		
ENG-110	Freshman Composition	3
HET-115	Electronic Engines	3
HET-119	Mechanical Transmissions	3
TRN-120	Basic Transp Electricity	5
TRN-120A	Basic Transp Electrical Lab	1
WLD-112	Basic Welding Processes	2
Third Semester (Summer)		
HET-231	Med/Hvy. Duty Brake Systems	2
HET-233	Suspension and Steering	4
HYD-112	Hydraulics-Med/Heavy Duty	2
TRN-140	Transp Climate Control	2
Total Credit Hours Required		**44**

Diesel and Heavy Equipment Technology Certificate (C60460L1)

Courses requiring a grade of "C" or better: HET and TRN

First Semester (Fall)		**Credits**
HET-110	Diesel Engines	6
HET-125	Preventative Maintenance	2
TRN-110	Intro to Transport Tech	2
Second Semester (Spring)		
TRN-120	Basic Transp Electricity	5
TRN-120A	Basic Transp Electrical Lab	1
Third Semester (Summer)		
HET-231	Med/Hvy. Duty Brake Systems (HET-119)	2
Total Credit Hours Required		**18**

Early Childhood Education

The Early Childhood Education curriculum prepares individuals to work with children from birth through eight in diverse learning environments. Students will combine learned theories with practice in actual settings with young children under the supervision of qualified teachers.

Course work includes child growth and development; physical/nutritional needs of children; care and guidance of children; and communication skills with families and children. Students will foster the cognitive/language, physical/motor, social/emotional, and creative development of young children.

Graduates are prepared to plan and implement developmentally appropriate programs in early childhood settings. Employment opportunities include child development and child care programs, preschools, public and private schools, recreational centers, Head Start Programs, and school-age programs.

Specific Program Requirements

1. General college admission requirements.
2. According to GS 110-91, "No person shall be an operator of nor be employed in a child care facility who has been convicted of a crime involving child neglect, child abuse, or moral turpitude, or who is a habitually excessive user of alcohol or who illegally uses narcotic or other impairing drugs, or who is mentally or emotionally impaired to an extent that may be injurious to children."
3. Prior to registering for EDU 284 and being placed in a practicum site, students must students must submit evidence of a Childcare Background Check from the Division of Child Development Early Education Criminal Background Check Unit (https://ncchildcare.ncdhhs.gov/Home/DCDEE-Sections/Criminal-Background-Check-Unit/Basic-Information/dhhs-criminal-background-checks), as well as a Tuberculin Test and Health Questionnaire.

See advisor about bi-lateral transfer agreements with select universities.

Early Childhood Education Associate in Applied Science Degree (A55220WF)

Courses requiring a grade of "C" or better: ART, CIS, COM, EDU, ENG, MAT, PSY, and SOC

First Semester (Fall)		**Credits**
EDU-119	Intro to Early Childhood Educ	4
EDU-144	Child Development I	3
EDU-145	Child Development II	3
EDU -146	Child Guidance	3
ENG-111	Writing and Inquiry	3
Second Semester (Spring)		
EDU-151	Creative Activities	3
EDU-153	Health, Safety & Nutrition	3
EDU-221	Children w/ Exceptionalities	3
EDU-234	Infants, Toddlers & Twos	3
MAT-143	Quantitative Literacy	3

Third Semester (Summer)		
ART-111	Art Appreciation	3
COM-231	Public Speaking	3

Fourth Semester (Fall)		
CIS-110	Intro to Computers	3
EDU-131	Child, Family & Community	3
EDU-259	Curriculum Planning	3
EDU-261	Early Childhood Administration I	3
EDU-262	Early Childhood Administration II	3

Fifth Semester (Spring)		
EDU-280	Language and Literacy Experiences	3
EDU-284	Early Childhood Capstone Prac	4
PSY-150	General Psychology	3
SOC-213	Sociology of the Family	3
Total Credit Hours Required		**65**

Early Childhood: Licensure Transfer Track (A55220TL)

Courses requiring a grade of "C" or better: ART, BIO, COM, EDU, ENG, MAT, PHY, PSY, and SOC

First Semester (Fall)		Credits
EDU-119	Intro to Early Childhood Educ	4
EDU-144	Child Development I	3
EDU-145	Child Development II	3
EDU-146	Child Guidance	3
ENG-111	Writing and Inquiry	3

Second Semester (Spring)		
EDU-151	Creative Activities	3
EDU-153	Health, Safety & Nutrition	3
EDU-221	Children w/ Exceptionalities	3
EDU-234	Infants, Toddlers & Twos	3
MAT-143	Quantitative Literacy	3

Third Semester (Summer)		
ART-111	Art Appreciation	3
COM-231	Public Speaking	3

Fourth Semester (Fall)		
BIO-110	Principles of Biology	4
EDU-131	Child, Family & Community	3
EDU-216	Foundations of Education	3
EDU-250	Teacher Licensure Preparation	3
ENG-112	Writing/Research in the Disc.	3

Fifth Semester (Spring)		
EDU-280	Language and Literacy Experiences	3
EDU-284	Early Childhood Capstone Prac	4
PHY-110	Conceptual Physics	3
PHY-110A	Conceptual Physics Lab	1
PSY-150	General Psychology	3
SOC-210	Intro to Sociology	3
Total Credit Hours Required		**70**

Early Childhood: Non-Licensure Transfer Track (A55220NL)

Courses requiring a grade of "C" or better: ART, BIO, COM, EDU, ENG, MAT, PHY, PSY, and SOC

First Semester (Fall)		Credits
EDU-119	Intro to Early Childhood Educ	4
EDU-144	Child Development I	3
EDU-145	Child Development II	3
EDU -146	Child Guidance	3
ENG-111	Writing and Inquiry	3

Second Semester (Spring)		
EDU-151	Creative Activities	3
EDU-153	Health, Safety & Nutrition	3
EDU-221	Children w/ Exceptionalities	3
EDU-234	Infants, Toddlers & Twos	3
MAT-143	Quantitative Literacy	3

Third Semester (Summer)		
ART-111	Art Appreciation	3
COM-231	Public Speaking	3

Fourth Semester (Fall)		
BIO-110	Principles of Biology	4
EDU-131	Child, Family & Community	3
EDU-261	Early Childhood Admin I	3
EDU-262	Early Childhood Admin II	3
ENG-112	Writing/Research in the Disc.	3

Fifth Semester (Spring)		
EDU-280	Language and Literacy Experiences	3
EDU-284	Early Childhood Capstone Prac	4
PHY-110	Conceptual Physics	3
PHY-110A	Conceptual Physics Lab	1
PSY-150	General Psychology	3
SOC-210	Intro to Sociology	3
Total Credit Hours Required		**70**

Early Childhood Certificate (C55220L1)

The Early Childhood Certificate program is designed to provide students minimum entry-level skills to work with children from three to five years old. Employment opportunities include child development and child care programs, preschools, public and private schools, recreational centers, and school-age programs.

Specific Program Requirements

1. General college admission requirements.
2. According to GS 110-91, "No person shall be an operator of nor be employed in a child care facility who has been convicted of a crime involving child neglect, child abuse, or moral turpitude, or who is a habitually excessive user of alcohol or who illegally uses narcotic or other impairing drugs, or who is mentally or emotionally impaired to an extent that may be injurious to children."
3. Prior to the second semester of coursework, students must submit an Early Education Criminal Record Check Qualification Letter from the Division of Child Development and Early Education. (http://ncchildcare.nc.gov/general.dhhscrc_childcare.asp).

Courses requiring a grade of "C" or better: EDU

First Semester (Fall)		**Credits**
EDU-119	Intro to Early Childhood Educ	4
EDU-145	Child Development II	3
EDU-151	Creative Activities	3
Second Semester (Spring)		
EDU-146	Child Guidance	3
EDU-280	Language and Literacy Experiences	3
Total Credit Hours Required		**16**

Infant/Toddler Care Certificate (C55290)

The Infant/Toddler Care certificate prepared individuals to work with children from infancy to three years of age in diverse learning environments. Students will combine learned theories, competency-based knowledge, and practice in actual settings with young children under the supervision of qualified teachers.

Coursework includes infant/toddler growth and development, physical/nutritional needs of infants and toddlers, safety issues in the care of infants and toddlers, care and guidance, communication skills with parents and children; design and implementation of appropriate curriculum; and other related topics.

Graduates should be prepared to plan and implement developmentally appropriate infant/toddler programs in early childhood settings. Employment opportunities include child development and child care programs, preschools, public and private schools, recreational centers, Early Head Start programs, and other infant/toddler programs.

Specific Program Requirements

1. General college admission requirements.
2. According to GS 110-91, "No person shall be an operator of nor be employed in a child care facility who has been convicted of a crime involving child neglect, child abuse, or moral turpitude, or who is a habitually excessive user of alcohol or who illegally uses narcotic or other impairing drugs, or who is mentally or emotionally impaired to an extent that may be injurious to children."
3. Criminal background checks are required prior to the second semester of coursework.

Courses requiring a grade of "C" or better: EDU

First Semester (Fall)		**Credits**
EDU-119	Intro to Early Childhood Educ	4
EDU-144	Child Development I	3
EDU-131	Child, Family, & Commun	3
Second Semester (Spring)		
EDU-153	Health, Safety & Nutrit	3
EDU-234	Infants, Toddlers, and Twos	3
Total Credit Hours Required		**16**

Early Childhood Administration (Certificate) (Pending Approval of NCCCS)(C55850)

This curriculum prepares individuals pursuing administrative roles in diverse child care settings to effectively work with children, families and teachers. The certificate is composed of learning opportunities in developmental theories, competency and evidence-based professional knowledge, administrative skills and leadership qualities.

Course work includes foundations in early childhood education, physical/nutritional needs of young children, safety issues in the care of young children; communication and leadership skills with teachers, families and children; programming and staffing, budgeting/financial management and marketing, and rules and regulations of early childhood programs.

Employment opportunities include entrepreneurship and/or management of child development and child care programs, preschools, public and private schools, recreational centers, Early Head Start and Head Start programs, and other programs.

Specific Program Requirements

1. General college admission requirements.
2. According to GS 110-91, "No person shall be an operator of nor be employed in a child care facility who has been convicted of a crime involving child neglect, child abuse, or moral turpitude, or who is a habitually excessive user of alcohol or who illegally uses narcotic or other impairing drugs, or who is mentally or emotionally impaired to an extent that may be injurious to children."

3. Criminal background checks are required prior to the second semester of coursework.

Courses requiring a grade of "C" or better: EDU

First Semester (Fall)			**Credits**
EDU	119	Intro to Early Childhood Educ	4
Second Semester (Spring)			
EDU	131	Child, Family, & Commun	3
EDU	153	Health, Safety & Nutrit	3
Third Semester (Fall)			
EDU	261	Early Childhood Admin I	3
EDU	262	Early Childhood Admin II	3
Total Credit Hours Required			**16**

Electrical Systems Technology

The Electrical Systems Technology curriculum is designed to provide training for persons interested in the installation and maintenance of electrical systems found in residential, commercial, and industrial facilities.

Coursework, most of which is hands-on, will include such topics as AC/DC theory, basic wiring practices, programmable logic controllers, industrial motor controls, applications of the National Electric Code, and other subjects as local needs require.

Graduates should qualify for a variety of jobs in the electrical field as an on-the-job trainee or apprentice assisting in the layout, installation, and maintenance of electrical systems.

Electrical Systems Technology Associate in Applied Science Degree (A35130)

Courses requiring a grade of "C" or better: ATR, CST, EGR, ELC, and ISC

First Semester (Fall)		**Credits**
CST-110	Intro to Construction	2
EGR-110	Intro to Engineering Tech	2
ELC-111	Intro to Electricity	3
ELC-113	Residential Wiring	4
ELC-118	National Electrical Code	2
MAT-121	Algebra/Trigonometry	3
Second Semester (Spring)		
ELC-114	Commercial Wiring	4
ELC-115	Industrial Wiring	4
ELC-131	Circuit Analysis I	4
ELC-131A	Circuit Analysis I Lab	1
ENG-111	Writing and Inquiry	3
Third Semester (Summer)		
COM-231	Public Speaking	3
ELC-117	Motors and Controls	4
HUM-115	Critical Thinking	3
Fourth Semester (Fall)		
ATR-112	Intro to Automation	3
ELC-213	Instrumentation	4
ELN-260	Prog Logic Controllers	4
PSY-150	General Psychology	3
Fifth Semester (Spring)		
ELC-220	Photovoltaic Sys Tech	3
ELC-221	Advanced PV Sys Designs	3
ELC-228	PLC Applications	4
ISC-121	Envir Health & Safety	3
Total Credit Hours Required		**69**

Electrical Systems Technology Diploma (D35130)

Courses requiring a grade of "C" or better: CST, EGR, and ELC

First Semester (Fall)		**Credits**
COM-231	Public Speaking	3
CST-110	Intro to Construction	2
EGR-110	Intro to Engineering Tech	2
ELC-111	Intro to Electricity	3
ELC-113	Residential Wiring	4
MAT-121	Algebra/Trigonometry	3
Second Semester (Spring)		
ELC-114	Commercial Wiring	4
ELC-115	Industrial Wiring	4
ELC-117	Motors and Controls	4
ELC-118	National Electrical Code	2
ELC-131	Circuit Analysis I	4
ELC-131A	Circuit Analysis I Lab	1
Total Credit Hours Required		**36**

Electrical Wiring Certificate (C35130L1)

The Electrical Wiring Certificate program teaches the student the concepts and skills needed to install and repair residential, commercial, and industrial wiring systems. Preparation for state and local licenses are achieved through laboratory and classroom studies that focus on the National Electrical Code.

Courses requiring a grade of "C" or better: ELC

First Semester (Fall)		**Credits**
ELC-111	Intro To Electricity	3
ELC-113	Residential Wiring	4

Second Semester (Spring)		
ELC-115	Industrial Wiring	4
ELC-118	National Electrical Code	2
Total Credit Hours Required		**13**

Advanced Electrical Wiring Certificate (C35130L6)

The Advanced Electrical Wiring certificate provides student a significant overview of electrical theory, residential wiring practices, industrial wiring practices, the National Electrical Code, electrical motors, and control circuits. Participants learn while working hands-on in labs with real industry equipment and have the opportunity to earn nationally recognized third-party credentials.

Courses requiring a grade of "C" or better: ELC

First Semester (Fall)		Credits
ELC-111	Intro To Electricity	3
ELC-113	Residential Wiring	4
ELC-118	National Electrical Code	2
Second Semester (Spring)		
ELC-115	Industrial Wiring	4
ELC-117	Motors and Controls	4
Total Credit Hours Required		**17**

Electrical Construction Certificate (C35130L7)

The Electrical Construction Certificate program provides students with a comprehensive foundation in electrical systems used in residential, commercial, and industrial settings. Through hands-on labs and classroom instruction, students develop practical skills in wiring installation, electrical motor control, and construction practices. Graduates are equipped for entry-level roles in the electrical trade and have the opportunity to earn nationally recognized third-party credentials.

Courses requiring a grade of "C" or better: CST and ELC

First Semester (Fall)		Credits
CST-110	Intro to Construction	2
ELC-113	Residential Wiring	4
Second Semester (Spring)		
ELC-114	Commercial Wiring	4
ELC-115	Industrial Wiring	4
ELC-117	Motors and Controls	4
Total Credit Hours Required		**18**

Electrical Fundamentals Certificate (C35130L8)

The Electrical Fundamentals Certificate provides students with a foundational understanding of electrical theory, safety, and basic circuitry. It prepares individuals for entry-level work in many electrical trades or for further technical education in the field, enhancing career advancement.

Courses requiring a grade of "C" or better: ELC

First Semester (Fall)		Credits
ELC-111	Intro to Electricity	3
Second Semester (Spring)		
ELC-131	Circuit Analysis I	4
ELC-131A	Circuit Analysis I Lab	1
Third Semester (Summer)		
ELC-117	Motors and Controls	4
Total Credit Hours Required		**12**

Building Instrumentation & Control Certificate (C35130L4)

The Building Instrumentation and Control Certificate program teaches the student the concepts and skills needed to program, install, calibrate, and service systems that acquire and record industrial and environmental data. It also is intended to prepare students to install and maintain automated energy and environmental control systems.

Courses requiring a grade of "C" or better: ELC

First Semester (Fall)		Credits
ELC-111	Intro to Electricity	3
ELC-213	Instrumentation	4
ELN-260	Prog Logic Controllers	4
Second Semester (Spring)		
ELC-117	Motors and Controls	4
SST-120	Energy Use Analysis	3
Total Credit Hours Required		**17**

Solar Photovoltaic Energy Technology (C35130L5)

The Solar Photovoltaic Energy Technology certificate is a short-education educational program covering the design, installation, and maintenance of solar photovoltaic systems. Participants learn electrical theory, wiring practices, safety, and regulatory requirements, while working hands-on in a solar energy lab with real industry equipment and have the opportunity to earn a nationally recognized NABCEP credential.

Courses requiring a grade of "C" or better: ELC and ISC

First Semester (Fall)		**Credits**
ELC-111	Intro To Electricity	3
ELC-113	Residential Wiring	4

Second Semester (Spring)		
ELC-220	Photovoltaic Sys Tech	3
ELC-221	Advanced PV Sys Designs	3
ISC-121	Envir Health & Safety	3
Total Credit Hours Required		**16**

Electronics Engineering Technology

The Electronics Engineering Technology program prepares the students to apply basic engineering principles and technical skills to become technicians who design, build, install, test, troubleshoot, repair, and modify developmental and production electronic components, equipment, and systems such as industrial/computer controls, manufacturing systems, communication systems, and power electronic systems. Includes instruction in mathematics, basic electricity, solid-state fundamentals, digital concepts, and microprocessors or programmable logic controllers. Graduates should qualify for employment as electronics engineering technician, field service technician, instrumentation technician, maintenance technician, electronic tester, electronic systems integrator, bench technician, and production control technician.

Electronics Engineering Technology Associate in Applied Science Degree (A40200)

Courses requiring a grade of "C" or better: CET, DFT, EGR, ELC, and ELN

First Semester (Fall)		**Credits**
CIS-110	Introduction to Computers	3
EGR-110	Intro to Engineering Tech	2
ELC-111	Intro to Electricity	3
ENG-111	Writing and Inquiry	3
MAT-121	Algebra/Trigonometry I	3

Second Semester (Spring)		
DFT-151	CAD I	3
ELC-131	Circuit Analysis I	4
ELN-152	Fabrication Techniques	2
ELN-232	Intro to Microprocessors	4

Third Semester (Summer)		
COM-231	Public Speaking	3
ELC-117	Motors and Controls	4
HUM-115	Critical Thinking	3
PSY-150	General Psychology	3

Fourth Semester (Fall)		
ELC-213	Instrumentation	4
ELN-131	Analog Electronics I	4
ELN-133	Digital Electronics	4
ELN-260	Prog Logic Controllers	4

Fifth Semester (Spring)		
CET-111	Computer Upgrade/Repair I	3
CSC-121	Python Programming	3
ELC-228	PLC Applications	4
ELN-234	Communication Systems	4
Total Credit Hours Required		**70**

Electronics Manufacturing Certificate (C40200L1)

Courses requiring a grade of "C" or better: ELC and ELN

First Semester (Fall)		**Credits**
ELC-111	Intro to Electricity	3
ISC-116	Lean Mfg Principles/Practices	1
ISC-121	Envir Health & Safety	3
ISC-132	Mfg Quality Control	3

Second Semester (Spring)		
ELC-131	Circuit Analysis I	4
ELN-152	Fabrication Techniques	2
Total Credit Hours Required		**16**

Emergency Medical Science

The Emergency Medical Science curriculum provides individuals with the knowledge, skills and attributes to provide advanced emergency medical care as a paramedic for critical and emergent patients who access the emergency medical system and prepares graduates to enter the workforce.

Students will gain complex knowledge, competency, and experience while employing evidence based practice under medical oversight, and serve as a link from the scene into the healthcare system.

Graduates of this program may be eligible to take state and/or national certification examinations.

Employment opportunities include providers of emergency medical services, fire departments, rescue agencies, hospital specialty areas, industry, educational and government agencies.

“To prepare competent entry-level Paramedics in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains”.

Specific Requirements

1. General college admission requirements:
   a. Complete application for admission.
   b. Meet with your advisor to discuss placement options.
   c. Official transcript of any prior college credit on file with admissions office.
2. Must be 18 years of age by the end of the first semester of the program.
3. Current N.C. driver’s license.
4. Acceptable reports of medical examinations and immunizations.
5. Criminal background checks will be required prior to admission to clinical sites.

Emergency Medical Science Associate in Applied Science Degree (A45340)

Courses requiring a grade of “C” or better: ACA, BIO, EMS, and MED

First Semester (Fall)		**Credits**
ACA-115	Success & Study Skills	1
EMS-110	EMT	9
EMS-150	Emergency Vehicles and EMS Comm	2
ENG-111	Writing and Inquiry	3
MAT-110	Mathematical Measurement	3
MED-120	Survey of Med Terminology	2
Second Semester (Spring)		
BIO-163	Basic Anatomy & Physiology	5
EMS-122	EMS Clinical Practicum I	1
EMS-130	Pharmacology	4
EMS-131	Advanced Airway Management	2
EMS-160	Cardiology I	3
Third Semester (Summer)		
EMS-210	Advanced Patient Assessment	2
EMS-220	Cardiology II	3
EMS-221	EMS Clinical Practicum II	2
EMS-240	Patients W/ Special Challenges	2
Fourth Semester (Fall)		
EMS-231	EMS Clinical Pract III	3
EMS-250	Medical Emergencies	4
EMS-260	Trauma Emergencies	2
EMS-270	Life Span Emergencies	4
ENG-114	Prof Research & Reporting	3
Fifth Semester (Spring)		
EMS-140	Rescue Scene Management	2
EMS-241	EMS Clinical Practicum IV	4
EMS-285	EMS Capstone	2
PHI-240	Introduction to Ethics	3
SOC-225	Social Diversity	3
Total Credit Hours Required		**74**

Credit for EMS-110 will be given for a current unrestricted North Carolina Emergency Medical Technician Certification (NC EMT) or current unrestricted National Registry Emergency Medical Technician Certification (NR EMT).

Basic Emergency Medical Science Certificate (C45340L1)

The certificate program prepares students for basic, entry level EMS positions as an EMT. Students learn basic emergency medical skills and procedures, emergency vehicle operations with hands-on driving experience, and other skills needed to enter the EMS field.

Courses requiring a grade of “C” or better: EMS and MED

First Semester (Fall)		**Credits**
EMS-110	EMT	9
EMS-150	Emergency Vehicles and EMS Comm	2
MAT-110	Mathematical Measurement	3
MED-120	Survey of Med Terminology	2
Total Credit Hours Required		**16**

Credit for EMS-110 will be given for a current unrestricted North Carolina Emergency Medical Technician Certification (NC EMT) or current unrestricted National Registry Emergency Medical Technician Certification (NR EMT).

Emergency Medical Science Bridge Program (A45340BR)

The Emergency Medical Science Bridge Program is designed to allow currently certified non-degree paramedics to earn an Associate in Applied Science (AAS) degree in Emergency Medical Science.

Specific Requirements

1. General college admission requirements:
   a. Complete application for admission.
   b. Successfully complete College Placement Test.
   c. Official transcript of any prior college credit on file with admissions office.

2. Possess current North Carolina driver's license.
3. Complete interview with EMS Department faculty.
4. Current Paramedic certification. (A copy of the Paramedic Education Program Transcript must be on file in the EMS Department.)
5. Current Basic Cardiac Life Support certification.
6. Current Basic Trauma Life Support or pre-Hospital Trauma Life Support certification.
7. Current Basic Trauma Life Support certification.
8. Current Pediatric Advanced Life Support certification.

The above certifications and experience (4-8) will provide 40 hours of proficiency credit toward the AAS degree and will count toward the A-B Tech residency requirement. These 40 hours represent the major area (EMS) courses required for EMT, Advanced EMT, and Paramedic certification that are not required as part of the EMS Bridge Program.

Emergency Medical Science Bridge Program Associate in Applied Science Degree (A45340BR)

Courses requiring a grade of "C" or better: BIO and EMS

First Semester (Fall)		**Credits**
BIO-163	Basic Anatomy & Physiology	5
EMS-150	Emergency Vehicles & EMS Comm	2
ENG-111	Writing and Inquiry	3
MAT-110	Mathematical Measurement	3
Second Semester (Spring)		
EMS-280	EMS Bridge Course	3
EMS-285	EMS Capstone	2
Third Semester (Summer)		
EMS-210	Advanced Patient Assessment	2
ENG-114	Professional Research & Reporting	3
PHI-240	Introduction to Ethics	3
SOC-225	Social Diversity	3
Total Credit Hours Required		**29**

Esthetics Instructor

The Esthetics Instructor curriculum provides a course of study for learning the skills needed to teach the theory and practice of esthetics as required by the North Carolina Board of Cosmetology.

Course work includes all phases of esthetics theory laboratory instruction.

Graduates should be prepared to take the North Carolina Cosmetology State Board Esthetics Instructor Licensing Exam and upon passing be qualified for employment in a cosmetology or esthetics school.

The Esthetics Technology program is approved by the:
North Carolina Board of Cosmetic Art Examiners
121 Edinburgh South Drive, Suite 209
Cary, NC 27511
Phone: (919) 736-6123
Fax: (919) 678-3012
www.nccosmeticarts.com

Specific Program Requirements

1. General college admission requirements.
2. Should have a high school diploma or a high school graduation equivalency certificate.
3. Submission of proper documentation is required by the Spa Therapies and Operations Department and the NC Board of Cosmetic Art Examiners prior to class start. Required documentation includes Hepatitis B record, current government-issued photo ID showing date of birth, and social security card, tax ID card, or Department of Homeland Security ID.
4. Completion of required Hepatitis B vaccine. First dose to be completed by the first day of class. Second Hepatitis B vaccine to be completed at least one month after the first dose. Third dose must be completed six months after the first.
5. To earn hours, Esthetics Instructor students must be physically present in the laboratory. When leaving a laboratory, students must clock out.
6. Students must be able to differentiate between colors with or without reasonable accommodations and be comfortable working directly with chemicals found in products used in the esthetics industry.
7. Students should be able to use esthetics equipment such as electric current machines, etc. and be able to sit/stand for prolonged periods with or without reasonable accommodations.
8. Applicants of the Esthetics Instructor program should hold a current NC Board of Cosmetic Arts Examiners Cosmetologist or an esthetician license.

Esthetics Instructor Certificate (C55270)

Courses requiring a grade of "C" or better: COS

First Semester (Fall)		**Credits**
COS-253	Esthetics Ins. Concepts I	11
Second Semester (Spring)		
COS-254	Esthetic Ins. Concepts II	11
Total Credit Hours Required		**22**

Esthetics Technology

The Esthetics Technology curriculum provides competency-based knowledge, scientific/artistic principles and hands-on fundamentals associated with the art of skin care. The curriculum provides a simulated salon environment which enables students to develop manipulative skills.

Course work includes instruction in all phases of professional Esthetics Technology, business/human relations, product knowledge, and other related topics.

Graduates should be prepared to take the North Carolina Cosmetology State Board Licensing Exam and upon passing be licensed and qualify for employment in beauty and cosmetic/skin care salons, as a platform artist, and in related businesses.

The Mountain Tech Spa, an on-campus spa facility, provides practical experience for Esthetics students under the direction of College faculty.

The Esthetics Technology program is approved by the:
North Carolina Board of Cosmetic Art Examiners
121 Edinburgh South Drive, Suite 209
Cary, NC 27511
Phone: (919) 736-6123
Fax: (919) 678-3012
www.nccosmeticarts.com

Specific Program Requirements

1. General college admission requirements.
2. Submission of proper documentation is required by the Spa Therapies and Operations Department and the NC Board of Cosmetic Art Examiners prior to class start. Required documentation includes Hepatitis B record, current government-issued photo ID showing date of birth, and social security card tax ID card, or Department of Homeland Security ID.
3. Completion of required Hepatitis B vaccine. First dose to be completed by the first day of class. Second Hepatitis B vaccine to be completed at least one month after the first dose. Third dose must be completed six months after the first.
4. Esthetics Technology students must clock out when leaving the laboratory. To earn hours, students must be physically present in the laboratory.
5. Students should be physically able to use esthetics technology equipment and safely use esthetics technology products with or without reasonable accommodations and be comfortable working directly with chemicals found in products used in the esthetics industry.

Esthetics Technology Certificate (C55230)

Courses requiring a grade of "C" or better: COS

First Semester (Fall)		Credits
COS-119	Esthetics Concepts I	2
COS-120	Esthetics Salon I	6

Second Semester (Spring)		
COS-125	Esthetics Concepts II	2
COS-126	Esthetics Salon II	6
Total Credit Hours Required		**16**

Geomatics Technology (Surveying)

The Geomatics Technology curriculum prepares students to use mathematical and scientific principles for the delineation, determination and planning of land tracts, boundaries, contours, and features by applying principles of route and construction surveying, photogrammetry, mapping, global positioning systems, geographical information systems, and other kinds of property description and measurement to create related maps, charts, and reports.

Course work includes instruction in applied geodesy, computer graphics, photointerpretation, plane and geodetic surveying, mensuration, traversing, survey equipment operation and maintenance, instrument calibration, and basic cartography.

Graduates should qualify for jobs as survey party chief, instrument person, surveying technician, highway surveyor, mapper, GPS technician, and CAD operator. Graduates will be prepared to pursue the requirements necessary to become a Professional Land Surveyor and will also be able to transfer and complete a four-year degree in the field.

Geomatics Technology Associate in Applied Science Degree (A40420)

Courses requiring a grade of "C" or better: CEG, CIV, DFT, EGR, MAT, and SRV

First Semester (Fall)		Credits
CEG-111	Intro to GIS and GNSS	4
CEG-115	Intro to Tech & Sustainability	3
CIS-110	Introduction to Computers	3
MAT-121	Algebra/Trigonometry I	3

Second Semester (Spring)		
DFT-151	CAD I	3
ENG-111	Writing and Inquiry	3
HUM-115	Critical Thinking	3
PSY-150	General Psychology	3
SRV-110	Surveying I	4

Third Semester (Summer)		
CEG-211	Hydrology & Erosion Control	3
SRV-111	Surveying II	4

Fourth Semester (Fall)

CIV-125	Civil/Surveying CAD	3
GIS-121	Georeferencing and Mapping	3
SRV-210	Surveying III	4
SRV-240	Topographic/Site Surveying	4

Fifth Semester (Spring)

CEG-230	Subdivision Planning & Design	3
ENG-114	Prof. Research and Reporting	3
GIS-215	GIS Data Models	3
SRV-220	Surveying Law	3
SRV-250	Advanced Surveying	4
Total Credit Hours Required		**66**

Geomatics Technology Land Surveying Fundamentals Certificate (C40420L1)

Courses requiring a grade of "C" or better: CEG, DFT, MAT, and SRV

First Semester (Fall)		**Credits**
CEG-111	Intro to GIS and GNSS	4
CEG-115	Intro to Tech & Sustainability	3
MAT-121	Algebra/Trigonometry I	3

Second Semester (Spring)

DFT-151	CAD I	3
SRV-110	Surveying I	4
Total Credit Hours Required		**17**

Health and Fitness Science

The Health and Fitness Science program is designed to provide students with the knowledge and skills necessary for employment in the fitness and exercise industry.

Students will be trained in exercise science and be able to administer basic fitness tests and health risk appraisals, teach specific exercise and fitness classes and provide instruction in the proper use of exercise equipment and facilities.

Graduates should qualify for employment opportunities in commercial fitness clubs, YMCA's/YWCA's, wellness programs in business and industry, Parks & Recreation Departments and other organizations implementing exercise & fitness programs.

Health and Fitness Associate in Applied Science Degree (A45630)

Courses requiring a grade of "C" or better: ACA, BIO, HEA, HFS, and WBL

First Semester (Fall)		**Credits**
ACA-115	Success & Study Skills	1
ENG-111	Writing and Inquiry	3
HFS-110	Exercise Science	4
HFS-116	Pvnt & Care Exer Injuries	3
MAT-143	Quantitative Literacy or higher	3
PED-110	Fit and Well for Life	2

Second Semester (Spring)

BIO-155	Nutrition	3
BIO-168	Anatomy & Physiology I	4
COM-231	Public Speaking	3
HFS-111	Fitness & Exer Testing I	4
	PED Elective	1

Third Semester (Summer)

HUM-115	Critical Thinking	3
PSY-150	General Psychology	3

Fourth Semester (Fall)

BIO-169	Anatomy & Physiology II	4
BUS-137	Principles of Management	3
HEA-112	First Aid and CPR	2
HFS-118	Fitness Facility Mgmt	4
HFS-218	Lifestyle Chng & Wellness	4

Fifth Semester (Spring)

HFS-114	Phys Fit Theory & Instr	4
HFS-120	Group Exercise Instruction	3
HFS-210	Personal Training	3
HFS-212	Exercise Programming	3
WBL-111	Work-Based Learning	1
	PED Elective	1
Total Credit Hours Required		**69**

PED Elective: PED-117, PED-118, PED-119, PED-122, PED-217
NOTE: Graduates of the Health and Fitness Science program will be required to sit for the American Council on Exercise Personal Trainer Certification Exam before graduation. Graduates may also be eligible to sit for a variety of other examinations that pertain to the health and fitness industry.

Group Fitness Instructor Certificate (C45630L1)

The Group Exercise Instructor certificate prepares students to work as a Group Fitness Instructor in the health & Fitness industry. Upon completion, students will be able to demonstrate the ability to appropriately design group exercise classes, lead group exercise classes effectively and provide proper technique demonstrations. Students will also be trained to analyze and evaluate potential Group Fitness Instructors in the presentation and class organization skills, use of audiovisuals, and delivery of proper critique to participants. Group Exercise Instructors are able to work in a variety of settings including YMCAs, fitness centers and recreation centers.

Courses requiring a grade of "C" or better: HEA and HFS

First Semester (Fall)		**Credits**
HFS-110	Exercise Science	4
HFS-118	Fitness Facility Mgmt	4
PED-110	Fit and Well for Life	2
Second Semester (Spring)		
HEA-112	First Aid and CPR	2
HFS-120	Group Exercise Instruction	3
	PED Elective	1
	PED Elective	1
Total Credit Hours Required		**17**

PED Elective: PED-117, PED-118, PED-119, PED-122, PED-217

Hospitality Management

This curriculum prepares individuals to understand and apply the administrative and practical skills needed for supervisory and managerial positions in hotels, motels, resorts, inns, restaurants, institutions, and clubs.

Course work includes guest services, leadership, management, restaurant operations, lodging operations, marketing, sanitation, food preparation, food and beverage management and other critical areas.

Graduates should qualify for management or entry-level supervisory positions in food and lodging operations, including restaurants, foodservice, beverage service, catering, front office, reservations and housekeeping. Opportunities are also available in product services, and technology support and sales.

Mountain Tech Lodge

An on-campus lodging facility, the Mountain Tech Lodge, is operated and maintained by the Hospitality Management students, and provides practical experience under the direction of College faculty.

Hospitality Management Associate in Applied Science Degree (A25110)

Courses requiring a grade of "C" or better: ACA, ACC, CUL, HRM and WBL

First Semester (Fall)		**Credits**
ACA-115	Success & Study Skills	1
CUL-110	Sanitation & Safety	2
HRM-110	Intro to Hosp & Tourism	3
HRM-124	Guest Service Management	3
HRM-135	Facilities Management	3
MAT-110	Math Measurement & Literacy	3
Second Semester (Spring)		
CUL-135	Food & Beverage Service	2
CUL-135A	Food & Beverage Serv Lab	1
ENG-111	Writing and Inquiry	3
HRM-120	Front Office Procedures	3
HRM-220	Cost Control-Food & Bev	3
HRM-245	Human Resource Mgmt-Hosp	3
Third Semester (Summer)		
WBL-112	Work-Based Learning I	2
Fourth Semester (Fall)		
COM-231	Public Speaking	3
HRM-215	Restaurant Management	3
HRM-215A	Restaurant Management Lab	1
HRM-225	Beverage Management	3
HRM-240	Marketing for Hospitality	3
PSY-150	General Psychology	3
Fifth Semester (Spring)		
ACC-120	Prin of Financial Accounting	4
HRM-140	Legal Issues-Hospitality	3
HRM-180	The Business of Tourism	3
HRM-280	Mgmt Problems - Hospitality	3
HUM-115	Critical Thinking	3
Total Credit Hours Required		**64**

Hospitality Management Certificate (C25110L3)

The Hospitality Management certificate provides line employees with the concepts and skills to upgrade or cross-train in their career in the hotel and restaurant management industry. In addition, successful completion of CUL 110, HRM 225 and HRM 245 leads to nationally recognized certifications from the National Restaurant Association and the American Hotel and Lodging Association.

Courses requiring a grade of "C" or better: CUL and HRM

First Semester (Fall)		Credits
CUL-110	Sanitation & Safety	2
HRM-225	Beverage Management	3
HRM-240	Marketing for Hospitality	3
Second Semester (Spring)		
HRM-140	Legal Issues-Hospitality	3
HRM-220	Cost Control-Food & Bev	3
HRM-245	Human Resource Mgmt-Hosp	3
Total Credit Hours Required		**17**

Restaurant Management Certificate (C25110L4)

The Restaurant Management Certificate is designed for students specifically interested in the dining segment of the Hospitality industry. In just three semesters, students will gain an understanding of sanitation, basic culinary skills, guest services, and classical dining service training and management.

Courses requiring a grade of "C" or better: CUL and HRM

First Semester (Fall)		Credits
CUL-110	Sanitation & Safety	2
HRM-124	Guest Service Management	3
Second Semester (Spring)		
CUL-135	Food & Beverage Service	2
CUL-135A	Food & Beverage Serv Lab	1
HRM-220	Cost Control-Food & Bev	3
Third Semester (Fall)		
HRM-215	Restaurant Management	3
HRM-215A	Restaurant Management Lab	1
HRM-240	Marketing for Hospitality	3
Total Credit Hours Required		**18**

Students who have the ServSafe Certification will receive credit for CUL-110.

Online Hospitality Management Certificate (C25110L5)

The Online Hospitality Management Certificate is designed for learners to gain a broad spectrum of hospitality knowledge. Focus on hospitality and tourism, human resources, law, and cost controls for food and beverage operations will provide a good understanding of hospitality management functions. Students will earn a ServSafe Manager Certification, which provides an understanding of food safety and is valuable to industry partners.

Courses requiring a grade of "C" or better: CUL and HRM

First Semester (Fall)		Credits
CUL-110	Sanitation & Safety	2
HRM-110	Intro to Hosp & Tourism	3
Second Semester (Spring)		
HRM-140	Legal Issues-Hospitality	3
HRM-180	The Business of Tourism	3
HRM-220	Cost Control-Food & Bev	3
HRM-245	Human Resource Mgmt-Hosp	3
Total Credit Hours Required		**17**

Students who have the ServSafe Manager Certification will receive credit for CUL-110.

Food Truck Operations Certificate (C25110L6)

This certificate is designed to offer students an overview of food truck operations. In only three semesters, students will earn a certificate that will provide a ServSafe Manager Certification, basic culinary skills, an understanding of cost controls, and labor management.

Courses requiring a grade of "C" or better: CUL and HRM

First Semester (Fall)		Credits
CUL-110	Sanitation & Safety	2
CUL-140	Culinary Skills I	5
CUL-140A	Culinary Skills I Lab	1
Second Semester (Spring)		
HRM-220	Cost Control-Food & Bev	3
HRM-245	Human Resource Mgmt-Hosp	3
Third Semester (Summer)		
HRM-170	Food Truck Operations	3
Total Credit Hours Required		**17**

Students who have the ServSafe Manager Certification will receive credit for CUL-110.

Information Technology: Artificial Intelligence

The Artificial Intelligence (AI) curriculum is designed to provide students with the knowledge and skills necessary for employment and growth in the Information Technology (IT) and AI fields. Students will also learn AI skills that apply across other disciplines such as business, manufacturing, and healthcare.

Coursework includes various subject areas related to IT and AI fundamentals, AI tools, discrete and generative AI, Python programming, and hands-on training in multiple AI domains for the purpose of using artificial intelligence tools and skills in a technology environment.

Graduates may qualify for entry-level AI positions such as: AI Prompt Engineer, AI Project Manager, AI Researcher, AI Consultant, AI Tester, AI Tool Builder, and AI Technical Support.

Specific Requirements

1. General college admission requirements must be met.
2. Transfer credit will not be accepted for CTS-289.

Information Technology: Artificial Intelligence Associate in Applied Science Degree (A25590AI)

Courses requiring a grade of "C" or better: ACA, CSC, CTI, CTS, DBA, and NOS

First Semester (Fall)		**Credits**
ACA-115	Success and Study Skills	1
CSC-113	Artificial Intel. Fundamentals	3
CTI-110	IT Foundations	3
CTS-210	Computer Ethics	3
ENG-111	Writing and Inquiry	3
NOS-110	Operating Systems Concepts	3
Second Semester (Spring)		
CSC-117	Artificial Intel. Tools I	3
CSC-121	Python Programming	3
CTI-120	Network & Sec Foundations	3
DBA-120	Database Programming I	3
MAT-110	Mathematical Measurement	3
Third Semester (Summer)		
CTS-115	Info Sys Business Concepts	3
DBA-210	Database Administration	3
Fourth Semester (Fall)		
CET-111	Computer Upgrade/Repair I	3
CSC-114	Artificial Intelligence I	3
CSC-122	Python Application Development	3
CTS-130	Spreadsheet	3
CTS-217	Computer Training/Support	3
Fifth Semester (Spring)		
ART-111	Art Appreciation	3
COM-231	Public Speaking	3
CTS-289	System Support Project	3
PSY-150	General Psychology	3
Total Credit Hours Required		**64**

Information Technology: Artificial Intelligence Certificate (C25590AI1)

Students will learn how to use AI tools focused on industry standards. Upon completion of the certificate students will have a grounding in AI concepts, prompt engineering, AI domains, tools, and generative AI. This certificate is designed for those who have prior experience with computers and wish to add AI technologies to their skill set. If a student does not have prior computer proficiency, other course work may be required to meet course prerequisites.

Courses requiring a grade of "C" or better: CSC, CTI, CTS, and DBA

First Semester (Fall)		**Credits**
CSC-113	Artificial Intel. Fundamentals	3
CTI-110	IT Foundations	3
CTS-210	Computer Ethics	3
Second Semester (Spring)		
CSC-117	Artificial Intel. Tools I	3
CSC-121	Python Programming	3
DBA-120	Database Programming I	3
Total Credit Hours Required		**18**

Information Technology: Information Systems

The Information Systems curriculum is designed to prepare graduates for employment with organizations that use computers to process, manage, and communicate information. This is a flexible curriculum that can be customized to meet community information system needs.

Course work will develop a student's ability to communicate complex technical issues related to computer hardware, software, and networks in a manner that computer users can understand. Classes cover computer operations and terminology, operating systems, database, networking, security, and technical support.

Graduates should qualify for employment in entry-level positions with businesses, educational systems, and governmental agencies that rely on computer systems to manage information. Graduates should be prepared to sit for industry-recognized certification exams.

Specific Requirements

1. General college admission requirements must be met.
2. Transfer credit will not be accepted for CTS-289.

Information Technology: Information Systems Associate in Applied Science Degree (A25590IS)

Courses requiring a grade of "C" or better: ACA, CIS, CTI, CTS, DBA, GIS, NOS, and WEB

First Semester (Fall)		**Credits**
ACA-115	Success & Study Skills	1
CIS-110	Introduction to Computers	3
CTI-110	IT Foundations	3
CTI-120	Network & Sec Foundations	3
ENG-111	Writing and Inquiry	3
NOS-110	Operating System Concepts	3
Second Semester (Spring)		
CSC-113	Artificial Intel. Fundamentals	3
CSC-121	Python Programming	3
DBA-120	Database Programming I	3
MAT-110	Mathematical Measurement	3
NOS-130	Windows Single User	3
Third Semester (Summer)		
CTS-115	Info Sys Business Concepts	3
DBA-210	Database Administration	3
Fourth Semester (Fall)		
CET-111	Computer Upgrade/Repair I	3
COM-231	Public Speaking	3
CTS-217	Computer Training/Support	3
WEB-140	Web Development Tools	3
Fifth Semester (Spring)		
ART-111	Art Appreciation	3
CTS-289	System Support Project	3
GIS-111	Introduction to GIS	3
PSY-150	General Psychology	3
	Pathway Option	3
Total Credit Hours Required		**64**

Pathway options - choose one

CSC-121	Python Programming	3
CSC-151	JAVA Programming	3
GIS-121	Georeferencing and Mapping	3
GIS-215	GIS Data Models	3
NOS-120	Linux Single User	3
WEB-111	Intro to Web Graphics	3
WEB-213	Internet Mkt & Analytics	3

See page 173 for academic credit to be given for certifications in the Information Technology field.

Information Technology: Computer Fundamentals Certificate (C25590I1)

The Computer Fundamentals certificate provides students with an essential set of skills to prepare for the workplace. Students will learn to use a popular software application package, create, and design databases, design web sites, and perform operating system, networking, and security basics. This certificate is designed for students who want to improve their skills for the workplace.

Courses requiring a grade of "C" or better: CIS, CTI, DBA, NOS, and WEB

First Semester (Fall)		**Credits**
CIS-110	Introduction to Computers	3
CTI-110	IT Foundations	3
CTI-120	Network & Sec Foundations	3
Second Semester (Spring)		
DBA-120	Database Programming I	3
NOS-110	Operating System Concepts	3
WEB-140	Web Development Tools	3
Total Credit Hours Required		**18**

Information Technology: GIS Fundamentals Certificate (C25590I2)

The GIS Fundamentals Certificate provides a curriculum based on a solid foundation in GIS concepts. Students enrolled in this certificate will learn the different forms of spatial data and their essential properties; ways spatial data can be used to investigate complex problems; principles and methods for collecting spatial data; principles of map design and effective cartographic communication; designing, creating and manipulating GIS databases and operating GPS technology.

This certificate is designed for students who have experience with computers and want to improve geospatial technology skills. If a student does not have prior computer proficiency, other coursework might be required to meet course pre-requisites.

Courses requiring a grade of "C" or better: CTI and GIS

First Semester (Fall)		**Credits**
CTI-110	IT Foundations	3
GIS-111	Introduction to GIS	3
Second Semester (Spring)		
GIS-215	GIS Data Models	3
Third Semester (Fall)		
GIS-121	Georeferencing and Mapping	3
Total Credit Hours Required		**12**

Information Technology: PC Installation & Maintenance Certificate (C25590I3)

Students learn how to install, optimize, upgrade, and troubleshoot personal computer hardware and software. They gain both theoretical and hands-on experience using a variety of current hardware and software technologies. Topics such as testing electrical components, using diagnostics utilities, and user PC support interactions will be covered. Preparation for the A+ Certification examination is an integral objective of this certificate program. Success as a PC technician requires essential knowledge and skills that may be tested by the internationally-recognized A+ Certification exam.

Courses requiring a grade of "C" or better: CTI and NOS

First Semester (Fall)		**Credits**
CTI-110	IT Foundations	3
NOS-110	Operating System Concepts	3
Second Semester (Spring)		
CET-111	Computer Upgrade/Repair I	3
NOS-120	Linux Single User	3
NOS-130	Windows Single User	3
Total Credit Hours Required		**15**

See page 173 for academic credit to be given for certifications in the Information Technology field.

Information Technology: Network Management

The Network Management curriculum prepares individuals for employment supporting network infrastructure environments. Students will learn how to use technologies to provide reliable transmission and delivery of data, voice, image, and video communications in business, industry, and education. Course work includes design, installation, configuration, and management of network infrastructure technologies and network operating systems. Emphasis is placed on the implementation and management of network software and the implementation and management of hardware such as switches and routers.

Graduates may find employment in entry-level jobs as local area network managers, network operators, network analysts, and network technicians. Graduates may also be qualified to take certification examinations for various network industry certifications, depending on their local program.

Specific Requirements

1. General college admission requirements must be met.
2. Transfer credit will not be accepted for NET-289.

Information Technology: Network Management Associate in Applied Science Degree (A25590NM)

Courses requiring a grade of "C" or better: ACA, CTI, CTS, NET, NOS, and SEC

First Semester (Fall)		**Credits**
ACA-115	Success and Study Skills	1
CSC-113	Artificial Intel. Fundamentals	3
CTI-110	IT Foundations	3
CTI-120	Network & Sec Foundations	3
ENG-111	Writing and Inquiry	3
NOS-110	Operating Systems Concepts	3
Second Semester (Spring)		
MAT-110	Mathematical Measurement	3
NET-125	Introduction to Networks	3
NOS-120	Linux Single User	3
NOS-130	Windows Single User	3
SEC-110	Security Concepts	3
Third Semester (Summer)		
CTS-115	Info Sys Business Concepts	3
NET-126	Switching and Routing	3
NOS-220	Linux Admin I	3
Fourth Semester (Fall)		
COM-231	Public Speaking	3
CTI-240	Virtualization Admin I	3
NET-225	Enterprise Networking	3
NOS-230	Windows Administration I	3
SEC-160	Security Administration I	3
Fifth Semester (Spring)		
ART-111	Art Appreciation	3
NET-175	Wireless Technology	3
NET-289	Networking Capstone Project	3
PSY-150	General Psychology	3
SEC-210	Intrusion Detection	3
Total Credit Hours Required		**70**

Information Technology: Network Systems Administration Certificate (C25590N1)

This certificate will prepare individuals to perform tasks commonly associated with systems administrators. Students will learn how to monitor, manage, and troubleshoot computer systems and servers. Upon successful completion of this certificate program students will be able to install, manage, and configure Microsoft Windows™ and Linux operating systems.

Courses requiring a grade of "C" or better: NET and NOS

First Semester (Fall)		**Credits**
NOS-110	Operating System Concepts	3
Second Semester (Spring)		
NET-125	Introduction to Networks	3
NOS-120	Linux Single User	3
NOS-130	Windows Single User	3
Third Semester (Summer)		
NOS-220	Linux Admin I	3
Fourth Semester (Fall)		
NOS-230	Windows Administration I	3
Total Credit Hours Required		**18**

Information Technology: CCNA Preparation Certificate (C25590N2)

This certificate is designed to help prepare students for the Cisco Certified Network Associate (CCNA) examination. Topics include network topologies and design, router configuration and protocols, switching theory, virtual LANS and threaded case studies. Upon successful completion of the four course sequence, students will have acquired the knowledge necessary to perform entry level design, construction, and maintenance of network infrastructures. This certificate will help prepare students for the Cisco Certified Network Associate certification exam.

Courses requiring a grade of "C" or better: NET

First Semester (Spring)		**Credits**
NET-125	Introduction to Networks	3
Second Semester (Summer)		
NET-126	Switching and Routing	3
Third Semester (Fall)		
NET-225	Enterprise Networking	3
Fourth Semester (Spring)		
NET-175	Wireless Technology	3
Total Credit Hours Required		**12**

See page 173 for academic credit to be given for certifications in the Information Technology field.

Information Technology: Software and Web Development

The Software and Web Development curriculum prepares graduates for careers in the information technology arena using computers and mobile devices to disseminate and collect information via the Internet.

Course work in this program covers the terminology and use of computers, Internet-ready devices, servers, databases, programming languages, as well as Internet applications, site development and design. Studies will provide opportunity for students to learn related industry standards.

Graduates should qualify for career opportunities as designers, administrators, or developers in the areas of Internet and mobile applications, websites, web services, and related areas of Internet technologies.

Specific Requirements

1. General college admission requirements must be met.
2. Transfer credit will not be accepted for DBA-120, WEB-115, WEB-182, WEB-210, WEB-250, and WEB-289.

Information Technology: Software and Web Development (A25590WB)

Courses requiring a grade of "C" or better: ACA, CIS, CSC, CTI, CTS, GIS, DBA, WBL, and WEB

First Semester (Fall)		**Credits**
ACA-115	Success and Study Skills	1
CIS-115	Intro to Prog & Logic	3
CSC-113	Artificial Intel. Fundamentals	3
CTI-110	IT Foundations	3
ENG-111	Writing and Inquiry	3
WEB-115	Web Markup and Scripting	3
Second Semester (Spring)		
DBA-120	Database Programming I	3
MAT-110	Mathematical Measurement	3
WEB-111	Intro to Web Graphics	3
WEB-182	PHP Programming	3
WEB-210	Web Design	3
Third Semester (Summer)		
COM-231	Public Speaking	3
CTS-115	Info Sys Business Concepts	3
DBA-210	Database Administration	3

Fourth Semester (Fall)		
ART-111	Art Appreciation	3
WEB-125	Responsive Web Frameworks	3
WEB-215	Adv Markup and Scripting	3
WEB-225	Content Management Sys	3
WEB-250	Database Driven Websites	3

Fifth Semester (Spring)		
CTI-120	Network & Sec Foundations	3
PSY-150	General Psychology	3
WEB-213	Internet Mkt & Analytics	3
WEB-289	Web Dev Capstone Project	3
	Pathway Option	3
Total Credit Hours Required		**70**

CSC-121	Python Programming	3
CSC-134	C++ Programming	3
CSC-151	JAVA Programming	3
GIS-111	Introduction to GIS	3
WBL-212/215	Work-Based Learning	3

Information Technology: Database Management Certificate (C25590W4)

Students will learn how to design, manipulate and update databases using a variety of database programs. Upon completion of the certificate students should be able to write programs which create, update and produce databases, tables and reports representative of industry standards.

This certificate is designed for students who have experience with computers and want to improve database skills. If a student does not have the prior proficiency, other course work might be required to meet course prerequisites.

Courses requiring a grade of "C" or better: CIS, DBA, and WEB

First Semester (Fall)		**Credits**
CIS-115	Intro to Prog & Logic	3
WEB-115	Web Markup and Scripting	3

Second Semester (Spring)		
DBA-120	Database Programming I	3
WEB-182	PHP Programming	3

Third Semester (Summer)		
DBA-210	Database Administration	3
Total Credit Hours Required		**15**

Information Technology: Front-End Developer Certificate (C25590W5)

The Web Developer Front-end Certificate provides introductory courses related to front-end web development. Coursework includes client-side markup and scripting and graphic design.

Courses requiring a grade of C or better: CIS and WEB

First Semester (Fall)		**Credits**
CIS-115	Intro to Prog & Logic	3
WEB-115	Web Markup and Scripting	3

Second Semester (Spring)		
WEB-111	Intro to Web Graphics	3
WEB-210	Web Design	3

Third Semester (Fall)		
WEB-125	Responsive Web Frameworks	3
WEB-215	Adv Markup and Scripting	3
Total Credit Hours Required		**18**

Information Technology: Back-End Developer Level Certificate (C25590W6)

The Back-End Developer provides courses related to back-end web development. Coursework includes server-side scripting and database development. Students must complete the Web Developer Front-end Certificate to meet the pre-requisite skill set.

Courses requiring a grade of C or better: CIS, DBA, and WEB

First Semester (Fall)		**Credits**
CIS-115	Intro to Prog & Logic	3
WEB-115	Web Markup and Scripting	3

Second Semester (Spring)		
DBA-120	Database Programming I	3
WEB-182	PHP Programming	3

Third Semester (Summer)		
DBA-210	Database Administration	3

Fourth Semester (Fall)		
WEB-250	Database Driven Websites	3
Total Credit Hours Required		**18**

Information Technology: Systems Security

The Systems Security curriculum covers a broad expanse of technology concepts. This curriculum provides individuals with the skills required to implement effective and comprehensive information security controls.

Course work includes networking technologies, operating systems administration, information policy, intrusion detection, security administration, and industry best practices to protect data communications.

Graduates should be prepared for employment as security administrators. Additionally, they will acquire the skills that allow them to pursue security certifications.

Specific Requirements

1. General college admission requirements must be met.
2. Transfer credit will not be accepted for SEC-285.

Information Technology: Systems Security Associate in Applied Science Degree (A25590SS)

Courses requiring a grade of "C" or better: ACA, CCT, CTI, CTS, NET, NOS, and SEC

First Semester (Fall)		**Credits**
ACA-115	Success & Study Skills	1
CSC-113	Artificial Intel. Fundamentals	3
CTI-110	IT Foundations	3
CTI-120	Network & Sec Foundations	3
ENG-111	Writing and Inquiry	3
NOS-110	Operating Systems Concepts	3
Second Semester (Spring)		
MAT-110	Mathematical Measurement	3
NET-125	Introduction to Networks	3
NOS-120	Linux Single User	3
NOS-130	Windows Single User	3
SEC-110	Security Concepts	3
Third Semester (Summer)		
CTS-115	Info Sys Business Concepts	3
ENG-114	Professional Research and Reporting	3
NET-126	Switching and Routing	3
Fourth Semester (Fall)		
CTI-240	Virtualization Admin I	3
NET-225	Enterprise Networking	3
NOS-230	Windows Administration I	3
PSY-150	General Psychology	3
SEC-160	Security Administration I	3
Fifth Semester (Spring)		
ART-111	Art Appreciation	3
CCT-121	Computer Crime Invest	4
NET-175	Wireless Technology	3
SEC-210	Intrusion Detection	3
SEC-285	Systems Security Project	3
Total Credit Hours Required		**71**

Information Technology: Systems Security Certificate (C25590S2)

The Systems Security certificate will prepare individuals to monitor, manage and mitigate the common cyber security risks that business systems face today. It uses a comprehensive approach that includes rigorous training in process documentation, incident response planning and drills, and security assessments.

The certificate centers on best-practice system administration principles guided by the National Initiative for Cybersecurity Education framework.

Upon successful completion of this certificate, individuals will be able to develop security plans, responses, and assessments in accordance with industry standards in preparation for the CompTIA Security+, and the SSCP IT Administration Exam. This will establish a pathway to pursue certifications such as SSCP, CCSP, HCISPP, and CISSP once as they gain work experience in the field.

Courses requiring a grade of "C" or better: CCT, CTI, NET, and SEC

First Semester (Fall)		**Credits**
CTI-120	Network & Sec Foundation	3
Second Semester (Spring)		
SEC-110	Security Concepts	3
NET-125	Introduction to Networks	3
Third Semester (Fall)		
SEC-160	Security Administration I	3
Fourth Semester (Spring)		
CCT-121	Computer Crime Invest	4
Total Credit Hours Required		**16**

See page 173 for academic credit to be given for certifications in the Information Technology field.

Cyber Forensic Analyst Certificate (C25590S3)

Cybercrime continues to rise at an alarming rate. Cyber attackers are always evolving and making it more difficult for law enforcement and corporate investigators to solve the case. Small digital footprints are left behind that are paramount in learning who the offender is and leading them to prosecution.

This certificate will bridge the gap between traditional Criminal Investigations and Cyber/Computer Investigations.

Students will gain the foundational knowledge and skills to properly conduct cyber investigations by studying criminal law and utilizing some of the most industry-standard tools in performing the collection, preservation, and analysis of digital evidence.

Courses requiring a grade of "C" or better: CCT, CTI and NET

First Semester (Spring)		**Credits**
CTI-120	Network & Sec Foundations	3
	Elective	3
Second Semester (Fall)		
CCT-121	Computer Crimes Investigation	4
NET-125	Introduction to Networks	3
Total Credit Hours Required		**13**

Electives: CJC-131 Criminal Law or CJC-231 Constitutional Law

Students who have successfully completed a curriculum offering of Basic Law Enforcement Training within 10 years of their application to the Cyber Forensic Analyst Certificate will receive credit for the elective (CJC-121 or CJC-231).

In the Computer Technologies Department, academic credit is available for the following certifications as long as the certification is current at the time academic credit is awarded. If a student has a certification (not on the list), please check with the department chair for possible course credit.

CERTIFICATIONS	Credit Courses	Credit Hours
MOS Word, Excel, PowerPoint (2016 or later version)	CIS 110	3
Network+ and Security+	CTI 120	3
A+	CTS 120	3
Cisco Certified Network Associate (CCNA)	NET 125	3
	NET 126	3
	NET 225	3
CWNA	NET 175	3
Linux+ Red Hat Certified Technician Red Hat Certified Engineer	NOS 120	3
Linux/LPIC-1	NOS 120	3
	NOS 220	3
Modern Desktop Administrator (MD) via MD-100 Windows 10 and MD-101: Managing Modern Desktops	NOS 130	3
Any of the following: CompTIA Security+, CompTIA SMSP, CCIA, CHFI, GCIH, GSEC, or GISP	SEC 110	3
Certified Ethical Hacker (CEH)	SEC 160	3
Computer Hacking Forensic Investigator (CHFI)	CCT 121	4

Manicuring/Nail Technology

The Manicuring/Nail Technology curriculum provides competency-based knowledge, scientific/artistic principles, and hands-on fundamentals associated with the nail technology industry. The curriculum provides a simulated salon environment which enables students to develop manipulative skills.

Course work includes instruction in all phases of professional nail technology, business/computer principles, product knowledge, and other related topics.

Graduates should be prepared to take the North Carolina Cosmetology State Board Licensing Exam and upon passing be licensed and qualify for employment in beauty and nail salons, as a platform artist, and in related businesses.

The Mountain Tech Spa, an on-campus spa facility, provides practical experience for Manicuring/Nail Technology students under the direction of College faculty.

The Manicuring/Nail Technology program is approved by the:

North Carolina Board of Cosmetic Art Examiners
121 Edinburgh South Drive, Suite 209
Cary, NC 27511
Phone: (919) 736-6123
Fax: (919) 678-3012
www.nccosmeticarts.com

Specific Program Requirements

1. General college admission requirements.
2. Submission of proper documentation is required by the Spa Therapies and Operations Department and the NC Board of Cosmetic Art Examiners prior to class start. Required documentation includes Hepatitis B record, current government-issued photo ID showing date of birth, and social security card, tax ID card, or Department of Homeland Security ID.
3. Completion of required Hepatitis B vaccine. First dose to be completed by the first day of class. Second Hepatitis B vaccine to be completed at least one month after the first dose. Third dose must be completed six months after the first.
4. Manicuring/Nail Technology students must clock out when leaving the laboratory. To earn hours, students must be physically present in the laboratory.
5. Students should be physically able to use manicuring/nail technology equipment and safely use manicuring/nail technology products with or without reasonable accommodations and be comfortable working directly with chemicals found in products used in the manicuring/nail technology industry.

Manicuring/Nail Technology Certificate (C55400)

Courses requiring a grade of "C" or better: BUS and COS

First Semester (Fall)		**Credits**
COS-121	Manicure/Nail Technology I	6
Second Semester (Spring)		
BUS-139	Entrepreneurship I	3
COS-222	Manicure/Nail Tech. II	6
Total Credit Hours Required		**15**

Manicuring Instructor

The Manicuring Instructor curriculum provides a course of study covering the skills needed to teach the theory and practices of manicuring as required by the North Carolina State Board of Cosmetology.

Course work includes all phases of manicuring theory laboratory instruction.

Graduates should be prepared to take the North Carolina Cosmetology State Board Manicuring Instructor Licensing Exam and upon passing be qualified for employment in a cosmetology or manicuring school.

The Manicuring Instructor program is approved by the:

North Carolina Board of Cosmetic Art Examiners
121 Edinburgh South Drive, Suite 209
Cary, NC 27511
Phone: (919) 736-6123
Fax: (919) 678-3012
www.nccosmeticarts.com

Specific Program Requirements

1. General college admission requirements.
2. Should have a high school diploma or a high school graduation equivalency certificate.
3. Submission of proper documentation is required by the Spa Therapies and Operations Department and the NC Board of Cosmetic Art Examiners prior to class start. Required documentation includes Hepatitis B record, current government-issued photo ID showing date of birth, and social security card or tax ID card, or Department of Homeland Security ID.
4. Completion of required Hepatitis B vaccine. First dose to be completed by the first day of class. Second Hepatitis B vaccine to be completed at least one month after the first dose. Third dose must be completed six months after the first.
5. To earn hours, Manicuring Instructor students must be physically present in the laboratory. When leaving a laboratory, students must clock out.

6. Students must be able to differentiate between colors with or without reasonable accommodations and be comfortable working directly with chemicals found in products used in the manicuring industry.
7. Students should be able to use manicuring equipment such as electric file and be able to sit for prolonged periods with or without reasonable accommodations.
8. Applicants of the Manicuring Instructor program should hold a current NC Board of Cosmetic Arts Examiners Cosmetologist or a manicurist license.

Manicuring Instructor Certificate (C55380)

Courses requiring a grade of "C" or better: COS

First Semester (Fall)		Credits
COS-251	Manicure Instr Concepts	8
Second Semester (Spring)		
COS-252	Manicure Instr Practicum	5
Total Credit Hours Required		**13**

Mechanical Engineering Technology

A course of study that prepares students to use basic engineering principles and technical skills to design, develop, test, and troubleshoot projects involving mechanical systems. Includes instruction in principles of mechanics, applications to specific engineering systems, design testing procedures, prototype and operational testing and inspection procedures, manufacturing system-testing procedures, test equipment operation and maintenance, computer applications, critical thinking, planning and problem solving, and oral and written communications. Graduates of the curriculum will find employment opportunities in the manufacturing or service sectors of engineering technology. Engineering technicians may obtain professional certification by application to organizations such as ASQC, SME, and NICET.

Mechanical Engineering Technology Associate in Applied Science Degree (A40320)

Courses requiring a grade of "C" or better: ATR, DFT, EGR, ELC, ELN, HYD, ISC, MAC, MAT, MEC, PHY, and TDP

First Semester (Fall)		Credits
EGR-110	Intro to Engineering Technology	2
ELC-111	Intro to Electricity	3
ENG-111	Writing and Inquiry	3
MAC-131	Blueprint Reading/Mach I	2
MAT-171	Precalculus Algebra	4
Second Semester (Spring)		
DFT-151	CAD I	3
HYD-110	Hydraulics/Pneumatics I	3
ISC-121	Envir Health & Safety	3
MEC-110	Introduction to CAD/CAM	2
MEC-145	Mfg. Materials I	3
Third Semester (Summer)		
COM-231	Public Speaking	3
HUM-115	Critical Thinking	3
ELC-117	Motor and Controls	4
Fourth Semester (Fall)		
ATR-112	Intro to Automation	3
DFT-154	Intro to Solid Modeling	3
EGR-250	Statics/Strength of Mater	5
ELN-260	Prog Logic Controllers	4
Fifth Semester (Spring)		
ATR-212	Industrial Robots	3
DFT-254	Intermed Solid Model/Render	3
EGR-285	Design Project	2
PHY-151	College Physics I	4
PSY-150	General Psychology	3
TDP-110	Introduction to 3D Printing	3
Total Credit Hours Required		**71**

Mechanical Engineering Technology - Automation & Robotics Certificate (C40320L5)

The Mechanical Engineering Technology Automation and Robotics Certificate program is designed to develop fundamental skills necessary to safely operate and maintain robotic and automated equipment. This certificate prepares students for employment opportunities in automated industries.

Courses requiring a grade of "C" or better: ATR, ELC, and ELN

Courses Required		Credits
ATR-112	Intro to Automation	3
ATR-212	Industrial Robots	3
ELC-111	Intro to Electricity	3
ELC-117	Motor and Controls	4
ELN-260	Prog Logic Controllers	4
Total Credit Hours Required		**17**

Computer Aided Drafting Certificate (C40320L8)

Courses requiring a grade of "C" or better: DFT

Required Courses		**Credits**
DFT-151	CAD I	3
DFT-152	CAD II	3
DFT-153	CAD III	3
DFT-154	Solid Modeling	3
Total Credit Hours Required		**12**

Solid Modeling Certificate (C40320L9)

Courses requiring a grade of "C" or better: DFT and MAC

Required Courses			**Credits**
DFT	151	CAD I	3
DFT	152	CAD II	3
DFT	154	Solid Modeling	3
DFT	254	Inter. Solid Modeling	3
MAC	131	Blueprint Reading I	2
MAC	132	Blueprint Reading II	2
Total Credit Hours Required			**16**

Mechatronics Engineering Technology

A course of study that prepares the students to use basic engineering principles and technical skills in developing and testing automated, servomechanical, and other electromechanical systems. Includes instruction in prototype testing, manufacturing and operational testing, systems analysis and maintenance procedures.

Graduates should be qualified for employment in industrial maintenance and manufacturing including assembly, testing, startup, troubleshooting, repair, process improvement, and control systems, and should qualify to sit for Packaging Machinery Manufacturers Institute (PMMI) mechatronics or similar industry examinations.

Mechatronics Engineering Technology Associates in Applied Science Technology (A40350)

Courses requiring a grade of "C" or better: ATR, DFT, EGR, ELC, ELN, HYD, ISC, MAC, MEC, and WLD

First Semester (Fall)		**Credits**
CIS-110	Introduction to Computers	3
DFT-154	Intro to Solid Modeling	3
EGR-110	Intro to Engineering Technology	2
ELC-111	Intro to Electricity	3
ENG-111	Writing and Inquiry	3
MAC-131	Blueprint Reading/Mach I	2
Second Semester (Spring)		
COM-231	Public Speaking	3
HYD-110	Hydraulics/Pneumatics I	3
MEC-110	Introduction to CAD/CAM	2
MEC-130	Mechanisms	3
WLD-112	Basic Welding Processes	2
Third Semester (Summer)		
ELC-117	Motor and Controls	4
HUM-115	Critical Thinking	3
PSY-150	General Psychology	3
Fourth Semester (Fall)		
ATR-112	Intro to Automation	3
ELN-260	Prog Logic Controllers	4
ISC-121	Envir Health & Safety	3
MAT-171	Precalculus Algebra	4
Fifth Semester (Spring)		
ATR-212	Industrial Robots	3
ELC-213	Instrumentation	4
ELC-228	PLC Applications	4
PHY-151	College Physics I	4
Total Credit Hours Required		**68**

Mechatronics Engineering Technology: Maintenance & Reliability Diploma (D40350L1)

Courses requiring a grade of "C" or better: ATR, ELC, ELN, HYD, ISC, MAC, MEC, and WLD

First Semester (Fall)		**Credits**
ATR-112	Intro to Automation	3
MAC-131	Blueprint Reading/Mach I	2
ELC-111	Intro to Electricity	3
ELN-260	Prog Logic Controllers	4
MAT-171	Precalculus Algebra	4
MEC-110	Introduction to CAD/CAM	2
WLD-112	Basic Welding Processes	2
Second Semester (Spring)		
ELC-228	PLC Applications	4
HYD-110	Hydraulics/Pneumatics I	3
ISC-121	Envir Health & Safety	3
MEC-130	Mechanisms	3
Third Semester (Summer)		
ATR-212	Industrial Robots	3
ELC-117	Motor and Controls	4
ENG-111	Writing and Inquiry	3
Total Credit Hours Required		**43**

Mechatronics Engineering Technology: Basic Industrial Maintenance Certificate (C40350L1)

The Industrial Systems Basic Maintenance program teaches the student concepts and skills needed to service and repair various types of mechanical equipment.

Courses requiring a grade of "C" or better: ELC, HYD, ISC, MAC, MEC, and WLD

Required Courses		**Credits**
ELC-111	Intro to Electricity	3
HYD-110	Hydraulics/Pneumatics I	3
ISC-121	Envir Health & Safety	3
MAC-131	Blueprint Reading/Mach I	2
MEC-130	Mechanisms	3
WLD-112	Basic Welding Processes	2
Total Credit Hours Required		**16**

Medical Assisting

The Medical Assisting Diploma prepares healthcare professionals with a wide range of skills to handle administrative tasks, clinical duties, and laboratory work. Course work covers appointment management, insurance processing, billing procedures, and computer skills; it also includes training in exam assistance, basic lab techniques, electrocardiography, supervised medication administration, and the ethical and legal aspects of patient care.

Graduates of the medical assisting program may be eligible to sit for the Registered Medical Assisting and the Registered Phlebotomy Technician exams through the American Medical Technologist organization. Employment opportunities include physicians' offices, health maintenance organizations, health departments, and hospitals.

Medical Assisting Diploma (D25310L1)

Courses requiring a grade of "C" or better: MED and OST

First Semester (Fall)		**Credits**
ENG-111	Writing and Inquiry	3
MED-110	Orientation to Medical Assisting	1
MED-116	Intro to Anatomy and Physiology	4
MED-121	Medical Terminology I	3
MED-122	Medical Terminology II	3
OST-149	Medical Legal Issues	3
Second Semester (Spring)		
MED-130	Admin Office Procedures I	2
MED-131	Admin Office Procedure II	2
MED-140	Exam Room Procedures I	5
MED-240	Exam Room Procedures II	5
OST-137	Office Applications	3
Third Semester (Summer)		
COM-120	Interpersonal Communication	3
MED-260	Clinical Externship	5
Total Credit Hours Required		**42**

Medical Laboratory Technology

This curriculum prepares individuals to perform clinical laboratory procedures in chemistry, hematology, microbiology, and immunohematology that may be used in the maintenance of health and diagnosis/treatment of disease.

Course work emphasizes mathematical and scientific concepts related to specimen collection, laboratory testing and procedures, quality assurance and reporting/recording and interpreting findings involving tissues, blood, and body fluids.

Graduates may be eligible to take the examination given by the Board of Certification of the American Society for Clinical Pathology. Employment opportunities include laboratories in hospitals, medical offices, industry, and research facilities.

This program is accredited by:
National Accrediting Agency for Clinical Laboratory Sciences (NAACLS)
5600 N River Rd. Suite 720
Rosemont, IL 60018
Phone: (773) 714-8880
www.naacls.org

Specific Program Requirements:

1. General college admission requirements.
2. High school units:
    a. Completion of high school-level chemistry or college-level Chemistry 092 required with grade of C or higher.
    b. Biology strongly recommended.
3. This program has a selective admission process. See Selective Allied Health Program Criteria on the Selective and Limited Programs page of the A-B Tech website. www.abtech.edu/selective-limited-programs
4. Acceptable reports of medical examinations by first day of MLT 252 Practicum I.
5. Satisfactory completion of required immunizations by first day of MLT 252 Practicum I.
6. Criminal background checks, drug screens, and seasonal flu vaccines are required prior to admission to clinical sites.
7. Current American Heart Association (AHA) Basic Life Support (BLS) for Healthcare Providers certification by the first day of MLT 252 Practicum I.

Medical Laboratory Technology Associate in Applied Science Degree (A45420ML)

Courses requiring a grade of "C" or better: CHM and MLT

First Semester (Fall)		Credits
CHM-130	Gen, Org & Biochemistry	3
CHM-130A	Gen, Org & Biochem Lab	1
MLT-110	Intro to MLT	3
MLT-111	Urinalysis & Body Fluids	2
MLT-116	Anatomy & Med Terminology	5
MLT-140	Intro to Microbiology	3
Second Semester (Spring)		
ENG-111	Writing and Inquiry	3
MAT-110	Mathematical Measurement & Literacy	3
MLT-120	Hematology/Hemostasis I	4
MLT-126	Immunology and Serology	2
MLT-130	Clinical Chemistry I	4
MLT-240	Special Clin Microbiology	3
Third Semester (Summer)		
MLT-127	Transfusion Medicine	3
MLT-252	MLT Practicum I (Phlebotomy)	2
Fourth Semester (Fall)		
COM-120	Intro Interpersonal Communication	3
MLT-254	MLT Practicum I (Blood Bank)	4
MLT-264	MLT Practicum III (Hematology)	4
PSY-150	General Psychology	3
Fifth Semester (Spring)		
CIS-110	Introduction to Computers	3
HUM-115	Critical Thinking	3
MLT-215	Professional Issues	1
MLT-271	MLT Practicum III (Special Microbiology)	1
MLT-273	MLT Practicum III (Microbiology)	3
MLT-274	MLT Practicum III (clinical Chemistry)	4
Total Credit Hours Required		**70**

Students who have completed the Phlebotomy Certificate at A-B Tech or have a Phlebotomy Certification by either national professional organization will be given credit for MLT-252.

Medical Laboratory Technology: Accelerated Associate in Applied Science Degree (A45420AC)

Specific Program Requirements:

1. General college admission requirements.
2. High school units:
   c. Completion of high school-level chemistry or college-level Chemistry-092 required with grade of C or higher.
   d. Biology strongly recommended.
3. This program has a selective admission process. See Selective Allied Health Program Criteria on the Selective and Limited Programs page of the A-B Tech website. www.abtech.edu/selective-limited-programs
4. Acceptable reports of medical examinations by first day of MLT-252 Practicum I.
5. Satisfactory completion of required immunizations by first day of MLT-252 Practicum I.
6. Criminal background checks, drug screens, and seasonal flu vaccines are required prior to admission to clinical sites.
7. Current American Heart Association (AHA) Basic Life Support (BLS) for Healthcare Providers certification by the first day of MLT-252 Practicum I.
8. **Must be a working lab employee at a hospital greater than >45 miles from Asheville. Hospital is required to have an affiliation agreement with A-B Tech. The Hospital must be willing to host the students for their first-year labs in all sections and host them as a clinical student 5 days a week for 1–16-week semester.**

Courses requiring a grade of "C" or better: CHM and MLT

First Semester (Fall)		Credits
CHM-130	Gen, Org & Biochemistry	3
CHM-130A	Gen, Org & Biochem Lab	1
MLT-110	Intro to MLT	3
MLT-111	Urinalysis & Body Fluids	2
MLT-116	Anatomy & Med Terminology	5
MLT-140	Intro to Microbiology	3
Second Semester (Spring)		
ENG-111	Writing and Inquiry	3
MAT -110	Mathematical Measurement & Literacy	3
MLT-120	Hematology/Hemostasis I	4
MLT-126	Immunology and Serology	2
MLT-130	Clinical Chemistry I	4
MLT-240	Special Clin Microbiology	3
Third Semester (Summer)		
COM-120	Intro Interpersonal Communication	3
MLT-127	Transfusion Medicine	3
MLT-252	MLT Practicum I (Phlebotomy)	2
PSY-150	General Psychology	3

Fourth Semester (Fall)

CIS-110	Introduction to Computers	3
HUM-115	Critical Thinking	3
MLT-285	MLT Practicum	13
MLT-215	Professional Issues	1
Total Credit Hours Required		**67**

Students who have completed the Phlebotomy Certificate at A-B Tech or have a Phlebotomy Certification by either national professional organization will be given credit for MLT-252.

Medical Office Administration

The Medical Office Administration curriculum prepares individuals for employment as medical administrative personnel in the areas of medical office, medical billing and coding, dental office, patient services, and medical documents.

Course work includes medical terminology, computer applications, medical office management, medical coding, medical insurance and billing, medical legal and ethical issues, oral and written communication, and other topics depending on the subject area selected within this curriculum.

Graduates should qualify for employment opportunities in a variety of medical office positions in medical and dental offices, hospitals, insurance companies, laboratories, medical supply companies, and other healthcare related organizations. Upon graduation, students may be eligible to sit for industry recognized certification exams.

Medical Office Administration Associate in Applied Science Degree (A25310)

Courses requiring a grade of "C" or better: ACA, ACC, MED, and OST

First Semester (Fall)		**Credits**
ACA-115	Success & Study Skills	1
ENG-111	Writing and Inquiry	3
MED-121	Medical Terminology I	3
OST-131	Keyboarding	2
OST-137	Office Applications I	3
OST-164	Office Editing	3

Second Semester (Spring)

HUM-115	Critical Thinking	3
MAT-110	Math Measurement & Literacy	3
MED-122	Medical Terminology II	3
OST-134	Text Entry & Formatting	3
OST-136	Word Processing	3
OST-148	Med Ins & Billing	3

Third Semester (Summer)

OST-132	Keyboard Skill Building	2
OST-149	Medical Legal Issues	3
OST-243	Med Office Simulation	3
OST-289	Office Admin Capstone	3

Fourth Semester (Fall)

ACC-120	Prin of Financial Accounting	4
BIO-161	Intro to Human Biology	3
OST-171	Intro to Virtual Office	3
OST-286	Professional Development	3

Fifth Semester (Spring)

COM-231	Public Speaking	3
OST-145	Social Media for Office Prof	3
PSY-150	General Psychology	3
	Major Elective	3
Total Credit Hours Required		**69**

Major Electives: OST-153 or OST-247/OST-248.

Medical Office Administration Diploma (D25310)

Courses requiring a grade of "C" or better: ACA, MED, and OST

Entrance requirements: Keyboarding placement test into OST 134 consisting of 25 gross words a minute (gwam) at 98% accuracy using the touch system and college English placement test.

First Semester (Fall)		**Credits**
ACA-115	Success & Study Skills	1
ENG-111	Writing and Inquiry	3
MED-121	Medical Terminology I	3
OST-137	Office Applications I	3
OST-164	Office Editing	3
OST-171	Intro to Virtual Office	3

Second Semester (Spring)

BIO-161	Intro to Human Biology	3
MED-122	Medical Terminology II	3
OST-134	Text Entry & Formatting	3
OST-136	Word Processing	3
OST-148	Med Ins & Billing	3
	Major Elective	3

Third Semester (Summer)

OST-132	Keyboard Skill Building	2
OST-149	Medical Legal Issues	3
OST-243	Med Office Simulation	3
OST-289	Office Admin Capstone	3
Total Credit Hours Required		**45**

Major Electives: OST-153 or OST-247/OST-248.

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Academic Programs

Medical Office Administration: Medical Coding Certificate (C25310L1)

The Medical Coding Certificate program will prepare individuals for entry-level employment opportunities in the allied health specialty of medical coding. This is an introductory program that may, with experience and additional training, lead to national certification.

Courses requiring a grade of "C" or better: MED and OST

First Semester (Fall)		**Credits**
BIO-161	Intro to Human Biology	3
MED-121	Medical Terminology I	3
Second Semester (Spring)		
MED-122	Medical Terminology II	3
OST-148	Med Ins & Billing	3
Third Semester (Summer)		
OST-247	Procedure Coding	3
OST-248	Diagnostic Coding	3
Total Credit Hours Required		**18**

The Medical Office Administration: Medical Coding Certificate is offered in a 100% online format. Distance learning allows the certificate to be completed around the student's personal schedule without the need to travel to a physical location.

Medical Sonography

The Medical Sonography curriculum provides knowledge and clinical skills in the application of high frequency sound waves to image internal body structures.

Course work includes physics, cross-sectional anatomy, abdominal, introductory vascular, and obstetrical/gynecological sonography. Competencies are attained in identification of normal anatomy and pathological processes, use of equipment, fetal growth and development, integration of related imaging, and patient interaction skills.

Graduates of accredited programs may be eligible to take examinations in ultrasound physics and instrumentation and specialty examinations administered by the American Registry of Diagnostic Medical Sonographers (ARDMS) and find employment in clinics, physicians' offices, mobile services, hospitals, and educational institutions.

Graduates will be eligible to apply to the American Registry of Diagnostic Medical Sonographers for examinations in physics, vascular, abdominal and obstetrics and gynecology.

The Diagnostic Medical Sonography Program is accredited in Abdomen Extended, OB/GYN, Adult Cardiac and Vascular concentrations. The following are the accrediting agencies:

Commission on Accreditation of Allied Health Education Programs (CAAHEP)
9355 - 113th St. N, #7709
Seminole, FL 33775
Phone: (727) 210-2350
Fax: (727) 210-2354
www.caahep.org

Joint Review Committee on Education in Diagnostic Medical Sonography (JRC-DMS)
6021 University Boulevard, Suite 500
Ellicott City, MD 21043
Phone: (443) 973-3251
www.jrcdms.org

Specific Program Requirements:

1. General college admission requirements.
2. This program has a selective selection process. See Selective Allied Health Program Criteria on the Selective and Limited Programs page of the A-B Tech website. www.abtech.edu/selective-limited-programs
3. Keyboarding skills are highly recommended.
4. Final admission to the Medical Sonography program shall be contingent upon documentation of physical and emotional health that would provide evidence indicative of the applicant's ability to provide safe care to the public. Completed medical and immunization records must be submitted before classes begin.
5. Either first dose of Hepatitis B vaccine or completion of series.
6. Current American Heart Association (AHA) Basic Life Support (BLS) for Healthcare Providers certification is a prerequisite to full admission and must be maintained throughout the program. This certification must include hands-on skills components, AED use, and other lifesaving skills. Course certifications from any other providers will not be accepted.
7. Satisfactory completion of required immunizations prior to admission to clinical sites. Affiliated clinical sites for Sonography will require an on boarding process, which will include a criminal background check and drug screen prior to the term in which the first clinical experience will occur. If any clinical facility refuses to allow the student to participate in clinical experiences, for any reason, the student will not be able to progress in the program.
8. Sonography students will be required to complete clinical rotations that may require them to travel as much as two hours from campus.

9. Prior to admission to the Medical Sonography program, students must have successfully completed BIO 163 (or advisor-approved substitution) COM-120, MAT-110, and PHY-125 with a "C" or better. Students applying to the Medical Sonography program are encouraged to have successfully completed: COM-120, PHI-240 and PSY-150 prior to program admission due to the rigorous nature of the Medical Sonography curriculum.

Medical Sonography Associate in Applied Science Degree (A45440)

Courses requiring a grade of "C" or better: BIO, COM, ENG, MAT, PHY, and SON

Preadmission Requirements		**Credits**
BIO-163	Basic Anatomy and Physiology	5
COM-120	Intro Interpersonal Communication	3
MAT-110	Math Measurement & Literacy	3
PHY-125	Health Sciences Physics	4
First Semester (Fall)		
ENG-111	Writing and Inquiry	3
SON-110	Intro to Sonography	3
SON-111	Sonographic Physics	4
SON-130	Abdominal Sonography I	3
Second Semester (Spring)		
PSY-150	General Psychology	3
SON-120	SON Clinical Ed I	5
SON-131	Abdominal Sonography II	2
SON-140	Gynecological Sonography	2
SON-241	Obstetrical Sonography I	2
Third Semester (Summer)		
SON-121	SON Clinical Ed II	5
SON-242	Obstetrical Sonography II	2
Fourth Semester (Fall)		
SON-220	SON Clinical Ed III	8
SON-250	Vascular Sonography	2
SON-272	Advanced Pathology	1
Fifth Semester (Spring)		
PHI-240	Introduction to Ethics	3
SON-221	SON Clinical Ed IV	8
SON-225	Case Studies	1
SON-289	Sonographic Topics	2
Total Credit Hours Required		**74**

Program total includes 12 credit hours of successful completion of BIO-163, COM-120, and MAT-110 with a grade of "C" or better prior to application and 4 hours of successful completion of PHY-125 with a grade of "C" or better as a prerequisite to full admission into the Medical Sonography Program.

Nursing

Associate Degree Nursing

The Associate Degree Nursing (ADN) curriculum provides knowledge, skills, and strategies to integrate safety and quality into nursing care, to practice in a dynamic environment, and to meet individual needs which impact health, quality of life, and achievement of potential.

Course work includes and builds upon the domains of healthcare, nursing practice, and the holistic individual. Content emphasizes the nurse as a member of the interdisciplinary team providing safe, individualized care while employing evidence-based practice, quality improvement, and informatics.

Graduates of this program are eligible to apply to take the National Council Licensure Examination (NCLEX-RN). Employment opportunities are vast within the global health care system and may include positions within acute, chronic, extended, industrial, and community health care facilities.

Upon completion of the Associate Degree Nursing Program and licensure, the graduate will:

1. Demonstrate skills necessary to provide safe, quality care
2. Demonstrate knowledge necessary for professional Nursing practice
3. Identify as a nurse committed to being a client advocate, who is caring and culturally competent
4. Utilize informatics and evidence based data to provide Nursing care to clients
5. Demonstrate behaviors that reflect integrity, responsibility, and ethical practices
6. Apply the principles of interdisciplinary team management

This program is nationally accredited by the:

National League for Nursing Commission for Nursing Education Accreditation (NLN CNEA)
2600 Virginia Avenue, NW
Washington, DC 20037
Phone: (202) 909-2487

This program is approved by the:
North Carolina Board of Nursing
P.O. Box 2129
Raleigh, NC 27602
Phone: (919) 782-3211
www.ncbon.com

Specific Program Requirements:

1. General college admission requirements.
2. High School units (as evidenced by proof of high school graduation, high-school equivalent, or earned credits from a post-secondary institution):
    a. Chemistry and Biology are strongly suggested
    b. Algebra is highly recommended
3. This program has a selective selection process. See School of Nursing Criteria on the Selective and Limited Programs page of the A-B Tech website. www.abtech.edu/selective-limited-programs
4. Final admission to the ADN program shall be contingent upon documentation of required immunizations and physical and emotional health that would provide evidence indicative of the applicant's ability to provide safe nursing care to the public; this is accomplished by submission of a nursing department-issued physical form that has been completed by a licensed health care provider (physician, PA, or NP).
5. Affiliated clinical sites for nursing will require an on boarding process, which will include a criminal background check and drug testing prior to participation in the clinical component. If any clinical facility refuses to allow the student to participate in clinical experiences, for any reason, the student will not be able to progress in the program. Applicants for initial licensure in NC must also have a criminal background check.
6. Current Basic Life Support (BLS) for Healthcare Providers from the American Heart Association (AHA) or American Red Cross (ARC) Is a prerequisite to full admission and must be maintained throughout the program. This certification must include hands-on skills components for the adult, child and infant, AED use, and choking. Course certifications from any other providers will not be accepted.
7. Students applying to the ADN program must have completed BIO-168 Anatomy and Physiology I with a "C" or higher within 5 years of the application date. BIO-169 Anatomy and Physiology II must be completed with a "C" or better within 5 years of the start of NUR courses. Students are encouraged to have successfully completed: BIO 175, ENG 111, ENG 112, PSY 150, PSY 241, and PHI 240, due to the rigorous nature of the ADN curriculum. See your advisor for acceptable general education substitutes.
8. Admission with advanced standing is subject to space available in the clinical component of the nursing program. Students who begin their nursing education at A-B Tech have preference in admission over students requesting transfer into the program. Space will be allotted to transfer students only when no students who have previously enrolled in the A-B Tech ADN Program are requesting and have qualified for re-entry.

Associate Degree Nursing Associate in Applied Science Degree (A45110)

Fall Admission

Courses requiring a grade of "C" or better: ACA, BIO, ENG, NUR, PHI, and PSY

Preadmission Requirements		**Credits**
BIO-168	Anatomy and Physiology I	4
BIO-169	Anatomy and Physiology II	4
First Semester (Fall)		
ACA-111	College Student Success	1
BIO-175	General Microbiology	3
NUR-111	Intro to Health Concepts	8
NUR-117	Pharmacology	2
Second Semester (Spring)		
ENG-111	Writing and Inquiry	3
NUR-112	Health-Illness Concepts	5
NUR-114	Holistic Health Concepts	5
Third Semester (Summer)		
NUR-212	Health System Concepts	5
PSY-150	General Psychology	3
Fourth Semester (Fall)		
ENG-112	Writing/Research in the Disc	3
NUR-113	Family Health Concepts	5
NUR-211	Health Care Concepts	5
PSY-241	Developmental Psychology	3
Fifth Semester (Spring)		
NUR-213	Complex Health Systems	10
PHI-240	Introduction to Ethics	3
Total Credit Hours Required		**72**

Program total includes 8 credit hours for successful completion of BIO-168 and BIO-169 with a "C" or better in each course, as prerequisites to full admission into the ADN program.

Spring Admission

Courses requiring a grade of "C" or better: ACA, BIO, ENG, NUR, PHI, and PSY

Preadmission Requirements		**Credits**
BIO-168	Anatomy and Physiology I	4
BIO-169	Anatomy and Physiology II	4
First Semester (Spring)		
ACA-111	College Student Success	1
BIO-175	General Microbiology	3
NUR-111	Intro to Health Concepts	8
NUR-117	Pharmacology	2

Second Semester (Fall)

ENG-111	Writing and Inquiry	3
NUR-112	Health-Illness Concepts	5
NUR-114	Holistic Health Concepts	5
Third Semester (Spring)		
ENG-112	Writing/Research in the Disc	3
NUR-113	Family Health Concepts	5
NUR-211	Health Care Concepts	5
PSY-150	General Psychology	3
Fourth Semester (Summer)		
NUR-212	Health System Concepts	5
PSY-241	Developmental Psychology	3
Fifth Semester (Fall)		
NUR-213	Complex Health Systems	10
PHI-240	Introduction to Ethics	3
Total Credit Hours Required		**72**

Program total includes 8 credit hours for successful completion of BIO-168 and BIO-169 with a "C" or better in each course, as prerequisites to full admission into the ADN program.

Associate Degree Nursing Regionally Increasing Baccalaureate Nurses (RIBN) Option

The RIBN option is an AAS Dual Enrollment Program offered in collaboration with Western Carolina University (WCU). Students are accepted into and take courses at both A-B Tech and WCU during enrollment in the RIBN option.

This A-B Tech Associate Degree program Is nationally accredited by the:

National League for Nursing Commission for Nursing Education Accreditation (NLN CNEA)
2600 Virginia Avenue, NW
Washington, DC 20037
Phone: (202) 909-2487

The A-B Tech Associate Degree Nursing is approved by:

North Carolina Board of Nursing
P.O. Box 2129
Raleigh, NC 27602
Phone: (919) 782-3211
www.ncbon.com

The Western Carolina University Nursing program is accredited by:

The Commission on Collegiate Nursing Education
One DuPont Circle, NW Suite 530
Washington, DC 20036
Phone: (202) 887-6791
www.aacn.nche.edu

Specific Option Requirements:

1. A minimum GPA of 3.0 with a TEAS score of 70 or greater are required to be admitted to the ADN program with the RIBN Option.
2. Current American Heart Association (AHA) Basic Life Support (BLS) for Healthcare Providers certification is a prerequisite to full admission and must be maintained throughout the program. Thiscertification must include hands-on skills components, AED use, and other lifesaving skills. Course certifications from any other providerswill not be accepted.
3. Affiliated clinical sites for nursing will require an on boarding process, which will include a criminal background check and drug testing prior to participation in the clinical component. If any clinical facility refuses to allow the student to participate in clinical experiences, for any reason, the student will not be able to progress in the program. Applicants for initial licensure in North Carolina must also have a criminal background check.
4. Maintain dual admission and continued enrollment at both A-B Tech and WCU by completing one WCU course each academic year, as advised by the RIBN Nursing Advisor.
5. Maintain a GPA of 2.5 or greater to progress in the RIBN option, with a minimum grade of "C" in all coursework.
6. Years 1, 2, and 3: Home school is A-B Tech
7. Year 1: Enroll in general education courses at A-B Tech and WCU asadvised by the RIBN Nursing Advisor.
8. Years 2 and 3: Enroll in Associate Degree Nursing courses at A-B Tech and continue enrollment in WCU courses as advised by the RIBN Nursing Advisor.
9. Year 4: Home School is WCU.
10. Successfully pass NCLEX - RN to progress to Year 4.
11. See the RIBN Nursing Advisor for the recommended course sequence.

LPN to ADN Advanced Placement Option

The Licensed Practical Nurse (LPN) to Associate Degree Nursing (ADN) advanced placement curriculum provides knowledge, skills, and strategies to integrate safety and quality into nursing care, to practice in a dynamic environment, and to meet individual needs which impact health, quality of life, and achievement of potential.

Course work includes and builds upon the domains of healthcare, nursing practice, and the holistic individual. Content emphasizes the nurse as a member of the interdisciplinary team providing safe, individualized care while employing evidence-based practice, quality improvement, and informatics.

Graduates of this option are eligible to apply to take the National Council Licensure Examination (NCLEX-RN). Employment opportunities are vast within the global health care system and may include positions within acute, chronic, extended, industrial, and community health care facilities.

Upon completion of the LPN to ADN Advanced Placement Option and licensure, the graduate will:

1. Demonstrate skills necessary to provide safe, quality care
2. Demonstrate knowledge necessary for professional Nursing practice
3. Identify as a nurse committed to being a client advocate, who is caring and culturally competent
4. Utilize informatics and evidence based data to provide Nursing care to clients
5. Demonstrate behaviors that reflect integrity, responsibility, and ethical practices
6. Apply the principles of interdisciplinary team management

This A-B Tech Associate Degree program Is nationally accredited by the:

National League for Nursing Commission for Nursing Education Accreditation (NLN CNEA)
2600 Virginia Avenue, NW
Washington, DC 20037
Phone: (202) 909-2487

The Practical Nursing program is approved by the North Carolina Board of Nursing (NCBON).

North Carolina Board of Nursing
PO Box 2129
Raleigh, NC 27602
Phone (919) 782-3211
www.ncbon.com

Specific Option Requirements:

1. General college admission requirements.
2. This program has a selective selection process. See School of Nursing Criteria on the Selective and Limited Programs page of the A-B Tech website. www.abtech.edu/selective-limited-programs
3. Provide evidence of a current, unrestricted license to practice as an LPN In the state of North Carolina, or from a Nurse Licensure Compact State. A current licensure must be maintained throughout the ADN program.
4. Final admission to the ADN program shall be contingent upon documentation of required Immunizations and physical and emotional health that would provide evidence indicative of the applicant's ability to provide safe nursing care to the public; this is accomplished by submission of a nursing department-issued physical form that has been completed by a licensed health care provider (physician, PA, or NP).
5. Current Basic Life Support (BLS) for Healthcare Providers from the American Heart Association (AHA) or American Red Cross (ARC) is a prerequisite to full admission and must be maintained throughout the program. This certification must include hands-on skills components for the adult, child and infant, AED use, and choking. Course certifications from any other providers will not be accepted.
6. Affiliated clinical sites for nursing will require an on boarding process, which will include a criminal background check and drug testing prior to participation in the clinical component. If any clinical facility refuses to allow the student to participate in clinical experiences, for any reason, the student will not be able to progress in the program. Applicants for initial licensure in NC must also have a criminal background check.
7. Licensed Practical Nurses in the ADN Advanced Placement option must complete most of the general education courses required in the Associate Degree Nursing program prior to the application deadline. These courses include: BIO-168, BIO-169, BIO-175, ENG-111, ENG-112 or ENG-114, PSY-150. See your advisor for acceptable general education substitutes.

LPN to ADN Advanced Placement Option

Credit is given for NUR-111, NUR-117, NUR-112, and NUR-114 (20 hours)

Courses requiring a grade of "C" or better: ACA, BIO, NUR, PHI, and PSY

First Semester (Spring)		**Credits**
ACA-111	College Student Success	1
BIO-175	General Microbiology	3
NUR-113	Family Health Concepts	5
NUR-211	Health Care Concepts	5

Second Semester (Summer)

NUR-212	Health System Concepts	5
PSY-241	Developmental Psychology	3
Third Semester (Fall)		
NUR-213	Complex Health Systems	10
PHI-240	Introduction to Ethics	3
Total Credit Hours Required		**35**

Paramedic to ADN Advanced Placement Option

The Paramedic to Associate Degree Nursing (ADN) advanced placement curriculum provides knowledge, skills, and strategies to integrate safety and quality into nursing care, to practice in a dynamic environment, and to meet individual needs which impact health, quality of life, and achievement of potential.

Coursework includes and builds upon the domains of healthcare, nursing practice, and the holistic individual. Content emphasizes the nurse as a member of the interdisciplinary team providing safe, individualized care while employing evidence-based practice, quality improvement, and informatics.

Graduates of this option are eligible to apply to take the National Council Licensure Examination (NCLEX-RN). Employment opportunities are vast within the global healthcare system and may include positions within acute, chronic, extended, industrial, and community healthcare facilities.

Upon completion of the Paramedic to ADN Advanced Placement Option and licensure, the graduate will:

1. Demonstrate skills necessary to provide safe, quality care
2. Demonstrate knowledge necessary for professional Nursing practice
3. Identify as a nurse committed to being a client advocate, who is caring and culturally competent
4. Utilize informatics and evidence-based data to provide Nursing care to clients
5. Demonstrate behaviors that reflect integrity, responsibility, and ethical practices
6. Apply the principles of interdisciplinary team management

This A-B Tech Associate Degree program Is nationally accredited by the:

National League for Nursing Commission for Nursing Education Accreditation (NLN CNEA)
2600 Virginia Avenue, NW
Washington, DC 20037
Phone: (202) 909-2487

The Associate Degree Nursing program is approved by the:

North Carolina Board of Nursing
P.O. Box 2129
Raleigh, NC 27602
Phone: (919) 782-3211
www.ncbon.com

Specific Option Requirements:

1. General college admission requirements.
2. This program has a selective selection process. See School of Nursing Criteria on the Selective and Limited Programs page of the A-B Tech website. www.abtech.edu/selective-limited-programs
3. Completion of the AAS Degree in Emergency Medical Science
4. Provide evidence of a valid, unrestricted North Carolina Paramedic Certification or National Registry Paramedic Certification.
5. A minimum grade of "C" for general education courses for the ADN program.
6. Final admission to the ADN program shall be contingent upon documentation of required Immunizations and physical and emotional health that would provide evidence indicative of the applicant's ability to provide safe nursing care to the public; this is accomplished by submission of a nursing department-issued physical form that has been completed by a licensed health care provider (physician, PA, or NP).
7. Current Basic Life Support (BLS) for Healthcare Providers from the American Heart Association (AHA) or American Red Cross (ARC) is a prerequisite to full admission and must be maintained throughout the program. This certification must include hands-on skills components for the adult, child, and infant, AED use, and choking. Course certifications from any other providers will not be accepted.
8. Affiliated clinical sites for nursing will require an onboarding process, which will include a criminal background check and drug testing before participation in the clinical component. If any clinical facility refuses to allow the student to participate in clinical experiences, for any reason, the student will not be able to progress in the program. Applicants for initial licensure in NC must also have a criminal background check.
9. Paramedics enrolled In the Paramedic to ADN Advanced Placement option will receive credit for NUR 111, NUR 112, NUR 114 and NUR 117. General education courses required before admission into the paramedic to ADN advanced placement option Include BIO 168, BIO 169, ENG 111, ENG 112 or ENG 114, and PHI 240. See your advisor for acceptable general education substitutes.

Paramedic to ADN Advanced Placement Option

Credit is given for NUR-111, NUR-117, NUR-112, and NUR-114 (20 hours)

Courses requiring a grade of "C" or better: BIO, NUR, and PSY

First Semester (Fall)		**Credits**
BIO-175	General Microbiology	3
NUR-215	Paramedic to RN Bridge Concepts	6
Second Semester (Spring)		
NUR-113	Family Health Concepts	5
NUR-211	Health Care Concepts	5
PSY-150	General Psychology	3
Third Semester (Summer)		
NUR-212	Health Systems Concepts	5
PSY-241	Developmental Psychology	3
Fourth Semester (Fall)		
NUR-213	Complex Health Concepts	10
Total Credit Hours Required		**37**

Practical Nursing

This curriculum prepares individuals with the knowledge and skills to provide nursing care to children and adults. Students will participate in assessment, planning, implementing, and evaluating nursing care.

Upon completion of the Practical Nursing Program and licensure, the graduate will:

1. Demonstrate skills necessary to provide safe, quality care.
2. Demonstrate the knowledge necessary for professional nursing practice.
3. Identify as a nurse committed to being a client advocate, who is caring and culturally competent.
4. Utilize informatics and evidence-based data to provide nursing care to clients.
5. Demonstrate behaviors that reflect integrity, responsibility, and ethical practice.

Graduates of this program are eligible to apply to take the National Council Licensure Examination (NCLEX-PN) which is required for practice as a Practical Nurse. Employment opportunities include hospitals, rehabilitation facilities, long-term care facilities, clinics, physician's offices, and home health agencies.

The Practical Nursing program is approved by the:

North Carolina Board of Nursing

P.O. Box 2129
Raleigh, NC 27602
Phone: (919) 782-3211
www.ncbon.com

Specific Requirements

1. General college admission requirements.
2. High School units (as evidenced by proof of high school graduation, high-school equivalent, or earned credits from a post-secondary institution):
   a. Chemistry and Biology are strongly suggested
   b. Algebra is highly recommended
3. This program has a selective selection process. See School of Nursing Criteria on the Selective and Limited Programs page of the A-B Tech website. www.abtech.edu/selective-limited-programs
4. Final admission to the PN program shall be contingent upon documentation of required immunizations and physical and emotional health that would provide evidence indicative of the applicant's ability to provide safe nursing care to the public; this is accomplished by submission of a nursing department-issued physical form that has been completed by a licensed health care provider (physician, PA, or NP).
5. Current Basic Life Support (BLS) for Healthcare Providers from the American Heart Association (AHA) or American Red Cross (ARC) is a prerequisite to full admission and must be maintained throughout the program. This certification must include hands-on skills components for the adult, child and infant, AED use, and choking. Course certifications from any other providers will not be accepted.
6. Students applying to the PN program must have completed BIO-168 Anatomy and Physiology I with a "C" or higher within 5 years of the application date. BIO-169 Anatomy and Physiology II must be completed with a "C" or better within 5 years of the start of NUR courses. Students are encouraged to have successfully completed: ENG-111 and PSY-150, due to the rigorous nature of the PN curriculum. See your advisor for acceptable general education substitutes.
7. Affiliated clinical sites for nursing will require an on boarding process, which will include a criminal background check and drug testing prior to participation in the clinical component. If any clinical facility refuses to allow the student to participate in clinical experiences, for any reason, the student will not be able to progress in the program. Applicants for initial licensure in NC must also have a criminal background check.

Practical Nursing Diploma (D45660)

Courses requiring a grade of "C" or better: BIO, ENG, NUR, and PSY

Preadmission Requirements		**Credits**
BIO-168	Anatomy and Physiology I	4
BIO-169	Anatomy and Physiology II	4
First Semester (Fall)		
NUR-101	Practical Nursing I	11
PSY-150	General Psychology	3
Second Semester (Spring)		
ENG-111	Expository Writing	3
NUR-102	Practical Nursing II	10
Third Semester (Summer)		
NUR-103	Practical Nursing III	9
Total Credit Hours Required		**44**

Occupational Therapy Assistant

The Occupational Therapy Assistant (OTA) curriculum prepares individuals to work under the supervision of a registered/licensed occupational therapist in screening, assessing, planning, and implementing treatment and documenting progress for clients receiving occupational therapy services.

Course work includes human growth and development, conditions which interfere with activities of daily living, theory and process of occupational therapy, individual/group treatment activities, therapeutic use of self, activity analysis, and grading/adapting activities and environments.

Graduates may be eligible to take the national certification examination for practice as a certified occupational therapy assistant. Employment opportunities include hospitals, rehabilitation facilities, long-term/extended-care facilities, sheltered workshops, schools, home health programs, and community programs.

The Asheville-Buncombe Technical Community College OTA program is accredited by the Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association (AOTA), located at 7501 Wisconsin Ave, Suite 510E, Bethesda, MD 20814 ACOTE's telephone number c/o AOTA is (301) 652-6611 and its web address is www.acoteonline.org. Graduates of the program will be eligible to sit for the national certification examination for the occupational therapy assistant administered by the National Board for Certification in Occupational Therapy (NBCOT) www.nbcot.org. After successful completion of this exam, the individual will be a Certified Occupational Therapy Assistant (COTA). In addition, all states require licensure in order to practice; however, state licenses are usually based on the results of the NBCOT Certification Examination. Note that a felony conviction may affect a graduate's ability to sit for the NBCOT certification examination or attain state licensure.

Specific Program Requirements:

1. General college admission requirements.
2. This program has a selective selection process. See Selective Allied Health Program Criteria on the Selective and Limited Programs page of the A-B Tech website. www.abtech.edu/selective-limited-programs
3. Final admission to the OTA program shall be contingent upon documentation of physical and emotional health that would provide evidence indicative of the applicant's ability to provide safe care to the public.
4. Completed medical and immunization records must be submitted before fieldwork begins.
5. Satisfactory completion of required immunizations prior to admission to fieldwork sites. Affiliated fieldwork sites for OTA will require an on boarding process, which will include a criminal background check and drug screen prior to the term in which the first fieldwork experience will occur. If any fieldwork facility refuses to allow the student to participate in fieldwork experiences, for any reason, the student will not be able to progress in the program.
6. Current American Heart Association (AHA) Basic Life Support (BLS) for Healthcare Providers certification is required prior to beginning OTA-161 in the second semester and must be maintained throughout the program. This certification must include hands-on skills demonstration of one and two rescuer adult, child, and Infant CPR, and AED use. Course certifications from any other providers will not be accepted.
7. Students accepted into the program must attend a required program orientation session which will be scheduled in spring of the year they intend to enter the program.
8. Applicants must view a video and complete a 5-question assessment. See Occupational Therapy Assistant Application Criteria on the Selective and Limited Programs page of the A-B Tech website for more information. www.abtech.edu/selective-limited-programs
9. Students applying to the OTA program must successfully complete ACA-115, and MED-120. BIO-168 must be taken within 5 years of program start from a regionally accredited institution with a C or higher.

10. Students applying to the OTA are encouraged to have successfully completed: BIO-169, ENG-111, ENG-112, PSY-150, PSY-241, PSY-281, COM-120, and HUM-115 prior to program admission due to the rigorous nature of the OTA curriculum. (For BIO-169 to be accepted, it must have been taken within 5 years of program start from a regionally accredited institution with a C or higher.)
11. OTA students will be required to complete fieldwork experiences, which may require them to travel as much as 1-1/2 hours from campus.
12. Students must complete all graduation requirements in a timely manner. This includes completion of all Level II fieldwork within 18 months following completion of the didactic portion of the program.

Occupational Therapy Assistant Associate in Applied Science Degree (A45500)

Courses requiring a grade of "C" or better: ACA, BIO, COM, ENG, HUM, MED, OTA, and PSY

Preadmission Requirements		**Credits**
ACA-115	Success & Study Skills	1
BIO-168	Anatomy and Physiology I	4
MED-120	Survey of Med Terminology	2
First Semester (Fall)		
BIO-169	Anatomy and Physiology II	4
ENG-111	Writing and Inquiry	3
HUM-115	Critical Thinking	3
OTA-110	Fundamentals of OT	3
OTA-120	OT Media I	2
OTA-140	Professional Skills I	1
PSY-150	General Psychology	3
Second Semester (Spring)		
ENG-112	Writing/Research in the Disc	3
OTA-130	Assessment Skills	3
OTA-135	Kinesiology	1
OTA-161	Fieldwork I Placement 1	1
OTA-170	Physical Conditions	3
PSY-241	Developmental Psychology	3
Third Semester (Summer)		
COM-120	Intro Interpersonal Communication	3
OTA-162	Fieldwork I Placement 2	1
OTA-163	Fieldwork I Placement 3	1
OTA-240	Professional Skills II	1
PSY-281	Abnormal Psychology	3
Fourth Semester (Fall)		
OTA-150	Peds Concepts & Interventions	3
OTA-180	Psychosocial Conditions	3
OTA-220	OT Media II	3
OTA-245	Professional Skills III	1
OTA-250	Adult Concepts & Interventions	3
Fifth Semester (Spring)		
OTA-260	Fieldwork II-Placement 1	6
OTA-261	Fieldwork II-Placement 2	6
OTA-280	Professional Transitions	1
Total Credit Hours Required		75

Office Management

The Office Management curriculum prepares individuals for employment as administrative office personnel who use skills in the areas of office management, office finance, legal office, virtual office, customer service, and office software.

Course work includes computer applications, oral and written communication, analysis and coordination of office tasks and procedures, records management, and other topics depending on the subject area selected within this curriculum.

Graduates should qualify for employment opportunities in a variety of office positions in business, government, and industry. Upon graduation, students may be eligible to sit for industry recognized certification exams.

Office Management: General Office Associate in Applied Science Degree (A25370GO)

Courses requiring a grade of "C" or better: ACA, ACC, BUS, CTS, OST, and WEB

First Semester (Fall)		**Credits**
ACA-115	Success & Study Skills	1
ENG-111	Writing and Inquiry	3
OST-131	Keyboarding	2
OST-137	Office Applications I	3
OST-286	Professional Development	3
Second Semester (Spring)		
ACC-120	Prin of Financial Accounting	4
MAT-110	Math Measurement & Literacy	3
OST-134	Text Entry & Formatting	3
OST-136	Word Processing	3
OST-164	Office Editing	3

Third Semester (Summer)		
ACC-140	Payroll Accounting	2
COM-231	Public Speaking	3
OST-132	Keyboard Skill Building	2
PSY-150	General Psychology	3
Fourth Semester (Fall)		
BUS-110	Introduction to Business	3
BUS-137	Principles of Management	3
CTS-130	Spreadsheet	3
OST-171	Intro to Virtual Office	3
WEB-140	Web Development Tools	3
Fifth Semester (Spring)		
ACC-150	Accounting Software Appl	4
HUM-115	Critical Thinking	3
OST-145	Social Media in Office Prof	3
OST-289	Office Admin Capstone	3
Total Credit Hours Required		**64**

Office Management Diploma (D25370)

Courses requiring a grade of "C" or better: ACA, ACC, BUS, CTS, and OST

First Semester (Fall)		Credits
ACA-115	Success & Study Skills	1
ENG- 111	Writing and Inquiry	3
OST-131	Keyboarding	2
OST-137	Office Applications I	3
OST-171	Intro to Virtual Office	3
OST-286	Professional Development	3
Second Semester (Spring)		
ACC-120	Prin of Financial Accounting	4
CTS-130	Spreadsheet	3
OST-134	Text Entry & Formatting	3
OST-136	Word Processing	3
OST-164	Office Editing	3
Third Semester (Summer)		
ACC-140	Payroll Accounting	2
BUS-137	Principles of Management	3
COM-231	Public Speaking	3
OST-132	Keyboard Skill Building	2
OST-289	Office Admin Capstone	3
Total Credit Hours Required		**44**

Office Management Certificate (C25370L2)

The Office Management Certificate will prepare individuals for entry-level office management positions in business, government, and industry.

Courses requiring a grade of "C" or better: ACC and OST

First Semester (Fall)		Credits
ACC-120	Prin of Financial Accounting	4
OST-171	Intro to Virtual Office	3
Second Semester (Spring)		
OST-136	Word Processing	3
OST-164	Office Editing	3
Third Semester (Summer)		
OST-289	Office Admin Capstone	3
Total Credit Hours Required		**16**

Virtual Office Management Certificate (C25370L3)

The Virtual Office Certificate program equips students with the essential skills to work efficiently in remote and hybrid office environments. Through training in digital communication, state-of-the-art software, and virtual administrative support, graduates are prepared for careers in remote office management and customer service roles.

Courses requiring a grade of "C" or better: OST

First Semester (Fall)		Credits
OST-131	Keyboarding	2
OST-137	Office Applications I	3
OST-171	Intro to Virtual Office	3
Second Semester (Spring)		
OST-134	Text Entry and Formatting	3
OST-145	Social Media for Office Prof	3
OST-164	Office Editing	3
Total Credit Hours Required		**20**

Office Management: Finance Associate in Applied Science Degree (A25370FI)

Office Finance (AAS degree) is a concentration area in the Office Management program. Students develop skills in accounting and office finance, along with office procedures, office software applications, records management, office computations, keyboarding, editing and formatting, oral and written communication, critical thinking, team building and problem solving.

Graduates should qualify for employment opportunities in the financial areas of government agencies, real-estate offices, financial institutions, and small or large business.

Courses requiring a grade of "C" or better: ACA, ACC, BUS, CTS, and OST

First Semester (Fall)		**Credits**
ACA-115	Success & Study Skills	1
ENG-111	Writing and Inquiry	3
MAT-110	Math Measurement & Literacy	3
OST-131	Keyboarding	2
OST-137	Office Applications I	3
Second Semester (Spring)		
ACC-120	Prin of Financial Accounting	4
CTS-130	Spreadsheet	3
OST-134	Text Entry & Formatting	3
OST-136	Word Processing	3
OST-164	Text Editing Applications	3
Third Semester (Summer)		
ACC-140	Payroll Accounting	2
COM-231	Public Speaking	3
OST-132	Keyboard Skill Building	2
OST-289	Office Admin Capstone	3
PSY-150	General Psychology	3
Fourth Semester (Fall)		
BUS-137	Principles of Management	3
OST-122	Office Computations	3
OST-171	Intro to Virtual Office	3
OST-286	Professional Development	3
Fifth Semester (Spring)		
BUS-110	Introduction to Business	3
HUM-115	Critical Thinking	3
OST-145	Social Media for Office Prof	3
OST-153	Office Finance Solutions	3
Total Credit Hours Required		**65**

Radiography

The Radiography curriculum prepares the graduate to be a radiographer, a skilled health care professional who uses radiation to produce images of the human body.

Course work includes clinical rotations to area health care facilities, radiographic exposure, image processing, radiographic procedures, physics, pathology, patient care and management, radiation protection, quality assurance, anatomy and physiology, and radiobiology.

Graduates of accredited programs are eligible to apply to take the American Registry of Radiologic Technologists' national examination for certification and registration as medical radiographers. Graduates may be employed in hospitals, clinics, physicians' offices, medical laboratories, government agencies, and industry.

Specific Program Requirements:

1. General college admission requirements.
2. This program has a selective selection process. See Selective Allied Health Program Criteria on the Selective and Limited Programs page of the A-B Tech website. www.abtech.edu/selective-limited-programs
3. High school biology, high school algebra, and keyboarding skills are highly recommended.
4. Final admission to the Radiography program shall be contingent upon documentation of physical and emotional health that would provide evidence indicative of the applicant's ability to provide safe care to the public.
5. Completed medical and immunization records must be submitted via the third-party administration platform before classes begin.
6. Either first dose of Hepatitis B vaccine or completion of series.
7. Current American Heart Association (AHA) Basic Life Support (BLS) for Healthcare Providers certification is a prerequisite to full admission and must be maintained throughout the program. This certification must include hands-on skills components, AED use, and other lifesaving skills. Course certifications from any other providers will not be accepted.
8. Satisfactory completion of required immunizations prior to admission to clinical sites. Affiliated clinical sites for Radiography will require an on boarding process, which will include a criminal background check and drug testing at cost to the student prior to the term in which the first clinical experience will occur. If any clinical facility refuses to allow the student to participate in clinical experiences, for any reason, the student will not be allowed to progress in the program.
9. Students applying to the Radiography program must have successfully completed BIO-163 (or BIO-168 and BIO-169) with a "C" or better prior to full acceptance into the Radiography program.
10. Students applying to the Radiography program are encouraged to have successfully completed: MAT-110, ENG-111, COM-120, HUM-115, and SOC-225 prior to program admission due to the rigorous nature of the Radiography curriculum.

This program is accredited by:

Joint Review Committee on Education in Radiologic Technology (JRCERT)
20 N. Wacker Drive, Suite 2850
Chicago, IL 60606-3182
Phone: (312) 704-5300
Fax: (312) 704-5304
www.jrcert.org

Notice: Candidates for certification from the American Registry of Radiologic Technologists (ARRT) must comply with the "Rules of Ethics" contained in the ARRT Standards of Ethics. Any conviction of a crime, including a felony, a gross misdemeanor, or a misdemeanor with the sole exception of speeding and parking violations must be investigated by the ARRT in order to determine eligibility for the certification examination. Additional information may be obtained from the department chairperson or on the ARRT website at www.arrt.org.

Radiography students will be required to complete clinical rotations, which may require them to travel as much as 1 1/2 hours from campus. Clinical affiliates are currently located in Asheville, Hendersonville, Fletcher, Brevard, Marion, Columbus, and Spruce Pine.

Radiography Associate in Applied Science Degree (A45700)

Courses requiring a grade of "C" or better: BIO and RAD

Preadmission Requirements		**Credits**
BIO-163	Basic Anat & Physiology	5
First Semester (Fall)		
ENG-111	Writing and Inquiry	3
RAD-110	Radiography Intro & Patient Care	3
RAD-111	RAD Procedures I	4
RAD-113	RAD Lab Elective	1
RAD-151	RAD Clinical Education I	2
Second Semester (Spring)		
COM-120	Intro Interpersonal Communication	3
MAT-110	Mathematical Measurement	3
RAD-112	RAD Procedures II	4
RAD-121	Image Production I	3
RAD-161	RAD Clinical Education II	5
Third Semester (Summer)		
RAD-122	Image Production II	2
RAD-141	Radiation Safety	2
RAD-171	RAD Clinical Education III	3
RAD-181	RAD Clinical Elective	1
Fourth Semester (Fall)		
RAD-211	RAD Procedures III	3
RAD-231	Image Production III	2
RAD-251	RAD Clinical Ed IV	7
SOC-225	Social Diversity	3
Fifth Semester (Spring)		
HUM-115	Critical Thinking	3
RAD-261	RAD Clinical Education V	7
RAD-271	Radiography Capstone	3
Total Credit Hours Required		**72**

Program total includes 5 credit hours of successful completion of BIO 163 (or BIO-168 & BIO-169) with a grade of "C" or better, as a prerequisite to full admission into the Radiography Program.

Social and Human Services

The Social and Human Services curriculum prepares students for entry-level positions in institutions and agencies which provide social, community, and behavioral health services. Along with core courses, students take courses which prepare them for specialization in specific human service areas.

Coursework includes the development of professional knowledge, skills, and values in human services. Opportunities for experiential learning allow students to apply knowledge and skills learned in the classroom.

Graduates should qualify for positions in government, private, and nonprofit social and human services agencies. Graduates may choose to transfer and continue their education at a variety of colleges and universities.

Specific Program Requirements

1. General college admission requirements.
2. Students pursuing the degree should be aware that employers in the human services field (substance abuse and otherwise) can require prospective volunteers, interns, and employees to pass medical examinations, criminal background, drug & alcohol screen, immunization, and citizenship verification checks before they will be allowed to work at an organization.

Social and Human Services Associate in Applied Science Degree: Addiction & Recovery Career Track (A45380AC)

Courses requiring a grade of "C" or better: ACA, BIO, ENG, HSE, HUM, PSY, SAB, SOC, SWK, and WBL

First Semester (Fall)		**Credits**
ACA-115	Success & Study Skills	1
ENG-111	Writing & Inquiry	3
HSE-110	Intro to Human Services	3
HSE-123	Interview Tech Human Service	3
PSY-150	General Psychology	3
SAB-110	Intro to Addiction & Recovery	3
Second Semester (Spring)		
COM-120	Intro Interpersonal Com	3
HUM-115	Critical Thinking	3
HSE-212	Group Dynamics	3
HSE-225	Crisis and Intervention Prin	3
SAB-120	Intake and Assessment	3
Third Semester (Fall)		
BIO-161	Intro to Human Biology	3
HSE-223	Counseling Theories & Skills	3
SAB-135	Addictive Process	3
SOC-210	Introduction to Sociology	3
SWK-110	Intro to Social Work	3
WBL-111	Work-Based Learning I	1
Fourth Semester (Spring)		
HSE-210	Diversity Ethics and Trends	3
HSE-220	Case Management	3
SAB-210	Addiction and Recovery Counsel	3
SAB-240	Diversity, Ethics, and Trends	3
SOC-225	Social Diversity	3
WBL-112	Work-Based Learning II	2
Total Credit Hours Required		**64**

Social and Human Services Associate in Applied Science Degree: Addiction & Recovery Transfer Track (A45380AT)

Courses requiring a grade of "C" or better: ACA, BIO, ENG, HSE, HUM, MAT, POL, PSY, SAB, and SOC

First Semester (Fall)		**Credits**
ACA-122	College Transfer Success	1
ENG-111	Writing & Inquiry	3
HSE-110	Intro to Human Services	3
MAT-143	Quantitative Literacy	3
PSY-150	General Psychology	3
SAB-110	Intro to Addiction & Recovery	3
Second Semester (Spring)		
BIO-161	Intro to Human Biology	3
ENG-112	Writing/Research in the Disc	3
HSE-123	Interview Tech Human Service	3
HSE-210	Diversity Ethics and Trends	3
SAB-120	Intake and Assessment	3
SOC-210	Introduction to Sociology	3
Third Semester (Fall)		
HSE-212	Group Dynamics	3
HSE-220	Case Management	3
HSE-223	Counseling Theories & Skills	3
PSY-241	Developmental Psych	3
SAB-135	Addictive Process	3
Fourth Semester (Spring)		
HSE-225	Crisis and Intervention Prin	3
HUM-115	Critical Thinking	3
POL-120	American Government	3
SAB-210	Addiction and Recovery Counsel	3
SAB-240	Addiction and Recovery Counsel	3
Total Credit Hours Required		**64**

Social and Human Services Associate in Applied Science Degree: Mental Health Career Track (A45380MC)

Courses requiring a grade of "C" or better: ACA, BIO, COM, ENG, HSE, HUM, MHA, PSY, SAB, SOC, SWK, and WBL

First Semester (Fall)		Credits
ACA-115	Success & Study Skills	1
ENG-111	Writing & Inquiry	3
HSE-110	Intro to Human Services	3
HSE-123	Interview Tech Human Service	3
PSY-150	General Psychology	3
MHA-140	Intro to Mental Health	3
Second Semester (Spring)		
COM-120	Intro Interpersonal Com	3
HUM-115	Critical Thinking	3
HSE-212	Group Dynamics	3
HSE-225	Crisis and Intervention Prin	3
MHA-150	Mental Health Interventions	3
Third Semester (Fall)		
BIO-161	Intro to Human Biology	3
HSE-223	Counseling Theories & Skills	3
MHA-238	Psychopathology	3
SOC-210	Introduction to Sociology	3
SWK-110	Intro to Social Work	3
WBL-111	Work-Based Learning I	1
Fourth Semester (Spring)		
DDT-110	Intellectual/Dev Disabilities	3
HSE-210	Diversity Ethics and Trends	3
HSE-220	Case Management	3
MHA-240	Advocacy	3
SOC-225	Social Diversity	3
WBL-112	Work-Based Learning II	2
Total Credit Hours Required		**64**

Social and Human Services Associate in Applied Science Degree: Mental Health Transfer Track (A45380MT)

Courses requiring a grade of "C" or better: ACA, BIO, ENG, HSE, HUM, MAT, MHA, POL, PSY, SOC, and SWK

First Semester (Fall)		Credits
ACA-122	College Transfer Success	1
ENG-111	Writing & Inquiry	3
HSE-110	Intro to Human Services	3
MAT-143	Quantitative Literacy	3
MHA-140	Intro to Mental Health	3
PSY-150	General Psychology	3
Second Semester (Spring)		
BIO-161	Intro to Human Biology	3
ENG-112	Writing/Research in the Disc	3
HSE-123	Interview Tech Human Service	3
HSE-210	Diversity Ethics and Trends	3
MHA-150	Mental Health Interventions	3
SOC-210	Introduction to Sociology	3
Third Semester (Fall)		
HSE-212	Group Dynamics	3
HSE-220	Case Management	3
HUM-115	Critical Thinking	3
PSY-241	Developmental Psych	3
MHA-238	Psychopathology	3
Fourth Semester (Spring)		
HSE-223	Counseling Theories & Skills	3
HSE-225	Crisis and Intervention Prin	3
MHA-240	Advocacy	3
POL-120	American Government	3
SWK-110	Intro to Social Work	3
Total Credit Hours Required		**64**

Social and Human Services Associate in Applied Science Degree: Generalist Track (A45380GT)

Courses requiring a grade of "C" or better: ACA, BIO, CAS, ENG, HSE, HUM, MAT, MHA, POL, PSY, SAB, SOC, and SWK

First Semester (Fall)		**Credits**
ACA-122	College Transfer Success	1
ENG-111	Writing & Inquiry	3
HSE-110	Intro to Human Services	3
MAT-143	Quantitative Literacy	3
MHA-140	Intro to Mental Health	3
PSY-150	General Psychology	3

Second Semester (Spring)		
BIO-161	Intro to Human Biology	3
ENG-112	Writing/Research in the Disc	3
HSE-123	Interview Tech Human Service	3
HSE-210	Diversity Ethics and Trends	3
SAB-110	Intro to Addiction & Recovery	3
SOC-210	Introduction to Sociology	3

Third Semester (Fall)		
CAS-110	Perspectives on Child Maltreatme	3
HSE-212	Group Dynamics	3
HSE-220	Case Management	3
HUM-115	Critical Thinking	3
PSY-241	Developmental Psych	3

Fourth Semester (Spring)		
HSE-223	Counseling Theories & Skills	3
HSE-225	Crisis and Intervention Prin	3
MHA-150	Mental Health Interventions	3
POL-120	American Government	3
SWK-110	Intro to Social Work	3
Total Credit Hours Required		**64**

Social and Human Services Associate in Applied Science Degree: Child Advocacy Studies Career Track (A45380CC)

Courses requiring a grade of "C" or better: ACA, BIO, CAS, COM, ENG, HSE, HUM, PSY, SOC, SWK, and WBL

First Semester (Fall)		**Credits**
ACA-115	Success & Study Skills	1
CAS-110	Perspectives on Child Maltreatme	3
ENG-111	Writing & Inquiry	3
HSE-110	Intro to Human Services	3
HSE-123	Interview Tech Human Service	3
PSY-150	General Psychology	3

Second Semester (Spring)		
CAS-120	Cultural Awareness of Child Maltre	3
COM-120	Intro Interpersonal Com	3
HUM-115	Critical Thinking	3
HSE-212	Group Dynamics	3
HSE-225	Crisis and Intervention Prin	3

Third Semester (Fall)		
BIO-161	Intro to Human Biology	3
CAS-210	Professional & System Responses	3
HSE-223	Counseling Theories & Skills	3
SOC-210	Introduction to Sociology	3
SWK-110	Intro to Social Work	3
WBL-111	Work-Based Learning I	1

Fourth Semester (Spring)		
CAS-220	Responding to the Survivor	3
DDT-110	Intellectual/Dev Disabilities	3
HSE-210	Diversity Ethics and Trends	3
HSE-220	Case Management	3
SOC-225	Social Diversity	3
WBL-112	Work-Based Learning I	2
Total Credit Hours Required		**64**

Social and Human Services Associate in Applied Science Degree: Child Advocacy Studies Transfer Track (A45380CT)

Courses requiring a grade of "C" or better: ACA, BIO, CAS, ENG, HSE, MAT, POL, PSY, SOC, and SWK

First Semester (Fall)		Credits
ACA-122	College Transfer Success	1
ENG-111	Writing & Inquiry	3
CAS-110	Perspectives on Child Maltreatme	3
HSE-110	Intro to Human Services	3
MAT-143	Quantitative Literacy	3
PSY-150	General Psychology	3
Second Semester (Spring)		
BIO-161	Intro to Human Biology	3
CAS-120	Cultural Awareness of Child Maltre	3
ENG-112	Writing/Research in the Disc	3
HSE-123	Interview Tech Human Service	3
HSE -210	Diversity Ethics and Trends	3
SOC-210	Introduction to Sociology	3
Third Semester (Fall)		
CAS-210	Professional & System Responses	3
HSE-212	Group Dynamics	3
HSE-220	Case Management	3
HUM-115	Critical Thinking	3
PSY-241	Developmental Psych	3
Fourth Semester (Spring)		
CAS-220	Responding to the Survivor	3
DDT-110	Intellectual/Dev Disabilities	3
HSE-223	Counseling Theories & Skills	3
HSE-225	Crisis and Intervention Prin	3
POL-120	American Government	3
SWK-110	Intro to Social Work	3
Total Credit Hours Required		**64**

Social and Human Services Diploma (D45380L1)

The Social and Human Services Diploma is a document that asserts that a student has completed some of the main course of study, a few classes, or a set of experiences within the human services field. The Diploma is earned in pursuit of the A.A.S. degree program.

Courses requiring a grade of "C" or better: ENG, HSE, PSY, SOC, and SWK

First Semester (Fall)		Credits
ENG-111	Writing & Inquiry	3
HSE-110	Intro to Human Services	3
HSE-123	Interview Tech Human Service	3
PSY-150	General Psychology	3
Second Semester (Spring)		
HSE-212	Group Dynamics	3
HSE-220	Case Management	3
HSE-225	Crisis and Intervention Prin	3
SOC-225	Social Diversity	3
Third Semester (Fall)		
HSE -210	Diversity Ethics and Trends	3
HSE-223	Counseling Theories & Skills	3
SOC-210	Introduction to Sociology	3
SWK-110	Intro to Social Work	3
Total Credit Hours Required		**36**

Addiction & Recovery Studies Certificate (C45380L4)

The Addiction and Recovery Studies certificate is designed to prepare students to take the Certified Alcohol and Drug Counselor (CADC) exam in North Carolina and to better understand the processes of addiction and recovery, along with addiction and recovery counseling.

Courses requiring a grade of "C" or better: HSE and SAB

First Semester (Fall)		Credits
HSE-110	Intro to Human Services	3
SAB-110	Intro to Addiction & Recovery	3
SAB-135	Addictive Process	3
Second Semester (Spring)		
HSE-123	Interview Tech Human Service	3
SAB-120	Intake and Assessment	3
SAB-210	Addiction and Recovery Counsel	3
Total Credit Hours Required		**18**

Mental Health Studies Certificate (C45380L5)

The Mental Health Studies certificate is designed for human services professionals and professionals in other fields for whom an understanding of mental health challenges and interventions may enhance their job skills and performance.

Courses requiring a grade of "C" or better: HSE and MHA

First Semester (Fall)		Credits
HSE-110	Intro to Human Services	3
MHA-140	Intro to Mental Health	3
MHA-238	Psychopathology	3
Second Semester (Spring)		
HSE-123	Interview Tech Human Service	3
MHA-150	Mental Health Interventions	3
MHA-240	Advocacy	3
Total Credit Hours Required		**18**

Surgical Technology

The Surgical Technology curriculum prepares individuals to assist in the care of the surgical patient in the operating room and to function as a member of the surgical team.

Students will apply theoretical knowledge to the care of patients undergoing surgery and develop skills necessary to prepare supplies, equipment, and instruments; maintain aseptic conditions; prepare patients for surgery; and assist surgeons during operations.

Employment opportunities include labor/delivery/emergency departments, inpatient/outpatient surgery centers, dialysis units/facilities, physicians' offices, and central supply processing units.

Students of programs accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) are required to take the national certification exam administered by the National Board on Certification in Surgical Technology and Surgical Assisting (NBSTSA) within a four-week period prior to or after graduation.

Specific Program Requirements:

1. General College admission requirements.
2. This program has a selective selection process. See Selective Allied Health Program Criteria on the Selective and Limited Programs page of the A-B Tech website. www.abtech.edu/selective-limited-programs
3. Final admission to the Surgical Technology program shall be contingent upon documentation of physical and emotional health that would provide evidence indicative of the applicant's ability to provide safe care to the public.
4. Satisfactory completion of required immunizations.
5. Current American Heart Association (AHA) Basic Life Support (BLS) for Healthcare Providers certification is a prerequisite to admission and must be maintained throughout the program.
6. Clinical agencies and/or credentialing bodies require criminal background checks and drug screens prior to admission to clinical sites or issuance of credentials.
7. Students applying to the Surgical Technology program must successfully complete BIO-168 with a minimum grade of "C" and are encouraged to have successfully completed: ACA-115, BIO-169, BIO-175, and ENG-111 prior to program admission due to the rigorous nature of the Surgical Technology curriculum.

The Surgical Technology program is accredited by:

Commission on Accreditation of Allied Health Education Programs (CAA-HEP)
9355 - 113th St. N, #7709
Seminole, FL 33775
Phone: (727) 210-2350
Fax: (727) 210-2354
www.caahep.org

Upon the recommendation of:

Accreditation Review Council on Education in Surgical Technology and Surgical Assisting (ARC/STSA)
19751 E. Main St., Ste #339
Parker, CO 80138
Phone: (303) 694-9262
www.arcstsa.org

Surgical Technology Associate in Applied Science Degree (A45740)

Courses requiring a grade of "C" or better: ACA, BIO, and SUR

Preadmission Requirements		Credits
BIO-168	Anatomy and Physiology I	4
First Semester (Fall)		
ACA-115	Success & Study Skills	1
BIO-169	Anatomy and Physiology II	4
ENG-111	Writing and Inquiry	3
SUR-110	Intro to Surg Tech	3
SUR-111	Periop Patient Care	7
Second Semester (Spring)		
BIO-175	General Microbiology	3
SUR-122	Surgical Procedures I	6
SUR-123	Sur Clinical Practice I	7
Third Semester (Summer)		
SUR-134	Surgical Procedures II	5
SUR-135	Sur Clinical Practice II	4

Fourth Semester (Fall)

COM-120	Intro to Interpersonal Communication	3
PSY-150	General Psychology	3
SUR-211	Adv Theoretical Concepts	2
SUR-212	SUR Clinical Supplement	4

Fifth Semester (Spring)

HUM-115	Critical Thinking	3
SOC-210	Introduction to Sociology	3
SUR-137	Prof Success Prep	1
SUR-210	Adv SUR Clinical Practice	2
Total Credit Hours Required		**68**

Surgical Technology Bridge Program

The Surgical Technology Bridge program is designed to allow currently certified non-degree surgical technologists to earn an Associate in Applied Science (AAS) degree in Surgical Technology. Surgical technologists enrolled in the bridge program must have completed their surgical technology certificate or diploma at a Commission on Accreditation of Allied Health Education Programs (CAAHEP) accredited surgical technology program. All major courses along with all related and general education course requirements must be met for the Surgical Technology Associate in Applied Science Degree.

Specific Program Requirements:

1. General college admission requirements.
    a. Complete application for admission.
    b. Successfully complete college placement test.
    c. Official transcript of any prior college credit on file with admissions office.
    d. Diploma or certificate in Surgical Technology from a CAAHEP-accredited program.
2. Current American Heart Association (AHA) Basic Life Support (BLS) for Healthcare Providers certification is a prerequisite to admission and must be maintained throughout the program.
3. Final admission to the Surgical Technology program shall be contingent upon documentation of physical and emotional health that would provide evidence that is indicative of the applicant's ability to provide safe care to the public.
4. Satisfactory completion of required immunizations.
5. Clinical agencies and/or credentialing bodies require criminal background checks and drug screens prior to admission to clinical sites.

Copies of 1d. as well as 2-5 must be on file with the Surgical Technology Department.

The CST and Surgical Technology certificate or diploma will provide 33 hours of credit toward the AAS degree. The CST and Surgical Technology certificate or diploma will provide 33 hours of credit toward the AAS degree. Please refer to A-B Tech's transfer policy on page 29 of the catalog.

Students must earn a minimum of 25% of all AAS courses (17 credit hours) at A-B Tech. Surgical Technology, related, and general education courses can be completed at the student's own pace. It is understood that most students are employed full time during their AAS pursuit. Surgical technology course placement is contingent upon seat availability.

Surgical Technology Bridge Program Associate in Applied Science Degree (A45740BR)

Courses requiring a grade of "C" or better: ACA, BIO, and SUR

Preadmission Requirements		**Credits**
BIO-168	Anatomy and Physiology I	4
First Semester (Fall)		
ACA-115	Success & Study Skills	1
ENG-111	Writing and Inquiry	3
Second Semester (Spring)		
BIO-169	Anatomy and Physiology II	4
Third Semester (Summer)		
BIO-175	General Microbiology	3
Fourth Semester (Fall)		
COM-120	Intro to Interpersonal Communication	3
PSY-150	General Psychology	3
SUR-211	Adv Theoretical Concepts	2
SUR-212	SUR Clinical Supplement	4
Fifth Semester (Spring)		
HUM-115	Critical Thinking	3
SOC-210	Introduction to Sociology	3
SUR-210	Adv SUR Clinical Practice	2
Total Credit Hours Required		**35**

Veterinary Medical Technology

This curriculum is designed to prepare individuals to assist veterinarians in preparing animals, equipment, and medications for examination and surgery; collecting specimens; performing laboratory, radiographic, anesthetic, and dental procedures; assisting in surgery; and providing proper husbandry of animals and their environment.

Course work includes instruction in veterinary anatomy, nutrition, parasitology, pathology, physiology, radiology, terminology, zoology, office practices, laboratory techniques, dentistry, and small and large animal clinical practices.

Graduates of accredited programs may be eligible to take state and national examinations administered by the North Carolina Veterinary Medical Board.

Graduates may be employed in veterinary clinics; diagnostic, research, or pharmaceutical laboratories; zoos; academic institutions; or other areas associated with animal care.

This program is accredited by:
American Veterinary Medical Association (AVMA) Committee on Veterinary Technician Education and Activities (CVTEA)
1931 North Meacham Road, Suite 100
Schaumburg, IL 60173-4360
Phone: (800) 248-2862
Fax: (847) 925-1329
www.avma.org

Specific Program Requirements:

1. General college admission requirements.
2. High school units:
   a. Chemistry required.
   b. Biology and algebra highly recommended.
3. This program has a selective selection process. See Selective Allied Health Program Criteria on the Selective and Limited Programs page of the A-B Tech website. www.abtech.edu/selective-limited-programs
4. Final admission to the Veterinary Medical Technology program shall be contingent upon documentation of physical and emotional health that would provide evidence that is indicative of the applicant's ability to provide safe care to animals.
5. Satisfactory completion of required immunizations.
6. Work Based Learning sites may require criminal background checks and/or drug screening prior to acceptance/placement to that site. Work Based Learning sites can refuse a student's acceptance/placement to that site if the student does not meet any standards set by the policies and procedures of that site. Placement in a Work Based Learning site is not guaranteed.
7. North Carolina Board for Veterinary Medicine may require criminal background checks on all applicants for initial credentialing.

Veterinary Medical Technology Associate in Applied Science Degree (A45780)

Courses requiring a grade of "C" or better: ACA, CHM, MAT, VET, and WBL

First Semester (Fall)		**Credits**
ACA-115	Success & Study Skills	1
ENG-111	Writing and Inquiry	3
VET-120	Vet. Anatomy & Physiology	4
VET-121	Veterinary Medical Terminology	3
VET-137	Veterinary Office Practices	2

Second Semester (Spring)

CHM-130	Gen, Org, & Biochemistry	3
CHM-130A	Gen, Org, & Biochem Lab	1
MAT-110	Math Measurement & Literacy	3
VET-110	Animal Breeds & Husbandry	3
VET-123	Veterinary Parasitology	3
VET-125	Veterinary Diseases I	2

Third Semester (Summer)

VET-126	Veterinary Diseases II	2
VET-131	Vet Lab Techniques I	3
VET-133	Vet Clinical Practices I	3

Fourth Semester (Fall)

ENG-114	Prof Research and Reporting	3
HUM-115	Critical Thinking (or PHI 240)	3
VET-211	Vet Lab Techniques II	3
VET-213	Vet Clinical Practice II	4
VET-215	Veterinary Pharmacology	3

Fifth Semester (Spring)

PSY-150	General Psychology	3
VET-212	Vet Lab Techniques III	3
VET-214	Vet Clinical Practice III	4
VET-217	Large Animal Clin Practices	3
VET-237	Animal Nutrition	3

Sixth Semester (Summer)

WBL-112	Work Based Learning I	2
Total Credit Hours Required		**70**

Students must be full vaccinated against Rabies to participate in live animal instruction.

Welding Technology

The Welding Technology curriculum provides students with a sound understanding of the science, technology, and applications essential for successful employment in the welding and metal industry. Instruction includes consumable and non-consumable electrode welding and cutting processes.

Courses provide the student with industry-standard skills developed through classroom training and practical application.

Successful graduates of the Welding Technology curriculum may be employed as entry-level technicians in welding and metalworking industries. Career opportunities also exist in construction, manufacturing, fabrication, sales, quality control, supervision, and welding-related self-employment.

Welding Technology Associate in Applied Science Degree (A50420)

Courses requiring a grade of “C” or better: EGR and WLD

First Semester (Fall)		**Credits**
EGR-110	Intro to Engineering Technology	2
WLD-110	Cutting Processes	2
WLD-115	SMAW (Stick) Plate	5
WLD-121	GMAW (MIG) FCAW/Plate	4
WLD-131	GTAW (TIG) Plate	4

Second Semester (Spring)		
ENG-111	Writing and Inquiry	3
MAT-110	Math Measurement & Literacy	3
MEC-110	Intro to CAD/CAM	2
WLD-116	SMAW (Stick) Plate/Pipe	4
WLD-132	GTAW (TIG) Plate/Pipe	3

Third Semester (Summer)		
WLD-141	Symbols and Specifications	3
WLD-143	Welding Metallurgy	2

Fourth Semester (Fall)		
COM-110	Introduction to Communication	3
HUM-115	Critical Thinking	3
ISC-121	Envir Health & Safety	3
WLD-231	GTAW (TIG) Pipe	3
WLD-262	Inspection & Testing	3

Fifth Semester (Spring)		
PSY-150	General Psychology	3
WLD-151	Fabrication I	4
WLD-215	SMAW (stick) Pipe	4
WLD-261	Certification Practices	2
Total Credit Hours Required		**65**

Welding Technology - Diploma (D50420)

Courses requiring a grade of “C” or better: EGR and WLD

First Semester (Fall)		**Credits**
EGR-110	Intro to Engineering Technology	2
WLD-110	Cutting Processes	2
WLD-115	SMAW (Stick) Plate	5
WLD-121	GMAW (MIG) FCAW/Plate	4
WLD-131	GTAW (TIG) Plate	4

Second Semester (Spring)		
ENG-111	Writing and Inquiry	3
MAT-110	Math Measurement & Literacy	3
MEC-110	Intro to CAD/CAM	2
WLD-116	SMAW (Stick) Plate/Pipe	4
WLD-132	GTAW (TIG) Plate/Pipe	3

Third Semester (Summer)		
WLD-141	Symbols and Specifications	3
WLD-143	Welding Metallurgy	2
Total Credit Hours Required		**37**

Basic Welding Certificate I (C50420L2)

The following courses give students a basic understanding of the principles and skills of modern-day welding. Upon completion, students should be able to apply basic welding techniques in both SMAW and GMAW welding.

Courses requiring a grade of “C” or better: WLD

Courses Required		**Credits**
WLD-110	Cutting Processes	2
WLD-115	SMAW (Stick) Plate	5
WLD-121	GMAW (MIG) FCAW/Plate	4
WLD-131	GTAW (TIG) Plate	4
Total Credit Hours Required		**15**

Robotic Welding Certificate (C50420L5)

The Robotic Welding Certificate provides a fast-paced training curriculum in the utilization of robotic automation for industrial production welding operations in advanced manufacturing facilities. Students learn from lectures and a dedicated robotics lab with industry leading robots and the opportunity to earn multiple industry third-party credentials.

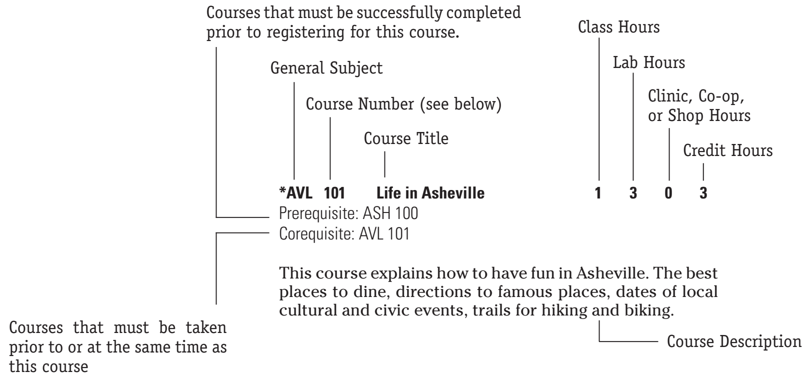
Courses requiring a grade of “C” or better: WLD

Courses Required		**Credits**
ISC-121	Envir Health & Safety	3
MEC-110	Intro to CAD/CAM	2
WLD-121	GMAW (MIG) FCAW/Plate	4
WLD-141	Symbols and Specifications	3
WLD-268	Robotic Gas Metal Arc Welding	4
Total Credit Hours Required		**16**

Course Descriptions

The following section contains descriptions of courses offered by Asheville-Buncombe Technical Community College. The following example explains each component of the course description entry.

When only three numbers are listed, the middle number always designates Lab Hours.
Credit Hours are always the last number.


Courses that must be successfully completed prior to registering for this course.
General Subject
Course Number (see below)
Course Title
Class Hours
Lab Hours
Clinic, Co-op, or Shop Hours
Credit Hours
*AVL 101 Life in Asheville 1 3 0 3
Prerequisite: ASH 100
Corequisite: AVL 101
This course explains how to have fun in Asheville. The best places to dine, directions to famous places, dates of local cultural and civic events, trails for hiking and biking.
Course Description
Courses that must be taken prior to or at the same time as this course

Course Numbers consist of three digits, and numbers are assigned as follows:

- The first digit indicates the year the course is normally taken.
  A first digit of “0” is used for Guided Studies courses.
- The second digit denotes the credential for which the course is intended:

100-109 and 200-209: Courses for stand-alone certificate and diploma programs.

110-189 and 210-289: Courses for associate degree programs;

these courses may also be used in certificate and diploma programs.
Please examine each course description before registering and determine if all prerequisites have been met. Prerequisites shown are those courses that must be successfully completed before attempting further study. In certain cases the department chairperson, or vice president of Instructional Services may waive some prerequisites.

***Credit by Examination is not available for courses marked with an asterisk because of the nature of the course and in some cases safety requirements in the use of equipment. Any exceptions must be with the approval of the department chairperson.**

Section Designators for A-B Tech Curriculum Courses

Colleague allows up to 5 alpha-numeric characters to distinguish sections
Please use characters in this order.

Location/Delivery Method
The main campus does not have a Location identifier. All other locations have a Location identifier.

E	A-B Tech Enka
R	A-B Tech Madison Ramsey Center
W	A-B Tech Woodfin
X	Off campus (hospital, clinical, etc.)
C	Co-requisite section for MAT or ENG gateway courses
OA	Online Asynchronous (students and instructor do not meet online at the same time)
OS	Online Synchronous (students and instructor meet online at same time)
SA	Seated Asynchronous (Student may attend in person or access the class online at their convenience)
SS	Seated Synchronous (student may attend in person or access the class online at designated time)
H	Hybrid (51-99% online)
B	Blended (50% or less online)
Z	Hy-Flex Option
I	Independent Study
T	Dental Assisting
Y	Dental Hygiene
F	Friday
Q	Cross-listed Between Locations (formerly ITV)

Time

L	Late Start
M	Mini-mester

Sequence Number
One to three digits

Course Descriptions

ACA Academic Related 206
ACC Accounting 206
AER Aerospace and Flight Training 207
AGR Agriculture 208
AHR Air Conditioning, Heating, and Refrigeration 208
ALT Alternative Energy Technology 209
ANT Anthropology 209
ARC Architecture 209
ART Art 210
ATR Automation & Robotics 211
AUT Automotive 211
BDF Brewing/Distillation/Fermentation 213
BIO Biology 214
BMT Biomedical Equipment Technology 216
BPA Baking and Pastry Arts 216
BPR Blueprint Reading 216
BUS Business 216
CAB Cabinetmaking 217
CAS Child Advocacy Studies 217
CCT Cyber Crime Technology 218
CEG Civil Engineering and Geomatics 218
CET Computer Engineering Technology 218
CHM Chemistry 218
CIS Information Systems 219
CIV Civil Engineering 220
CJC Criminal Justice 220
CMT Construction Management 221
COM Communication 221
COS Cosmetology 222
CSC Computer Science 224
CST Construction 224
CTI Computer Tech Integration 225
CTS Computer Information Technology 225
CUL Culinary 225
CVS Cardiovascular Sonography 227
DBA Database Management Technology 227
DDT Developmental Disabilities 228
DEN Dental 228
DFT Drafting 230
ECO Economics 231
EDU Education 231
EGR Engineering 233
ELC Electrical 234
ELN Electronics 235
EMS Emergency Medical Science 235
ENG English 237
ETR Entrepreneurship 238
FRE French 238
GIS Geographic Information Systems 238
HEA Health 239
HET Heavy Equipment Maintenance 239
HFS Health and Fitness Science 239
HIS History 240
HRM Hotel & Restaurant Management 240
HSE Human Services 242
HUM Humanities 242
HYD Hydraulics 243
ISC Industrial Science 243
LET Law Enforcement Training 243
MAC Machining 243
MAT Mathematics 245
MEC Mechanical 247
MED Medical Assisting 247
MHA Mental Health 248
MKT Marketing and Retailing 248
MLT Medical Laboratory Technology 249
MUS Music 250
NET Networking Technology 250
NOS Network Operating Systems 251
NUR Nursing 251
OST Office Systems Technology 252
OTA Occupational Therapy Assistant 254
PED Physical Education 256
PHI Philosophy 256
PHY Physics 257
POL Political Science 258
PSY Psychology 258
RAD Radiography 258
SAB Substance Abuse 259
SEC Information Systems Security 260
SOC Sociology 260
SON Medical Sonography 261
SPA Spanish 262
SRV Surveying 262
SST Sustainability Technologies 263
SUR Surgery 263
SWK Social Work 264
TDP Three Dimensional Printing 264
TRN Transportation Technology 264
VET Veterinary Medicine 265
WBL Work-Based Learning 266
WEB Web Technologies 267
WLD Welding 268

Academic Related

ACA-111 College Student Success 1 0 1
Prerequisites: None
Corequisites: NUR-111
This course introduces the college's physical, academic, and social environment and promotes the personal development essential for success. Topics include campus facilities and resources; policies, procedures, and programs; study skills; and life management issues such as health, self-esteem, motivation, goal-setting, diversity, and communication. Upon completion, students should be able to function effectively within the college environment to meet their educational objectives.

ACA-115 Success & Study Skills 0 2 1
Prerequisites: None
Corequisites: None
This course provides an orientation to the campus resources and academic skills necessary to achieve educational objectives. Emphasis is placed on an exploration of facilities and services, study skills, library skills, self-assessment, wellness, goal-setting, and critical thinking. Upon completion, students should be able to manage their learning experiences to successfully meet educational goals.

ACA-122 College Transfer Success 0 2 1
Prerequisites: None
Corequisites: None
This course provides information and strategies necessary to develop clear academic and professional goals beyond the community college experience. Topics include the CAA, college policies and culture, career exploration, gathering information on senior institutions, strategic planning, critical thinking and communications skills for a successful academic transition. Upon completion, students should be able to develop an academic plan to transition successfully to senior institutions. This course has been approved for transfer under the CAA as a premajor and/or elective course requirement.

Accounting

ACC-120 Prin of Financial Accounting 3 2 4
Prerequisites: None
Corequisites: None
This course introduces business decision-making using accounting information systems. Emphasis is placed on analyzing, summarizing, reporting, and interpreting financial information. Upon completion, students should be able to prepare financial statements, understand the role of financial information in decision-making and address ethical considerations. This course has been approved for transfer under the CAA as a premajor and/or elective course requirement.

ACC-121 Prin of Managerial Accounting 3 2 4
Prerequisites: ACC-120
Corequisites: None
This course includes a greater emphasis on managerial and cost accounting skills. Emphasis is placed on managerial accounting concepts for external and internal analysis, reporting and decision-making. Upon completion, students should be able to analyze and interpret transactions relating to managerial concepts including product costing systems. This course has been approved for transfer under the CAA as a premajor and/or elective course requirement.

ACC-129 Individual Income Taxes 2 2 3
Prerequisites: None
Corequisites: None
This course introduces the relevant laws governing individual income taxation. Topics include tax law, electronic research and methodologies, and the use of technology for preparation of individual tax returns. Upon completion, students should be able to analyze basic tax scenarios, research applicable tax law, and complete various individual tax forms.

ACC-130 Business Income Taxes 2 2 3
Prerequisites: ACC-129
Corequisites: None
This course introduces the relevant laws governing business and fiduciary income taxes. Topics include tax law relating to business organizations, electronic research and methodologies, and the use of technology for the preparation of business tax returns. Upon completion, students should be able to analyze basic tax scenarios, research applicable tax law, and complete various business tax forms.

ACC-140 Payroll Accounting 1 3 2
Prerequisites: ACC-115 or ACC-120
Corequisites: None
This course covers federal and state laws pertaining to wages, payroll taxes, payroll tax forms, and journal and general ledger transactions. Emphasis is placed on computing wages; calculating social security, income, and unemployment taxes; preparing appropriate payroll tax forms; and journalizing/posting transactions. Upon completion, students should be able to analyze data, make appropriate computations, complete forms, and prepare accounting entries using appropriate technology.

ACC-150 Accounting Software Appl 1 3 2
Prerequisites: ACC-115 or ACC-120
Corequisites: None
This course introduces microcomputer applications related to accounting systems. Topics include general ledger, accounts receivable, accounts payable, inventory, payroll, and correcting, adjusting, and closing entries. Upon completion, students should be able to use a computer accounting package to accurately solve accounting problems.

ACC-180 Practices in Bookkeeping 3 0 3
Prerequisites: ACC-120
Corequisites: None
This course provides advanced instruction in bookkeeping and record-keeping functions. Emphasis is placed on mastering adjusting entries, correction of errors, depreciation, payroll, and inventory. Upon completion, students should be able to conduct all key bookkeeping functions for small businesses.

***ACC-220 Intermediate Accounting I 3 2 4**
Prerequisites: ACC-120
Corequisites: None
This course is a continuation of the study of accounting principles with in-depth coverage of theoretical concepts and financial statements. Topics include generally accepted accounting principles and extensive analysis of balance sheet components. Upon completion, students should be able to demonstrate competence in the conceptual framework underlying financial accounting, including the application of financial standards.

*The numbers following course titles indicate **class**, **lab**, **clinic/co-op/shop**, and **credit** hours, respectively.*

Aerospace and Flight Training

*AER-110 Air Navigation 2 2 3

Prerequisites: None
Corequisites: None
This course covers the basic elements of air navigation, fundamentals of pilotage and dead reckoning, and the use of a plotter, computer, and aerial charts. Topics include pilotage, dead reckoning, radio navigation, LORAN, Global Positioning Systems, and the use of FAA publications. Upon completion, students should be able to interpret aeronautical charts and apply navigational principles.

*AER-111 Aviation Meteorology 3 0 3

Prerequisites: None
Corequisites: None
This course covers the atmosphere, interpretation and measurement of meteorological elements, and the effects of such on aircraft operations and performance. Topics include heat exchanges in the atmosphere; temperature, pressure, stability, clouds, air masses, fronts, and thunderstorms; and the use and interpretation of weather data. Upon completion, students should be able to analyze weather data for flight planning and safe flying.

*AER-112 Aviation Laws and FARs 2 0 2

Prerequisites: None
Corequisites: None
This course provides an in-depth study of the state, federal, and international regulations forming the structure of aviation law. Emphasis is placed on Federal Aviation Regulations Parts 61, 91, and 135 with additional emphasis on legal issues in aviation law. Upon completion, students should be able to apply legal principles and interpret federal air regulations.

*AER-113 History of Aviation 2 0 2

Prerequisites: None
Corequisites: None
This course provides a historical survey of the efforts of manned-flight. Topics include the development of aircraft, milestones in aviation, noted pioneers, and the socioeconomic impact of flight upon modern civilization. Upon completion, students should be able to demonstrate an understanding of the advancements that aviation has accrued for society and contemporary changes in aviation.

*AER-114 Aviation Management 3 0 3

Prerequisites: None
Corequisites: None
This course covers operation of a flight department on a cost-effective basis and analysis of profit and loss statements. Topics include flight operations costs, aircraft acquisition analysis and cost comparisons, costs versus revenue, and break-even points. Upon completion, students should be able to calculate cost of flight operations and apply monthly and annual budget analysis.

*AER-150 Private Pilot Flt Theory 2 2 3

Prerequisites: None
Corequisites: None
This course covers the aeronautical knowledge required to meet the Federal Aviation Administration regulations for private pilot certification. Topics include the principles of flight, the flight environment, basic aircraft systems and performance, basic meteorology and weather data interpretation, and FAA regulations. Upon completion, students should be able to demonstrate the competencies required for the FAA written examination for a private pilot certificate.

*AER-151 Flight-Private Pilot 0 3 1

Prerequisites: None
Corequisites: None
This course provides the hands-on training needed to qualify for a Federal Aviation Administration private pilot certificate. Topics include flight maneuvers (ground procedures, take-offs, climbs, level flight, turns, glides, stalls, slow flight, descents, slips, landings, emergency procedures) and cross-country planning and navigation. Upon completion, students should be able to demonstrate the competencies required for the flight test practical exam for the private pilot certificate.

*AER-160 Instrument Flight Theory 2 2 3

Prerequisites: None
Corequisites: None
This course covers the required aeronautical knowledge of the Federal Aviation Administration Regulation Instrument Ground School. Topics include a study of instruments, systems, instrument flight charts, instrument flight planning, approach procedures, and the IFR regulations. Upon completion, students should be able to demonstrate the competencies required to complete the FAA written examination for an instrument rating.

*AER-161 Flight-Instrument Pilot 0 6 2

Prerequisites: AER-151
Corequisites: None
This course covers instruction and training in instrument flight planning including IFR navigation, VOR, ILS, ADF, and compliance with ATC procedures. Emphasis is placed on approach and navigation procedures, including holding and missed approaches, and development of skill in executing en route and approach procedures. Upon completion, students should be able to plan and execute an IFR flight and demonstrate competencies required for the FAA instrument pilot flight exam.

*AER-170 Commercial Flight Theory 3 0 3

Prerequisites: None
Corequisites: None
This course covers advanced aircraft control, cross-country operations, and other topics required for the FAA commercial pilot written exam. Emphasis is placed on the principles of aircraft performance and operation, take-off performance, cruise performance, descent and landing performance, and weight and balance computations. Upon completion, students should be able to demonstrate commercial pilot skills and competence in the materials required for the FAA written commercial pilot examination.

*AER-171 Flight-Commercial Pilot 0 6 3

Prerequisites: AER-151
Corequisites: None
This course provides the hands-on training needed to qualify for a Federal Aviation Administration commercial pilot certificate. Topics include flight instruction in advanced precision maneuvers, maximum performance take-off and landings, emergency procedures, operation of complex aircraft, aircraft performance, and range and fuel planning. Upon completion, students should be able to demonstrate competence in the areas of the flight test practical exam for the commercial pilot certificate.

*The numbers following course titles indicate **class**, **lab**, **clinic/co-op/shop**, and **credit** hours, respectively.*

***AER-210 Flight Dynamics 3 0 3**
Prerequisites: None
Corequisites: None
This course covers basic and advanced principles of aerodynamic phenomena and fluid flow. Topics include airflow phenomena; lift/weight/thrust/drag; aircraft configuration characteristics, stability, and control; subsonic, transonic, and supersonic flight; critical Mach numbers; and the V-g Diagram. Upon completion, students should be able to explain the elements of applied aerodynamics and aeronautical engineering which relate directly to the problems of flight operations.

***AER-211 Air Traffic Control 2 0 2**
Prerequisites: None
Corequisites: None
This course provides a detailed analysis of all aspects of air traffic control. Emphasis is placed on an in-depth analysis of air traffic control, including utilization of the air traffic environment based on the pilot's and controller's perspective. Upon completion, students should be able to operate an aircraft within the national airspace system under FAA air traffic control.

***AER-215 Flight Safety 3 0 3**
Prerequisites: None
Corequisites: None
This course covers the basic procedures and practices of aircraft accident prevention, accident investigation, and reporting. Topics include a comprehensive review of federal regulations pertinent to aviation safety and analyses of actual aviation accident cases and their causes. Upon completion, students should be able to demonstrate an understanding and respect for specific personal factors such as attitude, motivation, and skill related to flight safety.

***AER-216 Engines & Systems 2 2 3**
Prerequisites: None
Corequisites: None
This course introduces piston and turbine aircraft engines and associated systems. Topics include aircraft hydraulic, pneumatic, electrical, air conditioning, and pressurization systems along with the theory of engine operations, including power and thrust computations. Upon completion, students should be able to apply principles of engine and systems operation.

***AER-217 Air Transportation 3 0 3**
Prerequisites: None
Corequisites: None
This course covers the development and present status of the air transportation system. Topics include federal legislation, characteristics and classification of air carriers, development of the air traffic control system, and the organization and function of the FAA. Upon completion, students should be able to relate the knowledge acquired to career development.

***AER-218 Human Factors in Aviation 2 0 2**
Prerequisites: None
Corequisites: None
This course analyzes interpersonal relationships in the cockpit and related psychological factors that affect pilot performance and efficiency during flight operations. Topics include cockpit management, judgment, aircraft and flight crew coordination and control, physiological factors, responsibility, and decision-making capabilities. Upon completion, students should be able to apply work-proven routines to stress management, crew responsibility, and the team concept in the cockpit.

Agriculture

AGR-267 Permaculture 2 2 3
Prerequisites: None
Corequisites: None
This course introduces the design of sustainable human habitats as part of a sustainable system, with emphasis placed on living systems of the temperate region. Topics include fundamentals of permaculture system design for farms, including gardens, fields, water, animals, buildings, economics, and society. Upon completion, students should be able to design a functional holistic farm system.

Air Conditioning, Heating, and Refrigeration

***AHR-110 Intro to Refrigeration 2 6 5**
Prerequisites: None
Corequisites: None
This course introduces the basic refrigeration process used in mechanical refrigeration and air conditioning systems. Topics include terminology, safety, and identification and function of components, refrigeration cycle, and tools and instrumentation used in mechanical refrigeration systems. Upon completion, students should be able to identify refrigeration systems and components, explain the refrigeration process, and use the tools and instruments of the trade.

***AHR-111 HVACR Electricity 2 2 3**
Prerequisites: None
Corequisites: None
This course introduces electricity as it applies to HVACR equipment. Emphasis is placed on power sources, interaction of electrical components, wiring of simple circuits, and the use of electrical test equipment. Upon completion, students should be able to demonstrate good wiring practices and the ability to read simple wiring diagrams.

***AHR-112 Heating Technology 2 4 4**
Prerequisites: None
Corequisites: AHR-111
This course covers the fundamentals of heating including oil, gas, and electric heating systems. Topics include safety, tools and instrumentation, system operating characteristics, installation techniques, efficiency testing, electrical power, and control systems. Upon completion, students should be able to explain the basic oil, gas, and electrical heating systems and describe the major components of a heating system.

***AHR-113 Comfort Cooling 2 4 4**
Prerequisites: AHR-110
Corequisites: None
This course covers the installation procedures, systems operations, and maintenance of residential and light commercial comfort cooling systems. Topics include terminology, component operation, and testing and repair of equipment used to control and produce assured comfort levels. Upon completion, students should be able to use psychometrics, manufacturer specifications, and test instruments to determine proper system operation.

*The numbers following course titles indicate **class**, **lab**, **clinic/co-op/shop**, and **credit** hours, respectively.*

***AHR-114 Heat Pump Technology 2 4 4**
Prerequisites: AHR-110 or AHR-113
Corequisites: None
This course covers the principles of air source and water source heat pumps. Emphasis is placed on safety, modes of operation, defrost systems, refrigerant charging, and system performance. Upon completion, students should be able to understand and analyze system performance and perform routine service procedures.

***AHR-115 Refrigeration Systems 1 3 2**
Prerequisites: AHR-110
Corequisites: None
This course introduces refrigeration systems and applications. Topics include defrost methods, safety and operational control, refrigerant piping, refrigerant recovery and charging, and leak testing. Upon completion, students should be able to assist in installing and testing refrigeration systems and perform simple repairs.

***AHR-130 HVAC Controls 2 2 3**
Prerequisites: AHR-111 or ELC-111
Corequisites: None
This course covers the types of controls found in residential and commercial comfort systems. Topics include electrical and electronic controls, control schematics and diagrams, test instruments, and analysis and troubleshooting of electrical systems. Upon completion, students should be able to diagnose and repair common residential and commercial comfort systems controls.

AHR-160 Refrigerant Certification 1 0 1
Prerequisites: None
Corequisites: AHR-110
This course covers the requirements for the EPA certification examinations. Topics include small appliances, high pressure systems, and low pressure systems. Upon completion, students should be able to demonstrate knowledge of refrigerants and be prepared for the EPA certification examinations.

AHR-170 Heating Lab 0 3 1
Prerequisites: None
Corequisites: AHR-112
This course provides a laboratory experience in heating technology. Emphasis is placed on providing practical experience in the fundamentals of heating. Upon completion, students should be able to demonstrate an understanding of electric, oil, and gas fueled heating systems.

AHR-171 Comfort Cooling Lab 0 3 1
Prerequisites: None
Corequisites: AHR-113
This course provides a laboratory experience in comfort cooling. Emphasis is placed on providing practical experience in installation, operations, and maintenance of residential and light commercial comfort cooling systems. Upon completion, students should be able to demonstrate an understanding of comfort cooling systems.

***AHR-211 Residential System Design 2 2 3**
Prerequisites: AHR-112 or AHR-113
Corequisites: None
This course introduces the principles and concepts of conventional residential heating and cooling system design. Topics include heating and cooling load estimating, basic psychometrics, equipment selection, duct system selection, and system design. Upon completion, students should be able to design a basic residential heating and cooling system.

***AHR-212 Advanced Comfort Systems 2 6 4**
Prerequisites: AHR-114
Corequisites: None
This course covers water-cooled comfort systems, water-source/geothermal heat pumps, and high efficiency heat pump systems including variable speed drives and controls. Emphasis is placed on the application, installation, and servicing of water-source systems and the mechanical and electronic control components of advanced comfort systems. Upon completion, students should be able to test, analyze, and troubleshoot water-cooled comfort systems, water-source/geothermal heat pumps, and high efficiency heat pumps. Hydronic (hot water) and steam heating systems will also be studied.

AHR-213 HVACR Building Code 1 2 2
Prerequisites: AHR-112 or AHR-113
Corequisites: None
This course covers the North Carolina codes that are applicable to the design and installation of HVACR systems. Topics include current North Carolina codes as applied to HVACR design, service, and installation. Upon completion, students should be able to demonstrate the correct usage of North Carolina codes that apply to specific areas of the HVACR trade.

Alternative Energy Technology

ALT-120 Renewable Energy Tech 2 2 3
Prerequisites: None
Corequisites: None
This course provides an introduction to multiple technologies that allow for the production and conservation of energy from renewable sources. Topics include hydro-electric, wind power, passive and active solar energy, tidal energy, appropriate building techniques, and energy conservation methods. Upon completion, students should be able to demonstrate an understanding of renewable energy production and its impact on humans and their environment.

Anthropology

ANT 220 Cultural Anthropology 3 0 3
Prerequisites: DRE 097, DRE 098, ENG 002 Tier 1, ENG 025, or C or better in ENG 110 or ENG 111
Corequisites: None
This course introduces the nature of human culture. Emphasis is placed on cultural theory, methods of fieldwork, and cross-cultural comparisons in the areas of ethnology, language, and the cultural past. Upon completion, students should be able to demonstrate an understanding of basic cultural processes and how cultural data are collected and analyzed. This course has been approved for transfer under the CAA as a general education course in Social/Behavioral Sciences.

Architecture

ARC-112 Constr Matls & Methods 3 2 4
Prerequisites: None
Corequisites: None
This course introduces construction materials and methodologies. Topics include construction terminology, traditional and alternative materials and their properties, manufacturing processes, construction techniques, and other related topics. Upon completion, students should be able to detail construction assemblies and identify construction materials and properties.

*The numbers following course titles indicate **class**, **lab**, **clinic/co-op/shop**, and **credit** hours, respectively.*

ARC-131 Building Codes 2 2 3
Prerequisites: ARC-112
Corequisites: None
This course covers the methods of researching building codes for specific projects. Topics include residential and commercial building codes. Upon completion, students should be able to determine the code constraints governing residential and commercial projects.

Art

ART-111 Art Appreciation 3 0 3
Prerequisites: None
Corequisites: None
This course introduces the origins and historical development of art. Emphasis is placed on the relationship of design principles to various art forms including but not limited to sculpture, painting, and architecture. Upon completion, students should be able to identify and analyze a variety of artistic styles, periods, and media. This is a Universal General Education Transfer Component (UGETC) course that satisfies Humanities/Fine Arts.

ART-114 Art History Survey I 3 0 3
Prerequisites: None
Corequisites: None
This course covers the development of art forms from ancient times to the Renaissance. Emphasis is placed on content, terminology, design, and style. Upon completion, students should be able to demonstrate an historical understanding of art as a product reflective of human social development. This is a Universal General Education Transfer Component (UGETC) course that satisfies Humanities/Fine Arts.

ART-115 Art History Survey II 3 0 3
Prerequisites: C or better in ART 114
Corequisites: None
This course covers the development of art forms from the Renaissance to the present. Emphasis is placed on content, terminology, design, and style. Upon completion, students should be able to demonstrate an historical understanding of art as a product reflective of human social development. This is a Universal General Education Transfer Component (UGETC) course that satisfies Humanities/Fine Arts.

ART-121 Two-Dimensional Design 0 6 3
Prerequisites: None
Corequisites: None
This course introduces the elements and principles of design as applied to two-dimensional art. Emphasis is placed on the structural elements, the principles of visual organization, and the theories of color mixing and interaction. Upon completion, students should be able to understand and use critical and analytical approaches as they apply to two-dimensional visual art. This course has been approved for the transfer under the CAA as a premajor and/or elective course requirement.

ART-122 Three-Dimensional Design 0 6 3
Prerequisites: C or better in ART 121
Corequisites: None
This course introduces basic studio problems in three-dimensional visual design. Emphasis is placed on the structural elements and organizational principles as applied to mass and space. Upon completion, students should be able to apply three-dimensional design concepts. This course has been approved for the transfer under the CAA as a premajor and/or elective course requirement.

ART-131 Drawing I 0 6 3
Prerequisites: None
Corequisites: None
This course introduces the language of drawing and the use of various drawing materials. Emphasis is placed on drawing techniques, media, and graphic principles. Upon completion, students should be able to demonstrate competence in the use of graphic form and various drawing processes. This course has been approved for the transfer under the CAA as a premajor and/or elective course requirement.

ART-171 Digital Design I 0 6 3
Prerequisites: None
Corequisites: None
This course is designed to introduce students to the elements and principles of design through the use of digital software. Emphasis is placed on developing composition and design skills using vector, raster, and time-based media. Upon completion, students should be able to identify and use tools in digital software, understand and utilize digital and artistic vocabulary, and employ the principles and elements of design to create artwork using digital means. This course has been approved for the transfer under the CAA as a premajor and/or elective course requirement.

ART-214 Portfolio and Resume 0 2 1
Prerequisites: None
Corequisites: None
This course covers resume writing, interview skills, and the preparation and presentation of an art portfolio. Emphasis is placed on the preparation of a portfolio of original artwork, the preparation of a photographic portfolio, approaches to resume writing, and interview techniques. Upon completion, students should be able to mount original art for portfolio presentation, photograph and display a professional slide portfolio, and write an effective resume. This course has been approved for the transfer under the CAA as a premajor and/or elective course requirement.

ART-231 Printmaking I 0 6 3
Prerequisites: C or better in ART 121
Corequisites: None
This course introduces printmaking: its history, development techniques, and processes. Emphasis is placed on basic applications with investigation into image source and development. Upon completion, students should be able to produce printed images utilizing a variety of methods. This course has been approved for the transfer under the CAA as a premajor and/or elective course requirement.

ART-240 Painting I 0 6 3
Prerequisites: C or better in ART-121 or ART-131
Corequisites: None
This course introduces the language of painting and the use of various painting materials. Emphasis is placed on the understanding and use of various painting techniques, media, and color principles. Upon completion, students should be able to demonstrate competence in the use of creative processes directed toward the development of expressive form. This course has been approved for the transfer under the CAA as a premajor and/or elective course requirement.

ART-244 Watercolor 0 6 3
Prerequisites: C or better in ART-121 or ART-131
Corequisites: None
This course introduces basic methods and techniques used in watercolor. Emphasis is placed on application, materials, content, and individual expression. Upon completion, students should be able to demonstrate a variety of traditional and nontraditional concepts used in watercolor media. This course has been approved for the transfer under the CAA as a premajor and/or elective course requirement.

ART-264 Digital Photography I 0 6 3
Prerequisites: None
Corequisites: None
This course introduces digital photographic equipment, theory and processes. Emphasis is placed on camera operation, composition, computer photo manipulation and creative expression. Upon completion, students should be able to successfully expose, digitally manipulate, and print a well-conceived composition. This course has been approved for the transfer under the CAA as a premajor and/or elective course requirement.

ART-266 Videography I 0 6 3
Prerequisites: None
Corequisites: None
This course introduces various aspects of basic video production including concept development, scripting, camera operation, and post-production. Emphasis is placed on creative expression, camera handling, story boarding and editing. Upon completion, students should be able to demonstrate a basic understanding of video camera operation and production techniques. This course has been approved for the transfer under the CAA as a premajor and/or elective course requirement.

ART-267 Videography II 0 6 3
Prerequisites: C or better in ART-266
Corequisites: None
This course is designed to provide a framework for the production of a long-term video project. Emphasis is placed on realization of the unique creative vision. Upon completion, students should be able to produce a thematically coherent, edited video with sound and titling. This course has been approved for the transfer under the CAA as a premajor and/or elective course requirement.

ART-275 Introduction to Graphic Design 0 6 3
Prerequisites: None
Corequisites: None
This course introduces students to the field of graphic design. Emphasis is placed on the basic concepts of visual communication, the design process and the ability to evaluate and discuss design issues in a critical manner. Upon completion, students will be able to use contemporary design software and visual language techniques as they apply to creative visual problem-solving involving typography, image manipulation, symbolic representation and page management while being responsive to the relationship between client, designer and audience. This course has been approved for the transfer under the CAA as a premajor and/or elective course requirement.

ART-276 Interactive Media Design 0 6 3
Prerequisites: None
Corequisites: None
Interactive Media Design introduces students to the concepts and techniques used in designing and producing interactive projects. Emphasis is placed on the interactive development process, aesthetics of visual solutions, technical proficiency, and graphical user interface (GUI) with projects including digital imaging, web design, simple animation, graphics and copyright issues. Upon completion students should be able to use contemporary software to solve a variety of multimedia problems for a range of platforms and devices that may include web-based interaction, mobile devices or other emerging technology. This course has been approved for the transfer under the CAA as a premajor and/or elective course requirement.

ART-283 Ceramics I 0 6 3
Prerequisites: None
Corequisites: None
This course provides an introduction to three-dimensional design principles using the medium of clay. Emphasis is placed on fundamentals of forming, surface design, glaze application, and firing. Upon completion, students should be able to demonstrate skills in slab and coil construction, simple wheel forms, glaze technique, and creative expression. This course has been approved for the transfer under the CAA as a premajor and/or elective course requirement.

ART-284 Ceramics II 0 6 3
Prerequisites: C or better in ART 283
Corequisites: None
This course covers advanced hand building and wheel techniques. Emphasis is placed on creative expression, surface design, sculptural quality, and glaze effect. Upon completion, students should be able to demonstrate a high level of technical competence in forming and glazing with a development of three-dimensional awareness. This course has been approved for the transfer under the CAA as a premajor and/or elective course requirement.

Automation & Robotics

***ATR-112 Intro to Automation 2 3 3**
Prerequisites: None
Corequisites: None
This course introduces the basic principles of automated manufacturing and describes the tasks that technicians perform on the job. Topics include the history, development, and current applications of robots and automated systems including their configuration, operation, components, and controls. Upon completion, students should be able to understand the basic concepts of automation and robotic systems.

***ATR-212 Industrial Robots 2 3 3**
Prerequisites: ATR-112
Corequisites: None
Available: As needed
This course covers the operation of advanced industrial robots. Topics include the classification of robots, activators, grippers, work envelopes, computer interfaces, overlapping work envelopes, installation, and programming. Upon completion, students should be able to install, program, and troubleshoot industrial robots.

Automotive

***AUT-116 Engine Repair 2 3 3**
Prerequisites: None
Corequisites: AUT-116A
This course covers the theory, construction, inspection, diagnosis, and repair of internal combustion engines and related systems. Topics include fundamental operating principles of engines and diagnosis, inspection, adjustment, and repair of automotive engines using appropriate service information. Upon completion, students should be able to perform basic diagnosis, measurement, and repair of automotive engines using appropriate tools, equipment, procedures, and service information.

***AUT-116A Engine Repair Lab 0 3 1**
Prerequisites: None
Corequisites: AUT-116
This course is an optional lab to be used as an alternative to co-op placement in meeting the NATEF standards for total hours. Topics include diagnosis, inspection, adjustment, and repair of automotive engines using appropriate service information. Upon completion, students should be able to perform basic diagnosis, measurement, and repair of automotive engines using appropriate tools, equipment, procedures, and service information.

***AUT-141 Suspension & Steering Sys 2 3 3**
Prerequisites: None
Corequisites: AUT-141A
This course covers principles of operation, types, and diagnosis/repair of suspension and steering systems to include steering geometry. Topics include manual and power steering systems and standard and electronically controlled suspension and steering systems. Upon completion, students should be able to service and repair steering and suspension components, check and adjust alignment angles, repair tires, and balance wheels.

***AUT-141A Suspension and Steering Lab 0 3 1**
Prerequisites: None
Corequisites: AUT-141
This course is an optional lab to be used as an alternative to co-op placement in meeting the NATEF standards for total hours. Topics include manual and power steering systems and standard and electronically controlled suspension and steering systems. Upon completion, students should be able to service and repair steering and suspension components, check and adjust alignment angles, repair tires, and balance wheels.

***AUT-151 Brake Systems 2 3 3**
Prerequisites: None
Corequisites: AUT-151A
This course covers principles of operation and types, diagnosis, service, and repair of brake systems. Topics include drum and disc brakes involving hydraulic, vacuum boost, hydra-boost, electrically powered boost, and anti-lock and parking brake systems. Upon completion, students should be able to diagnose, service, and repair various automotive braking systems.

***AUT-151A Brake Systems Lab 0 3 1**
Prerequisites: None
Corequisites: AUT-151
This course is an optional lab to be used as an alternative to co-op placement in meeting the NATEF standards for total hours. Topics Include drum and disc brakes involving hydraulic, vacuum-boost, hydra-boost, electrically powered boost, and anti-lock parking brake systems and emergency brake systems technologies. Upon completion, students should be able to diagnose, service, and repair various automotive braking systems.

***AUT-181 Engine Performance 1 2 3 3**
Prerequisites: None
Corequisites: None
This course covers the introduction, theory of operation, and basic diagnostic procedures required to restore engine performance to vehicles equipped with complex engine control systems. Topics include an overview of engine operation, ignition components and systems, fuel delivery, injection components and systems and emission control devices. Upon completion students should be able to describe operation of and diagnose/repair basic ignition, fuel and emission related drivability problems using appropriate test equipment and service information.

***AUT-221 Auto Transm/Transaxles 2 3 3**
Prerequisites: None
Corequisites: AUT-221A
This course covers operation, diagnosis, service, and repair of automatic transmissions/transaxles. Topics include hydraulic, pneumatic, mechanical, and electrical/electronic operation of automatic drive trains and the use of appropriate service tools and equipment. Upon completion, students should be able to explain operational theory, diagnose and repair automatic drive trains.

***AUT-221A Auto Transm/Transax Lab 0 3 1**
Prerequisites: None
Corequisites: AUT-221
This course is an optional lab to be used as an alternative to co-op placement in meeting the NATEF standards for total hours. Topics include hydraulic, pneumatic, mechanical, and electrical/electronic operation of automatic drive trains and the use of appropriate service tools and equipment. Upon completion, students should be able to diagnose and repair automatic drive trains.

***AUT-231 Man Trans/Axles/Drtrains 2 3 3**
Prerequisites: None
Corequisites: AUT-231A
This course covers the operation, diagnosis, and repair of manual transmissions/transaxles, clutches, drive shafts, axles, and final drives. Topics include theory of torque, power flow, and manual drive train servicing and repair using appropriate service information, tools, and equipment. Upon completion, students should be able to explain operational theory, diagnose and repair manual drive trains.

***AUT-231A Man Trans/Ax/Drtrains Lab 0 3 1**
Prerequisites: None
Corequisites: AUT-231
This course is an optional lab for the program that needs to meet NATEF hour standards, but does not have a co-op component in the program. Topics include manual drive train diagnosis, service and repair using appropriate service information, tools, and equipment. Upon completion, students should be able to diagnose and repair manual drive trains.

***AUT-281 Adv Engine Performance 2 2 3**
Prerequisites: None
Corequisites: None
This course utilizes service information and specialized test equipment to diagnose and repair power train control systems. Topics include computerized ignition, fuel and emission systems, related diagnostic tools and equipment, data communication networks, and service information. Upon completion, students should be able to perform diagnosis and repair.

*The numbers following course titles indicate **class**, **lab**, **clinic/co-op/shop**, and **credit** hours, respectively.*

Brewing/ Distillation/Fermentation

*BDF-110 Fermentation Production 2 4 4

Prerequisites: BDF-114
Corequisites: None

This course introduces the basic methodologies used in fermentation. Emphasis is placed on the production of fermented products including ingredients, techniques, fermentation management, storage and sanitation. Upon completion, students should be able to design/produce pilot-scale products to demonstrate how material selection and process conditions can generate different kinds/qualities of products.

*BDF-111 BDF Safety & Sanitation 1 2 2

Prerequisites: None
Corequisites: None

This course covers sanitation, handling and safety with fermentation products, facilities and equipment. Emphasis is placed on the proper chemicals, their selection, handling and storage for sanitation control within the fermentation environment. Upon completion, students should be able to safely maintain quality and stability of fermentation products. This course will include industry relevant OSHA and forklift certification training.

*BDF-114 Craft Beer Brewing 1 3 2

Prerequisites: None
Corequisites: None

This course introduces entry level skills in craft beer brewing. Topics include recipe development, basic sanitation, techniques and equipment used in the production of small batches (5 gallon or less) of craft beer. Upon completion, students should be able to demonstrate how to produce small batches of craft beer and be able to extrapolate concepts to larger future production.

*BDF-115 Applied Craft Bev Microbiology 3 2 4

Prerequisites: None
Corequisites: None

This course provides an introduction to microbiology and laboratory practices in the brewing industry. Emphasis is placed on yeast biology, fermentation and microorganisms in brewery/distillation and sanitation. Upon completion, students should be able to demonstrate an understanding of microbiology, laboratory techniques, and commonly used analysis methodologies applied in the brewing industry.

*BDF 117 Distillation Methods 1 3 2

Prerequisites: None
Corequisites: None

This course introduces entry level skills in craft distilling. Emphasis is placed on distillate production on small scale equipment, sanitation, cereal, molasses and fruit fermentations and how to purify ferments via distillation. Upon completion, students should be able to demonstrate how to produce small batches of distillate and be able to extrapolate concepts to larger production.

*BDF-125 Bev Tech & Calculations 1 3 2

Prerequisites: None
Corequisites: BDF-111, BDF-114

This course introduces technology and mathematical calculations used in craft beverage production. Emphasis is placed on equipment and technology relating to scheduling/record keeping, and recipe development/alcohol control and ingredient usage calculations. Upon completion, students should be able to identify/demonstrate technology and equipment used in craft beverage production and recipe development.

*BDF-150 Craft Bev Lab Methods 2 2 3

Prerequisites: None
Corequisites: None

This course covers the operation of laboratory equipment and basic laboratory techniques which are used in the craft beverage laboratory setting. Emphasis is placed on hands-on use and applications of basic craft beverage laboratory techniques including calibrating, troubleshooting, record keeping, measurement, and laboratory procedure development. Upon completion, students should be able to properly operate and maintain basic laboratory equipment and be able to prepare and test samples in the completion of individual and team projects.

*BDF-170 Bev Tour & Tasting Mgmt 2 2 3

Prerequisites: None
Corequisites: None

This course covers the role of craft beverage as a destination attraction. Emphasis is placed on developing, marketing and managing the craft beverage experience including customer service, special events, and tasting room operations. Upon completion, students should be able to demonstrate tasting room management for craft beverages and its application to tourism and economic development.

*BDF-175 Distillation Operations 2 4 4

Prerequisites: BDF-230, BDF-250
Corequisites: None

This course covers the principles and production techniques involved in the distillation of grains, fruits and other carbohydrates associated with craft beverage distillation. Emphasis is placed on materials/processing, fermentation applications, distillation technology, sensory evaluation, quality control, engineering, and craft distillery management. Upon completion, students should be able to demonstrate an understanding of distillation operation/management and the impact of sanitation, fermentation, maturation and aging in the production of distillations.

*BDF-180 Sensory Evaluation 2 2 3

Prerequisites: None
Corequisites: None

This course introduces the visual, olfactory and gustatory parameters used in the evaluation of beer and distillery products. Emphasis is placed on aromas, finish, flavor/taste interactions and factors affecting product quality, as well as descriptive analysis/model systems, judging systems, set-up and operation for beverage competitions. Upon completion, students should be able to demonstrate the fundamental principles/practices in sensory analysis and identify elements that influence sensory qualities of particular craft beverages.

*BDF-215 Legal Issues-Fermentation 3 0 3

Prerequisites: None
Corequisites: None

This course covers the laws and regulatory environment particular to the brewing, distillation and fermentation industry. Emphasis is placed on social/ethical responsibilities and the state/federal regulations including licensing, taxation, labeling, record keeping, permits, inspections and laws regarding interstate and international commerce. Upon completion, students should be able to demonstrate an understanding of the laws and regulations that influence the brewing, distillation and fermentation industry.

***BDF-220 Applied Craft Bev Chemistry 3 2 4**
Prerequisites: None
Corequisites: None
This course introduces chemistry fundamentals as they apply to the brewing and distillation industry. Emphasis is placed on elements impacting brewing/distillation including ingredient analysis/fermentation/production chemicals, and properties of gasses/liquids, pH, and pressure. Upon completion, students should be able to demonstrate basic chemistry principles/laboratory techniques to assess/control chemical properties associated with major products of the alcoholic beverage industry.

***BDF-230 Advanced Brewing 2 2 3**
Prerequisites: BDF-110, BDF-111, BDF-114, BDF-115
Corequisites: None
This course covers advanced brewing processes utilizing the equipment of an on-site brewery and fermentation facility. Topics include advanced beer making processes, analysis/monitoring of fermentation, specialty beer production, quality control, sustainable practices and facilities operations and management. Upon completion, students should be able to understand and demonstrate the proper applications of high volume brewing in a production facility.

***BDF-230A Advanced Brewing Lab 0 2 1**
Prerequisites: BDF-110, BDF-111, BDF-114, BDF-115
Corequisites: BDF-230
This course provides additional laboratory experience for enhancing student skills in advanced brewing processes utilizing the equipment of an on-site brewery and fermentation facility. Topics include advanced beer making processes, analysis/monitoring of fermentation, specialty beer production, quality control, sustainable practices and facilities operations and management. Upon completion, students should be able to demonstrate the proper applications of high volume brewing in a production facility.

***BDF-240 Seasonal Beer Production 2 4 4**
Prerequisites: None
Corequisites: None
This course covers the brewing of seasonal and specialty beers using advanced brewing techniques. Topics include original recipe development, lab analysis, production techniques and packaging. Upon completion, students should be able to develop original recipes for seasonal and specialty beers, and provide analysis, production and packaging.

***BDF-250 BDF Packaging & Materials 2 3 3**
Prerequisites: None
Corequisites: None
This course covers the practices associated with packaging including canning, bottling, box presentations and kegging of beer and distilled products. Emphasis is placed on techniques related to expansion of the product shelf life which may include container selection, temperature/light control, and labeling, capping, and sealing options. Upon completion, students should be able to demonstrate and perform practical operations critical to packaging.

***BDF-261 Bev Marketing & Sales 3 0 3**
Prerequisites None
Corequisites: None
This course covers the planning and resources required to market grains/hops/fruit and brewed or distilled products. Emphasis is placed on the nature of the craft beverage market including industry/consumer trends, economic, legal, and social considerations related to branding, pricing, promotion, and distribution. Upon completion, students should be able to demonstrate a basic proficiency of the marketing principles and practices for craft beverages and the grains/hops/fruit from which they are produced.

Biology

BIO-110 Principles of Biology 3 3 4
Prerequisites: DRE 097 (or placement), DRE 098 (or placement), ENG 002 Tier 1 (or placement), ENG 025, or C or better in ENG 110 or ENG 111
Corequisites: None
This course provides a survey of fundamental biological principles for non-science majors. Emphasis is placed on basic chemistry, cell biology, metabolism, genetics, taxonomy, evolution, ecology, diversity, and other related topics. Upon completion, students should be able to demonstrate increased knowledge and better understanding of biology as it applies to everyday life. This is a Universal General Education Transfer Component (UGETC) course that satisfies Natural Sciences.

BIO-111 General Biology I 3 3 4
Prerequisites: DMA 010 - DMA 030 (or placement) or MAT-003 Tier 1 (or placement), MAT 025 or MAT 035; Take DRE 097 (or placement), DRE 098 (or placement), ENG 002 Tier 1 (or placement), ENG 025, or C or better in ENG 110 or ENG 111
Corequisites: None
This course introduces the principles and concepts of biology. Emphasis is placed on basic biological chemistry, cell structure and function, metabolism and energy transformation, genetics, evolution, classification, and other related topics. Upon completion, students should be able to demonstrate understanding of life at the molecular and cellular levels. This is a Universal General Education Transfer Component (UGETC) course that satisfies Natural Sciences.

BIO-112 General Biology II 3 3 4
Prerequisites: C or better in BIO-111
Corequisites: None
This course is a continuation of BIO-111. Emphasis is placed on organisms, biodiversity, plant and animal systems, ecology, and other related topics. Upon completion, students should be able to demonstrate comprehension of life at the organismal and ecological levels. This is a Universal General Education Transfer Component (UGETC) course that satisfies Natural Sciences for the Associate of Science Degree.

BIO-120 Introductory Botany 3 3 4
Prerequisites: C or better in BIO-110 or BIO-111
Corequisites: None
This course provides an introduction to the classification, relationships, structure, and function of plants. Topics include reproduction and development of seed and non-seed plants, levels of organization, form and function of systems, and a survey of major taxa. Upon completion, students should be able to demonstrate comprehension of plant form and function, including selected taxa of both seed and non-seed plants. This course has been approved for transfer under the CAA as a general education course in Natural Science.

BIO-130 Introductory Zoology 3 3 4
Prerequisites: C or better in BIO-110 or BIO-111
Corequisites: None
This course provides an introduction to the classification, relationships, structure, and function of major animal phyla. Emphasis is placed on levels of organization, reproduction and development, comparative systems, and a survey of selected phyla. Upon completion, students should be able to demonstrate comprehension of animal form and function including comparative systems of selected groups. This course has been approved for transfer under the CAA as a general education course in Natural Science.

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BIO-140 Environmental Biology 3 0 3

Prerequisites: DRE 097 (or placement), DRE 098 (or placement), ENG 002 Tier 1 (or placement), ENG 025, or C or better in ENG 110 or ENG 111

Corequisites: BIO 140A

This course introduces environmental processes and the influence of human activities upon them. Topics include ecological concepts, population growth, natural resources, and a focus on current environmental problems from scientific, social, political, and economic perspectives. Upon completion, students should be able to demonstrate an understanding of environmental interrelationships and of contemporary environmental issues. This course has been approved for transfer under the CAA as a general education course in Natural Science.

BIO-140A Environmental Biology Lab 0 3 1

Prerequisites DRE 097 (or placement), DRE 098 (or placement), ENG 002 Tier 1 (or placement), or C or better in ENG 110 or ENG 111

Corequisites: BIO 140

This course provides a laboratory component to complement BIO 140. Emphasis is placed on laboratory and field experience. Upon completion, students should be able to demonstrate a practical understanding of environmental interrelationships and of contemporary environmental issues. This course has been approved for transfer under the CAA as a general education course in Natural Science.

BIO-155 Nutrition 3 0 3

Prerequisites: None

Corequisites: None

This course covers the biochemistry of foods and nutrients with consideration of the physiological effects of specialized diets for specific biological needs. Topics include cultural, religious, and economic factors that influence a person's acceptance of food, as well as nutrient requirements of the various life stages. Upon completion, students should be able to identify the functions and sources of nutrients, the mechanisms of digestion, and the nutritional requirements of all age groups. This course has been approved for transfer under the CAA as a premajor and/or elective course requirement.

BIO-161 Intro to Human Biology 3 0 3

Prerequisites: None

Corequisites: None

This course provides a basic survey of human biology. Emphasis is placed on the basic structure and function of body systems and the medical terminology used to describe normal and pathological states. Upon completion, students should be able to demonstrate an understanding of normal anatomy and physiology and the appropriate use of medical terminology.

BIO-163 Basic Anat and Physiology 4 2 5

Prerequisites: DMA 010-030 (or placement) or MAT 003 Tier 1 (or placement), MAT 025 or MAT 035; and DRE-097 (or placement), DRE 098 (or placement), ENG 002 Tier 1 (or placement), ENG 025, or C or better in ENG 110 or ENG 111

Corequisites: None

This course provides a basic study of the structure and function of the human body. Topics include a basic study of the body systems as well as an introduction to homeostasis, cells, tissues, nutrition, acid-base balance, and electrolytes. Upon completion, students should be able to demonstrate a basic understanding of the fundamental principles of anatomy and physiology and their interrelationships. This course has been approved for transfer under the CAA as a premajor and/or elective course requirement.

BIO-168 Anatomy and Physiology I 3 3 4

Prerequisites: DMA 010-030 (or placement) or MAT 003 Tier 1 (or placement), MAT 025 or MAT 035; and DRE-097 (or placement), DRE 098 (or placement), ENG 002 Tier 1 (or placement), ENG 025, or C or better in ENG 110 or ENG 111

Corequisites: None

This course provides a comprehensive study of the anatomy and physiology of the human body. Topics include body organization, homeostasis, cytology, histology, and the integumentary, skeletal, muscular, and nervous systems, and special senses. Upon completion, students should be able to demonstrate an in-depth understanding of principles of anatomy and physiology and their interrelationships. This course has been approved for transfer under the CAA as a premajor and/or elective course requirement.

BIO-169 Anatomy and Physiology II 3 3 4

Prerequisites: C or better in BIO-168

Corequisites: None

This course provides a continuation of the comprehensive study of the anatomy and physiology of the human body. Topics include the endocrine, cardiovascular, lymphatic, respiratory, digestive, urinary, and reproductive systems as well as metabolism, nutrition, acid-base balance, and fluid and electrolyte balance. Upon completion, students should be able to demonstrate an in-depth understanding of principles of anatomy and physiology and their interrelationships. This course has been approved for transfer under the CAA as a premajor and/or elective course requirement.

BIO-175 General Microbiology 2 2 3

Prerequisites: C or better in BIO-110, BIO-111, BIO-163, BIO-165 or BIO-168

Corequisites: None

This course covers principles of microbiology with emphasis on microorganisms and human disease. Topics include an overview of microbiology and aspects of medical microbiology, identification and control of pathogens, disease transmission, host resistance, and immunity. Upon completion, students should be able to demonstrate knowledge of microorganisms and the disease process as well as aseptic and sterile techniques. This course has been approved for transfer under the CAA as a premajor and/or elective course requirement.

BIO-275 Microbiology 3 3 4

Prerequisites: C or better in BIO-111, BIO-163, BIO-165 or BIO-168

Corequisites: None

This course covers principles of microbiology and the impact these organisms have on man and the environment. Topics include the various groups of microorganisms, their structure, physiology, genetics, microbial pathogenicity, infectious diseases, immunology, and selected practical applications. Upon completion, students should be able to demonstrate knowledge and skills including microscopy, aseptic technique, staining, culture methods, and identification of microorganisms. This course has been approved for transfer under the CAA as a premajor and/or elective course requirement.

Biomedical Equipment Technology

BMT 111 Intro to Biomed Field 2 0 2
Prerequisites: None
Corequisites: None
This course introduces the fundamental concepts of the health care delivery system. Topics include hospital organization and structure, BMET duties and responsibilities, and the professional and social interrelationships between services. Upon completion, students should be able to demonstrate an understanding of hospital organization as related to BMET duties.

BMT-212 BMET Instrumentation I 3 6 6
Prerequisites: None
Corequisites: None
This course covers theory of operation, circuit analysis, troubleshooting techniques, and medical applications for a variety of instruments and devices. Topics include electrodes, transducers, instrumentation amplifiers, electrocardiographs, monitors, recorders, defibrillators, ESU units, and related equipment used in clinical laboratories, intensive care units, and research facilities. Upon completion, students should be able to calibrate, troubleshoot, repair, and certify that instrumentation meets manufacturer's original specifications.

Baking and Pastry Arts

***BPA-120 Petit Fours & Pastries 1 4 3**
Prerequisites: CUL-110 and CUL-160
Corequisites: None
This course introduces the basic principles of the preparation and plating of a variety of petit fours and individual dessert pastries. Emphasis is placed on traditional and contemporary petit fours and pastries utilizing updated production methods. Upon completion, students should be able to produce individual pastries and petit fours for buffet and special event settings.

***BPA-150 Artisan & Specialty Bread 1 6 4**
Prerequisites: CUL-110 and CUL-160
Corequisites: None
This course provides an advanced study in the art and craft of bread making. Topics include pertinent formulas and techniques associated with naturally leavened loaves, hearth breads, focaccia, flat breads, and other breads utilizing a variety of grains. Upon completion, students should be able to prepare artisan and specialty breads that meet or exceed the expectations of restaurant and retail publics.

***BPA-180 Therapeutic Baking 1 4 3**
Prerequisites: Take One Set:
Set 1: CUL-110 CUL-160 and CUL-260
Set 2: CUL-110 CUL-160 and BPA-150
Corequisites: None
This course covers the principles of baking for special dietary needs. Emphasis is placed on gluten and lactose free, vegan, keto, low fat, low carb, and reduced calorie pastries and breads. Upon completion, students should be able to demonstrate an understanding of specialized baking to meet specific dietary requirements.

Blueprint Reading

BPR-130 Print Reading-Construction 3 0 3
Prerequisites: None
Corequisites: None
This course covers the interpretation of prints and specifications that are associated with design and construction projects. Topics include interpretation of documents for foundations, floor plans, elevations, and related topics. Upon completion, students should be able to read and interpret construction prints and documents.

Business

BUS-110 Introduction to Business 3 0 3
Prerequisites: None
Corequisites: None
This course provides a survey of the business world. Topics include the basic principles and practices of contemporary business. Upon completion, students should be able to demonstrate an understanding of business concepts as a foundation for studying other business subjects. This course has been approved for transfer under the CAA as a premajor and/or elective course requirement.

BUS-115 Business Law I 3 0 3
Prerequisites: None
Corequisites: None
This course introduces the student to the legal and ethical framework of business. Contracts, negotiable instruments, the law of sales, torts, crimes, constitutional law, the Uniform Commercial Code, and the court systems are examined. Upon completion the student should be able to identify legal and ethical issues that arise in business decisions and the laws that apply to them. This course has been approved for transfer under the CAA as a premajor and/or elective course requirement.

BUS-125 Personal Finance 3 0 3
Prerequisites: None
Corequisites: None
This course provides a study of individual and family financial decisions. Emphasis is placed on building useful skills in buying, managing finances, increasing resources, and coping with current economic conditions. Upon completion, students should be able to develop a personal financial plan.

BUS-131 Sports Management Logistics 3 0 3
Prerequisites: None
Corequisites: None
This course covers the aspects of sports management logistics. Emphasis is placed on managing various logistical elements related to organizing, coordinating, and executing successful sporting events. Upon completion, students will have the necessary knowledge to effectively plan, implement, and evaluate logistical operations within the sports industry.

BUS-132 Sports Management Marketing 3 0 3
Prerequisites: None
Corequisites: None
This course provides students with a comprehensive understanding of how marketing principles and techniques are applied in the context of sports organizations, events, and products. Emphasis is placed on consumer behavior, brand management, sponsorship, digital marketing, and other key areas that contribute to successful sport marketing campaigns. Upon completion, students should be able to develop and execute effective marketing strategies within the sports industry.

BUS-133 Sports Facility/Rec Mgmt 3 0 3
Prerequisites: None
Corequisites: None
This course provides students with the knowledge and skills necessary to effectively manage and operate sport facilities and recreational programs to provide high-quality experiences for participants. Emphasis is placed on facility planning, design, and maintenance; managing operations and risk of sport venues, recreation centers, and public spaces; and event planning and program development. Upon completion, students should be able to manage sport venues, recreation centers, and public spaces to provide inclusive and sustainable recreational programs.

BUS-136 Intro to Esports Management 3 0 3
Prerequisites: None
Corequisites: None
This course introduces the major business aspects of the Esports industry. Topics including Esports origins, governance, management, leadership, communications, finance, law, marketing, and event planning. Upon completion, students should be able to apply business concepts to the Esports industry.

BUS-137 Principles of Management 3 0 3
Prerequisites: None
Corequisites: None
This course is designed to be an overview of the major functions of management. Emphasis is placed on planning, organizing, controlling, directing, and communicating. Upon completion, students should be able to work as contributing members of a team utilizing these functions of management. This course has been approved for transfer under the CAA as a premajor and/or elective course requirement.

BUS-139 Entrepreneurship I 3 0 3
Prerequisites: None
Corequisites: None
This course provides an introduction to the principles of entrepreneurship. Topics include self-analysis of entrepreneurship readiness, the role of entrepreneur in economic development, legal problems, organizational structure, sources of financing, budgeting, and cash flow. Upon completion, students should have an understanding of the entrepreneurial process and issues faced by entrepreneurs.

BUS-147 Business Insurance 3 0 3
Prerequisites: None
Corequisites: None
This course surveys the basic concepts of risk management. Topics include principles and applications of health, property, life, and casualty insurance. Upon completion, students should be able to evaluate different insurance needs and assist an organization in acquiring adequate insurance coverage.

BUS-153 Human Resource Management 3 0 3
Prerequisites: None
Corequisites: None
This course introduces the functions of personnel/human resource management within an organization. Topics include equal opportunity and the legal environment, recruitment and selection, performance appraisal, employee development, compensation planning, and employee relations. Upon completion, students should be able to anticipate and resolve human resource concerns.

BUS 175 Contract Negotiations 3 0 3
Prerequisites: None
Corequisites: None
This course covers theory, strategies, techniques and tactics for negotiating contracts, and principles and practices of negotiations for government, corporate or institutional procurements. Topics include preparation and conduct of negotiations and methods of dealing with situations under different types of negotiations. Upon completion, students should be able to effectively negotiate contracts.

BUS 230 Small Business Management 3 0 3
Prerequisites: BUS-137
Corequisites: None
This course introduces the challenges of entrepreneurship including the startup and operation of a small business. Topics include market research techniques, feasibility studies, site analysis, financing alternatives, and managerial decision making. Upon completion, students should be able to develop a small business plan.

BUS-270 Professional Development 3 0 3
Prerequisites: None
Corequisites: None
This course provides basic knowledge of self-improvement techniques as related to success in the professional world. Topics include positive human relations, job-seeking skills, and projecting positive self-image. Upon completion, students should be able to demonstrate competent personal and professional skills necessary to get and keep a job.

Cabinetmaking

CAB-119 Cabinetry/Millworking 4 9 7
Prerequisites: None
Corequisites: None
This course introduces wood technology, cabinet construction, and millworking. Topics include safety, hand/power tools, wood identification and use, wood joinery, abrasives, cabinet layout, laminates, finishing techniques, and other related topics. Upon completion, students should be able to select and process materials using accurate drawings and cut lists and install finished products.

Child Advocacy Studies

CAS-110 Persp Child Maltreatment & Adv 3 0 3
Prerequisites: None
Corequisites: None
This course covers the critical examination of child maltreatment and advocacy. Emphasis is placed on the history, comparative perspectives, legal framework, responses to child maltreatment, pertinent issues in maltreatment and advocacy. Upon completion, students should be able to apply the knowledge and skills necessary for recognition and advocacy on behalf of child victims.

CAS-120 Cultural Aware Child Malt/Adv 3 0 3
Prerequisites: None
Corequisites: None
This course is designed to deepen students' understanding of the intersection between cultural dynamics and child maltreatment, emphasizing the significance of cultural awareness in effective advocacy. Emphasis is placed on an exploration of diverse cultural contexts, promoting cultural competence as an integral aspect of advocating for the rights and well-being of children. Upon completion, students should be able to navigate the complexities of child maltreatment while respecting and valuing the diverse backgrounds of children and families.

CAS-210 Prof & Sys Resp to Child Malt 3 0 3
Prerequisites: None
Corequisites: None
This course is designed to focus on the responses of professionals to allegations of child maltreatment. Emphasis is placed on the multifaceted nature of child abuse and neglect and explores evidence-based strategies for intervention, prevention, and collaboration across diverse professional settings. Upon completion, student should be able to identify the knowledge, skills, and ethical considerations essential for responding effectively to child maltreatment within various systems.

CAS-t220 Resp Survivor of Child Abuse 3 0 3
Prerequisites: None
Corequisites: None
This course is designed to equip students with the knowledge, skills, and compassion necessary to effectively recognize and respond to the effects of child maltreatment. Emphasis is placed on intervention strategies for children and their families, exploring the multifaceted dimensions of child abuse, emphasizing trauma-informed approaches, and the cultivation of a supportive environment for survivors. Upon completion, students should be able to demonstrate the practical skills and compassionate mindset needed to effectively recognize, respond to, and support survivors of child maltreatment.

Cyber Crime Technology

CCT-121 Computer Crime Invest. 3 2 4
Prerequisites: None
Corequisites: None
This course introduces the fundamental principles of computer crime investigation processes. Topics include crime scene/incident processing, information gathering techniques, data retrieval, collection and preservation of evidence, preparation of reports and court presentations. Upon completion, students should be able to identify cyber crime activity and demonstrate proper investigative techniques to process the scene and assist in case prosecution.

Civil Engineering and Geomatics

CEG 111 Intro to GIS and GNSS 2 4 4
Prerequisites: None
Corequisites: None
This course introduces the methods and techniques used in the Geographic Information Systems (GIS) and Global Navigation Satellite Systems (GNSS) professions. Emphasis is placed on data collection and mapping using GIS software. Upon completion, students should be able to use GNSS technologies to collect field data and create GIS maps.

CEG 115 Intro to Tech & Sustainability 2 3 3
Prerequisites: None
Corequisites: None
This course introduces basic skills, sustainability concepts and career fields for technicians. Topics include career options, technical vocabulary, dimensional analysis, measurement systems, engineering graphics, professional ethics, and related topics. Upon completion, students should be able to identify drawing elements and create sketches, perform basic engineering computations, and identify measures of sustainable development.

CEG 211 Hydrology & Erosion Control 2 3 3
Prerequisites: Take One Set
Set 1: DMA 060, DMA 070, and DMA 080
Set 2: DMA 065
Set 3: MAT 121
Set 4: MAT 171
Set 5: MAT 003
Corequisites: None

This course introduces basic engineering principles and characteristics of hydrology, erosion and sediment control. Topics include stormwater runoff, gravity pipe flow, open channel flow, low impact development (LID), erosion control devices and practices. Upon completion, students should be able to analyze and design gravitational drainage structures, identify LID and erosion control elements, and prepare a stormwater drainage plan.

***CEG 230 Subdivision Planning & Design 1 6 3**
Prerequisites Take One Course from Each Set:
SET 1: CEG 151, DFT 151, or EGR 120
SET 2: CEG 211
SET 3: SRV 111 or CIV 215
Corequisites: None
This course covers the planning and design concepts related to subdivisions including analysis of development standards, engineering, and the creation of CAD drawings. Topics include applicable codes, lot creation, roadway system layout, storm water drainage, low impact development (LID) concepts, and related topics. Upon completion, students should be able to prepare a set of subdivision plans.

Computer Engineering Technology

***CET-111 Computer Upgrade/Repair I 2 3 3**
Prerequisites: None
Corequisites: None
This course covers repairing, servicing, and upgrading computers and peripherals in preparation for industry certification. Topics include CPU/memory/bus identification, disk subsystems, hardware/software installation/configuration, common device drivers, data recovery, system maintenance, and other related topics. Upon completion, students should be able to safely repair and/or upgrade computer systems to perform within specifications.

Chemistry

CHM-092 Fundamentals of Chemistry 3 2 4
Prerequisites: DRE-097 (or placement), ENG-002 Tier 1 (or placement), or ENG 025; and DMA-010-030 (or placement), MAT-003 Tier 1 (or placement), MAT 025, or MAT 035
Corequisites: None
This course covers fundamentals of chemistry with laboratory applications. Topics include measurements, matter, energy, atomic theory, bonding, molecular structure, nomenclature, balancing equations, stoichiometry, solutions, acids and bases, gases, and basic organic chemistry. Upon completion, students should be able to understand and apply basic chemical concepts and demonstrate basic laboratory skills necessary for success in college-level science courses.

CHM-130 Gen, Org, & and Biochemistry 3 0 3

Prerequisites: High school chemistry or CHM 092, or MAT 110 and BIO 110, BIO 111, BIO 161, BIO 163, or BIO 168; and DRE 097 (or placement), DRE 098 (or placement), ENG 002 Tier 1 (or placement), ENG 025, or C or better in ENG 110 or ENG 111
Corequisites: CHM-130A

This course provides a survey of basic facts and principles of general, organic, and biochemistry. Topics include measurement, molecular structure, nuclear chemistry, solutions, acid-base chemistry, gas laws, and the structure, properties, and reactions of major organic and biological groups. Upon completion, students should be able to demonstrate an understanding of fundamental chemical concepts. This course has been approved for transfer under the CAA as a premajor and/or elective course requirement.

CHM-130A Gen, Org, and Biochem Lab 0 2 1

Prerequisites: None
Corequisites: CHM-130

This course is a laboratory for CHM 130. Emphasis is placed on laboratory experiences that enhance materials presented in CHM 130. Upon completion, students should be able to utilize basic laboratory procedures and apply them to chemical principles presented in CHM 130. This course has been approved for transfer under the CAA as a premajor and/or elective course requirement.

CHM-132 Organic and Biochemistry 3 3 4

Prerequisites: C or better in CHM-131/131A or CHM-151
Corequisites: None

This course provides a survey of major functional classes of compounds in organic and biochemistry. Topics include structure, properties, and reactions of the major organic and biological molecules and basic principles of metabolism. Upon completion, students should be able to demonstrate an understanding of fundamental chemical concepts needed to pursue studies in related professional fields. This course has been approved for transfer under the CAA as a general education course in Natural Science.

CHM-151 General Chemistry I 3 3 4

Prerequisites: C or better in high school chemistry, CHM-092, or CHM-121/121A; and take DRE 097 (or placement), DRE 098 (or placement), ENG-002 Tier 1 (or placement), ENG-025, or C or better in ENG-110 or ENG-111; and take DMA-010-030 (or placement), MAT-025 (or placement), MAT-035 (or placement), or MAT-003 Tier 1 (or placement)
Corequisites: None

This course covers fundamental principles and laws of chemistry. Topics include measurement, atomic and molecular structure, periodicity, chemical reactions, chemical bonding, stoichiometry, thermochemistry, gas laws, and solutions. Upon completion, students should be able to demonstrate an understanding of fundamental chemical laws and concepts as needed in CHM 152. This is a Universal General Education Transfer Component (UGETC) course that satisfies Natural Sciences.

CHM-152 General Chemistry II 3 3 4

Prerequisites: C or better in CHM 151 and C or better in MAT 161, MAT 171, or MAT 175
Corequisites: None

This course provides a continuation of the study of the fundamental principles and laws of chemistry. Topics include kinetics, equilibrium, ionic and redox equations, acid-base theory, electrochemistry, thermodynamics, introduction to nuclear and organic chemistry, and complex ions. Upon completion, students should be able to demonstrate an understanding of chemical concepts as needed to pursue further study in chemistry and related professional fields. This is a Universal General Education Transfer Component (UGETC) course that satisfies Natural Sciences for the Associate of Science Degree.

CHM-251 Organic Chemistry I 3 3 4

Prerequisites: C or better in CHM-152
Corequisites: None

This course provides a systematic study of the theories, principles, and techniques of organic chemistry. Topics include nomenclature, structure, properties, reactions, and mechanisms of hydrocarbons, alkyl halides, alcohols, and ethers; further topics include isomerization, stereochemistry, and spectroscopy. Upon completion, students should be able to demonstrate an understanding of the fundamental concepts of covered organic topics as needed in CHM 252. This course has been approved for transfer under the CAA as a premajor and/or elective course requirement.

CHM-252 Organic Chemistry II 3 3 4

Prerequisites: C or better in CHM-251
Corequisites: None

This course provides continuation of the systematic study of the theories, principles, and techniques of organic chemistry. Topics include nomenclature, structure, properties, reactions, and mechanisms of aromatics, aldehydes, ketones, carboxylic acids and derivatives, amines and heterocyclics; multi-step synthesis will be emphasized. Upon completion, students should be able to demonstrate an understanding of organic concepts as needed to pursue further study in chemistry and related professional fields. This course has been approved for transfer under the CAA as a premajor and/or elective course requirement.

CHM-271 Biochemical Principles 3 0 3

Prerequisites: C or better in CHM-252
Corequisites: None

The course covers fundamental principles of biochemistry. Topics include structures, properties, reactions, and mechanisms of biomacromolecules including amino acids, peptides, proteins, carbohydrates and nucleic acids, enzymatic metabolic pathways, and biochemical genetics. Upon completion, students should be able to demonstrate an understanding of fundamental biochemical processes. This course has been approved for transfer under the CAA as a premajor and/or elective course requirement.

Information Systems

CIS-110 Introduction to Computers 2 2 3

Prerequisites: None
Corequisites: None

This course introduces computer concepts, including fundamental functions and operations of the computer. Topics include identification of hardware components, basic computer operations, security issues, and use of software applications. Upon completion, students should be able to demonstrate an understanding of the role and function of computers and use the computer to solve problems. This course has been approved for transfer under the CAA as a general education course in Mathematics (Quantitative).

CIS-115 Intro to Prog & Logic 2 3 3

Prerequisites: Take One Set:
Set 1: DMA-040 or placement
Set 2: MAT-121
Set 3: MAT-171
Set 4: MAT-003
Corequisites: None

This course introduces computer programming and problem solving in a structured program logic environment. Topics include language syntax, data types, program organization, problem solving methods, algorithm design, and logic control structures. Upon completion, students should be able to use top-down algorithm design and implement algorithmic solutions in a programming language. This course has been approved for transfer under the CAA as a general education course in Mathematics (Quantitative).

Civil Engineering

CIV 125 Civil/Surveying CAD 1 6 3
Prerequisites: CEG 151 or DFT 151
Corequisites: None
This course introduces civil/surveying computer-aided drafting (CAD) software. Topics include drawing, editing, and dimensioning commands, plotting, and other related civil/surveying topics. Upon completion, students should be able to produce civil/surveying drawings using CAD software.

Criminal Justice

***CJC-111 Intro to Criminal Justice 3 0 3**
Prerequisites: None
Corequisites: None
This course introduces the components and processes of the criminal justice system. Topics include history, structure, functions, and philosophy of the criminal justice system and their relationship to life in our society. Upon completion, students should be able to define and describe the major system components and their interrelationships and evaluate career options. This course has been approved for transfer under the CAA as a premajor and/or elective course requirement.

***CJC-112 Criminology 3 0 3**
Prerequisites: None
Corequisites: None
This course introduces deviant behavior as it relates to criminal activity. Topics include theories of crime causation; statistical analysis of criminal behavior; past, present, and future social control initiatives; and other related topics. Upon completion, students should be able to explain and discuss various theories of crime causation and societal response.

***CJC-113 Juvenile Justice 3 0 3**
Prerequisites: None
Corequisites: None
This course covers the juvenile justice system and related juvenile issues. Topics include an overview of the juvenile justice system, treatment and prevention programs, special areas and laws unique to juveniles, and other related topics. Upon completion, students should be able to identify/discuss juvenile court structure/procedures, function and jurisdiction of juvenile agencies, processing/detention of juveniles, and case disposition. This course has been approved for transfer under the CAA as a premajor and/or elective course requirement.

***CJC-121 Law Enforcement Operations 3 0 3**
Prerequisites: None
Corequisites: None
This course introduces fundamental law enforcement operations. Topics include the contemporary evolution of law enforcement operations and related issues. Upon completion, students should be able to explain theories, practices, and issues related to law enforcement operations. This course has been approved for transfer under the CAA as a premajor and/or elective course requirement.

***CJC-122 Community Policing 3 0 3**
Prerequisites: None
Corequisites: None
This course covers the historical, philosophical, and practical dimensions of community policing. Emphasis is placed on the empowerment of police and the community to find solutions to problems by forming partnerships. Upon completion, students should be able to define community policing, describe how community policing strategies solve problems, and compare community policing to traditional policing.

***CJC-131 Criminal Law 3 0 3**
Prerequisites: None
Corequisites: None
This course covers the history/evolution/principles and contemporary applications of criminal law. Topics include sources of substantive law, classification of crimes, parties to crime, elements of crimes, matters of criminal responsibility, and other related topics. Upon completion, students should be able to discuss the sources of law and identify, interpret, and apply the appropriate statutes/elements.

***CJC-132 Court Procedure & Evidence 3 0 3**
Prerequisites: None
Corequisites: None
This course covers judicial structure/process/procedure from incident to disposition, kinds and degrees of evidence, and the rules governing admissibility of evidence in court. Topics include consideration of state and federal courts, arrest, search and seizure laws, exclusionary and statutory rules of evidence, and other related issues. Upon completion, students should be able to identify and discuss procedures necessary to establish a lawful arrest/search, proper judicial procedures, and the admissibility of evidence.

***CJC-141 Corrections 3 0 3**
Prerequisites: None
Corequisites: None
This course covers the history, major philosophies, components, and current practices and problems of the field of corrections. Topics include historical evolution, functions of the various components, alternatives to incarceration, treatment programs, inmate control, and other related topics. Upon completion, students should be able to explain the various components, processes, and functions of the correctional system. This course has been approved for transfer under the CAA as a premajor and/or elective course requirement.

***CJC-170 Critical Incident Mgt Pub Saf 3 0 3**
Prerequisites: None
Corequisites: None
This course prepares the student to specialize in the direct response, operations, and management of critical incidents. Emphasis is placed upon the theoretical and applied models to understand and manage disasters, terrorism, and school/workplace violence. Upon completion, the student should be able to identify and discuss managerial techniques, legal issues, and response procedures to critical incidents.

***CJC-212 Ethics and Comm Relations 3 0 3**
Prerequisites: None
Corequisites: None
This course covers ethical considerations and accepted standards applicable to criminal justice organizations and professionals. Topics include ethical systems; social change, values, and norms; cultural diversity; citizen involvement in criminal justice issues; and other related topics. Upon completion, students should be able to apply ethical considerations to the decision-making process in identifiable criminal justice situations. This course has been approved for transfer under the CAA as a premajor and/or elective course requirement.

*The numbers following course titles indicate **class**, **lab**, **clinic/co-op/shop**, and **credit** hours, respectively.*

*CJC-221 Investigative Principles 3 2 4

Prerequisites: None
Corequisites: None

This course introduces the theories and fundamentals of the investigative process. Topics include crime scene/incident processing, information gathering techniques, collection/preservation of evidence, preparation of appropriate reports, court presentations, and other related topics. Upon completion, students should be able to identify, explain, and demonstrate the techniques of the investigative process, report preparation, and courtroom presentation.

*CJC-222 Criminalistics 3 0 3

Prerequisites: None
Corequisites: None

This course covers the functions of the forensic laboratory and its relationship to successful criminal investigations and prosecutions. Topics include advanced crime scene processing, investigative techniques, current forensic technologies, and other related topics. Upon completion, students should be able to identify and collect relevant evidence at simulated crime scenes and request appropriate laboratory analysis of submitted evidence.

*CJC-231 Constitutional Law 3 0 3

Prerequisites: None
Corequisites: None

The course covers the impact of the Constitution of the United States and its amendments on the criminal justice system. Topics include the structure of the Constitution and its amendments, court decisions pertinent to contemporary criminal justice issues, and other related topics. Upon completion, students should be able to identify/discuss the basic structure of the United States Constitution and the rights/procedures as interpreted by the courts.

*CJC-255 Issue in Criminal Justice App 3 0 3

Prerequisites: CJC-111, CJC-221, and CJC-231
Corequisites: None

This course provides an opportunity to exhibit interpersonal and technical skills required for application of criminal justice concepts in contemporary practical situations. Emphasis is placed on critical thinking and integration of theory and practical skills components. Upon completion, students should be able to demonstrate the knowledge required of any entry-level law enforcement officer.

Construction Management

CMT-210 Construction Management Fund 3 0 3

Prerequisites: None
Corequisites: None

This course introduces the student to the fundamentals of effective supervision emphasizing professionalism through knowledge and applied skills. Topics include safety, planning and scheduling, contract, problem-solving, communications, conflict resolution, recruitment, employment laws and regulations, leadership, motivation, teamwork, discipline, setting objectives, and training. Upon completion, the student should be able to demonstrate the basic skills necessary to be successful as a supervisor in the construction industry.

*CMT-212 Total Safety Performance 3 0 3

Prerequisites: None
Corequisites: CMT-210

This course covers the importance of managing safety and productivity equally by encouraging people to take individual responsibility for safety and health in the workplace. Topics include safety management, controlling construction hazards, communicating and enforcing policies, OSHA compliance, personal responsibility and accountability, safety planning, training, and personal protective equipment. Upon completion, students should be able to supervise safety at a construction job site and qualify for the OSHA Training Certification.

*CMT-214 Planning and Scheduling 3 0 3

Prerequisites: CMT-210 and BPR-130
Corequisites: None

This course covers the need for the process of planning construction projects, as well as the mechanics and vocabulary of project scheduling. Topics include project preplanning, scheduling format, planning for production, short interval planning, schedule updating and revising, and computer-based planning and scheduling. Upon completion, the student should be able to understand the need for planning and scheduling, the language and logic of scheduling, and use of planning skills.

*CMT-216 Costs and Productivity 3 0 3

Prerequisites: CMT-210
Corequisites: None

This course covers the relationships between time, work completed, work-hours spent, schedule duration, equipment hours, and materials used. Topics include production rates, productivity unit rates, work method improvements, and overall total project cost control. Upon completion, the student should be able to demonstrate an understanding of how costs may be controlled and productivity improved on a construction project.

Communication

COM-110 Introduction to Communication 3 0 3

Prerequisites: None
Corequisites: None

This course provides an overview of the basic concepts of communication and the skills necessary to communicate in various contexts. Emphasis is placed on communication theories and techniques used in interpersonal group, public, intercultural, and mass communication situations. Upon completion, students should be able to explain and illustrate the forms and purposes of human communication in a variety of contexts. This course has been approved for transfer under the CAA as a general education course in Communication.

COM-120 Intro to Interpersonal Communication 3 0 3

Prerequisites: DRE 097, DRE 098, ENG 002 Tier 1, ENG 025 or C or better in ENG 110 or ENG 111
Corequisites: None

This course introduces the practices and principles of interpersonal communication in both dyadic and group settings. Emphasis is placed on the communication process, perception, listening, self-disclosure, speech apprehension, ethics, nonverbal communication, conflict, power, and dysfunctional communication relationships. Upon completion, students should be able to demonstrate interpersonal communication skills, apply basic principles of group discussion, and manage conflict in interpersonal communication situations. This is a Universal General Education Transfer Component (UGETC) course that satisfies Communication.

COM-140 Intro to Intercultural Communication 3 0 3

Prerequisites: DRE 097, DRE 098, ENG 002 Tier 1, ENG 025 or C or better in ENG 110 or ENG 111
Corequisites: None

This course introduces techniques of cultural research, definitions, functions, characteristics, and impacts of cultural differences in public address. Emphasis is placed on how diverse backgrounds influence the communication act and how cultural perceptions and experiences determine how one sends and receives messages. Upon completion, students should be able to demonstrate an understanding of the principles and skills needed to become effective in communicating outside one's primary culture. This course has been approved for transfer under the CAA as a general education course in Communication.

COM-150 Intro to Mass Communication 3 0 3
Prerequisites: DRE 097, DRE 098, ENG 002 Tier 1, ENG 025 or C or better in ENG 110 or ENG 111
Corequisites: None
This course introduces print and electronic media and the new information technologies in terms of communication theory and as economic, political, and social institutions. Topics include the nature, history, functions, and responsibilities of mass communication industries in a global environment and their role and impact in American society. Upon completion, students should be able to demonstrate awareness of the pervasive nature of mass media and how media operate in an advanced post-industrial society. This course has been approved for transfer under the CAA as a premajor and/or elective course requirement.

COM-231 Public Speaking 3 0 3
Prerequisites: DRE 097, DRE 098, ENG 002 Tier 1, ENG 025 or C or better in ENG 110 or ENG 111
Corequisites: None
This course provides instruction and experience in preparation and delivery of speeches within a public setting and group discussion. Emphasis is placed on research, preparation, delivery, and evaluation of informative, persuasive, and special occasion public speaking. Upon completion, students should be able to prepare and deliver well-organized speeches and participate in group discussion with appropriate audiovisual support. This is a Universal General Education Transfer Component (UGETC) course that satisfies Communication.

Cosmetology

***COS-111 Cosmetology Concepts I 4 0 4**
Prerequisites: None
Corequisites: COS-112
This course introduces basic cosmetology concepts. Topics include safety, first aid, sanitation, bacteriology, anatomy, diseases and disorders, hygiene, product knowledge, chemistry, ethics, manicures, and other related topics. Upon completion, students should be able to safely and competently apply cosmetology concepts in the salon setting.

***COS-112 Salon I 0 24 8**
Prerequisites: None
Corequisites: COS-111
This course introduces basic salon services. Topics include scalp treatments, shampooing, rinsing, hair color, design, haircutting, permanent waving, pressing, relaxing, wigs, and other related topics. Upon completion, students should be able to safely and competently demonstrate salon services.

***COS-113 Cosmetology Concepts II 4 0 4**
Prerequisites: COS-111 and COS-112
Corequisites: COS-114
This course covers more comprehensive cosmetology concepts. Topics include safety, product knowledge, chemistry, manicuring, chemical restructuring, and hair coloring. Upon completion, students should be able to safely and competently apply these cosmetology concepts in the salon setting.

***COS-114 Salon II 0 24 8**
Prerequisites: COS-111 and COS-112
Corequisites: COS-113
This course provides experience in a simulated salon setting. Topics include basic skin care, manicuring, nail application, scalp treatments, shampooing, rinsing, hair color, design, haircutting, chemical restructuring, pressing, wigs, and other related topics. Upon completion, students should be able to safely and competently demonstrate these salon services.

***COS-115 Cosmetology Concepts III 4 0 4**
Prerequisites: COS-111, COS-112, and COS-113
Corequisites: COS-116
This course covers more comprehensive cosmetology concepts. Topics include safety, product knowledge, salon management, salesmanship, skin care, electricity/light therapy, wigs, thermal hair styling, lash and brow tinting, superfluous hair removal, and other related topics. Upon completion, students should be able to safely and competently apply these cosmetology concepts in the salon setting.

***COS-116 Salon III 0 12 4**
Prerequisites: COS-111, COS-112, and COS-114
Corequisites: COS-115
This course provides comprehensive experience in a simulated salon setting. Emphasis is placed on intermediate-level of skin care, manicuring, scalp treatments, shampooing, hair color, design, haircutting, chemical restructuring, pressing, and other related topics. Upon completion, students should be able to safely and competently demonstrate these salon services.

COS-117 Cosmetology Concepts IV 2 0 2
Prerequisites: COS-111, COS-112, COS-113, and COS-115
Corequisites: COS-118
This course covers advanced cosmetology concepts. Topics include chemistry and hair structure, advanced cutting and design, and an overview of all cosmetology concepts in preparation for the licensing examination. Upon completion, students should be able to demonstrate an understanding of these cosmetology concepts and meet program completion requirements.

COS-118 Salon IV 0 21 7
Prerequisites: COS-111, COS-112, COS-114, and COS-116
Corequisites: COS-117
This course provides advanced experience in a simulated salon setting. Emphasis is placed on efficient and competent delivery of all salon services in preparation for the licensing examination and employment. Upon completion, students should be able to demonstrate competence in program requirements and the areas covered on the Cosmetology Licensing Examination and meet entry-level employment requirements.

***COS-119 Esthetics Concepts I 2 0 2**
Prerequisites: DRE-097, ENG-002 Tier 1, or placement
Corequisites: COS-120
This course covers the concepts of esthetics. Topics include orientation, anatomy, physiology, hygiene, sterilization, first aid, chemistry, basic dermatology, and professional ethics. Upon completion, students should be able to demonstrate an understanding of the concepts of esthetics and meet course requirements.

***COS-120 Esthetics Salon I 0 18 6**
Prerequisites: DRE-097, ENG-002 Tier 1, or placement
Corequisites: COS-119
This course covers the techniques of esthetics in a comprehensive experience in a simulated salon setting. Topics include client consultation, facials, body treatments, hair removal, make-up applications, and color analysis. Upon completion, students should be able to safely and competently demonstrate esthetic services on clients in a salon setting.

*The numbers following course titles indicate **class**, **lab**, **clinic/co-op/shop**, and **credit** hours, respectively.*

*COS-121 Manicure/Nail Technology I 4 6 6

Prerequisites: DRE-097, ENG-002 Tier 1, or placement
Corequisites: None

This course covers techniques of nail technology, hand and arm surface manipulation, and recognition of nail diseases and disorders. Topics include OSHA/safety, sanitation, bacteriology, product knowledge, salesmanship, manicures, artificial applications, pedicures, surface manipulation, and other related topics. Upon completion, students should be able to safely and competently perform nail care, including manicures, pedicures, surface manipulations, decorating and artificial applications in a salon setting.

*COS-125 Esthetics Concepts II 2 0 2

Prerequisites: COS-119
Corequisites: COS-126

This course covers more comprehensive esthetics concepts. Topics include nutrition, business management, makeup, and color analysis. Upon completion students should be able to demonstrate an understanding of the advanced esthetics concepts and meet course requirements.

*COS-126 Esthetics Salon II 0 18 6

Prerequisites: COS-120
Corequisites: COS-125

This course provides experience in a simulated esthetics setting. Topics include machine facials, aromatherapy, surface manipulation in relation to skin care, electricity, and apparatus. Upon completion, students should be able to demonstrate competence in program requirements and the areas covered on the Cosmetology licensing examination for Estheticians.

*COS-222 Manicure/Nail Tech. II 4 6 6

Prerequisites: COS-121
Corequisites: None

This course covers advanced techniques of nail technology and hand and arm surface manipulation. Topics include OSHA/safety, product knowledge, customer service, salesmanship, artificial applications, nail art, and other related topics. Upon completion, students should be able to demonstrate competence necessary for the licensing examination, including advanced nail care, artificial enhancements, and decorations.

*COS 251 Manicure Instr Concepts 8 0 8

Prerequisites: None
Corequisites: None

This course introduces manicuring instructional concepts. Topics include orientation, theories of education, unit planning, daily lesson planning, laboratory management, student assessment, record keeping, and other related topics. Upon completion, students should be able to identify theories of education, develop lesson plans, demonstrate supervision techniques, and assess student classroom performance.

*COS 252 Manicure Instr Practicum 0 15 5

Prerequisites: None
Corequisites: COS 251

This course covers supervisory and instructional skills for teaching manicuring students in a laboratory setting. Topics include demonstrations of services, supervision, student assessment, and other related topics. Upon completion, students should be able to demonstrate competence in the areas covered by the Manicuring Instructor Licensing Examination and meet program completion requirements.

*COS 253 Esthetics Ins. Concepts I 6 15 11

Prerequisites: None
Corequisites: None

This course introduces esthetic instructional concepts and skills. Topics include orientation, theories of education, unit planning, daily lesson plans, laboratory management, student assessment in a laboratory setting. Upon completion, students should be able to demonstrate esthetic services and instruct and objectively assess student performance in a classroom setting.

*COS 254 Esthetic Ins. Concepts II 6 15 11

Prerequisites: None
Corequisites: None

This course covers advanced esthetic instructional concepts and skills. Topics include practical demonstrations, lesson planning, lecture techniques, development and administration of assessment tools, record keeping and other related topics. Upon completion,students should be able to demonostrate competencies in the areas covered by the Esthetics Instructor Licensing Examination and meet program requirements.

COS-260 Design Applications 1 3 2

Prerequisites: COS-115, COS-116
Corequisites: None

This course provides an overview of the design concepts used in cosmetology. Topics include the application of art principles and elements to artistically design hair, nails, and make-up and other related topics. Upon completion, students should be able to demonstrate knowledge and techniques associated with design concepts.

*COS-271 Instructor Concepts I 5 0 5

Prerequisites: None
Corequisites: COS-272

This course introduces the basic cosmetology instructional concepts. Topics include orientation, theories of education, unit planning, daily lesson planning, laboratory management, student assessment, record keeping, and other related topics. Upon completion, students should be able to identify theories of education, develop lesson plans, demonstrate supervisory techniques, and assess student performance in a classroom setting.

*COS-272 Instructor Practicum I 0 21 7

Prerequisites: None
Corequisites: COS-271

This course covers supervisory and instructional skills for teaching entry-level cosmetology students in a laboratory setting. Topics include demonstrations of services, supervision, and entry-level student assessment. Upon completion, students should be able to demonstrate salon services and instruct and objectively assess the entry-level student.

*COS-273 Instructor Concepts II 5 0 5

Prerequisites: COS-271, COS-272
Corequisites: COS-274

This course covers advanced cosmetology instructional concepts. Topics include practical demonstrations, lesson planning, lecture techniques, development and administration of assessment tools, record keeping, and other related topics. Upon completion, students should be able to develop lesson plans, demonstrate supervision techniques, assess student performance in a classroom setting, and keep accurate records.

*COS-274 Instructor Practicum II 0 21 7

Prerequisites: COS-271, COS-272
Corequisites: COS-273

This course is designed to develop supervisory and instructional skills for teaching advanced cosmetology students in a laboratory setting. Topics include practical demonstrations, supervision, and advanced student assessment. Upon completion, students should be able to demonstrate competence in the areas covered by the Instructor Licensing Examination and meet program completion requirements.

Computer Science

CSC 113 Artificial Intel. Fundamentals 2 2 3
Prerequisites: None
Corequisites: None
This course provides a survey of artificial intelligence and machine learning. Topics include the history, development, and current applications of artificial intelligence and machine learning. Upon completion, students should be able to demonstrate general artificial intelligence and machine learning concepts.

CSC 114 Artificial Intelligence I 2 3 3
Prerequisites: C or better In CIS 113
Corequisites: None
This course covers the study of intelligent agent design and rational decision making. Topics include goal-driven agents, search techniques, optimization, basic problem-solving methods, logic, knowledge-based agents, statistical and probabilistic reasoning, and the basics of machine learning. Upon completion, students should be able to demonstrate artificial intelligence **design concepts.**

CSC 117 Artificial Intel. Tools I 2 3 3
Prerequisites: None
Corequisites: None
This course covers modern artificial intelligence tools, concepts, and technologies. Topics include theory and hands-on training across multiple artificial intelligence subdomains. Upon completion, students should be able to implement AI platforms that could improve safety, efficiency, accuracy, problem-solving, cost-savings, and the creation of new business opportunities.

CSC-121 Python Programming 2 3 3
Prerequisites: C or better In CIS 115
Corequisites: None
This course introduces computer programming using the Python programming language. Emphasis is placed on common algorithms and programming principles utilizing the standard library distributed with Python. Upon completion, students should be able to design, code, test, and debug Python language programs.

CSC 122 Python Application Development 2 2 3
Prerequisites: C or better In CIS 121
Corequisites: None
This course introduces the use of frameworks to build web-enabled applications. Emphasis is placed on URL routing, output format templating, database manipulation and security. Upon completion, students should be able to create simple web-enabled applications with a graphical user interface using the Python language.

CSC-134 C++ Programming 2 3 3
Prerequisites: Take one set:
Set 1: C or better in CIS-115
Set 2: C or better in MAT 172 or EGR 150
Corequisites: None
This course introduces computer programming using the C++ programming language with object-oriented programming principles. Emphasis is placed on event-driven programming methods, including creating and manipulating objects, classes, and using object-oriented tools such as the class debugger. Upon completion, students should be able to design, code, test and debug at a beginning level. This course has been approved for transfer under the CAA as a premajor and/or elective course requirement.

*The numbers following course titles indicate **class**, **lab**, **clinic/co-op/shop**, and **credit** hours, respectively.*

CSC-151 JAVA Programming 2 3 3
Prerequisites: Take one set:
Set 1: C or better in CIS-115
Set 2: C or better in MAT-271 or EGR-150
This course introduces computer programming using the JAVA programming language with object-oriented programming principles. Emphasis is placed on event-driven programming methods, including creating and manipulating objects, classes, and using object-oriented tools such as the class debugger. Upon completion students should be able to design, code, test, debug JAVA language programs. This course has been approved for transfer under the CAA as a premajor and/or elective course requirement.

Construction

CST 110 Intro to Construction 1 2 2
Prerequisites: None
Corequisites: None
This course covers standard and alternative building methods to include wall framing. Topics include safety and footings, foundations, floor framing systems, and wall framing systems commonly used in the construction industry. Upon completion, students should be able to safely erect all framing necessary to begin roof framing.

CST-111 Construction I 3 3 4
Prerequisites: None
Corequisites: None
This course covers standard and alternative building methods to include wall framing. Topics include safety and footings, foundations, floor framing systems, and wall framing systems commonly used in the construction industry. Upon completion, students should be able to safely erect all framing necessary to begin roof framing.

CST-112 Construction II 3 3 4
Prerequisites: Take CST-111
Corequisites: None
This course covers building methods and materials used to dry-in a building. Topics include safety, ceiling/roof framing applications, roof finishes, windows, and exterior doors. Upon completion, students should be able to safely erect different roof types and properly install window and exterior doors, roofing, and exterior finish materials.

CST-150 Building Science 2 2 3
Prerequisites: None
Corequisites: None
This course introduces concepts and techniques for the design and interaction of the mechanical systems of high performance buildings. Topics include building envelope, heating, ventilation and air conditioning (HVAC), indoor air quality, lighting, plumbing, and electrical. Upon completion, students should be able to understand building systems interaction and performance.

***CST-241 Planning/Estimating I 2 2 3**
Prerequisites: Take one: BPR-130, MAT-121, or MAT-171
Corequisites: None
This course covers the procedures involved in planning and estimating a construction/building project. Topics include performing quantity take-offs of materials necessary for a building project. Upon completion, students should be able to accurately complete a take-off of materials and equipment needs involved in a construction project.

Computer Tech Integration

CTI-110 IT Foundations 2 2 3
Prerequisites: None
Corequisites: None
This course provides an introduction to technology concepts and current trends in IT. Topics include foundational concepts across various IT domains such as, but not limited to, artificial intelligence, database fundamentals, programming principles, and web development. Upon completion, students should be able to demonstrate knowledge in core IT areas and apply skills critical for their academic and professional success.

CTI-120 Network & Sec Foundations 2 2 3
Prerequisites: None
Corequisites: None
This course introduces students to the Network concepts, including networking terminology and protocols, local and wide area networks, and network standards. Emphasis is placed on securing information systems and the various implementation policies. Upon completion, students should be able to perform basic tasks related to networking mathematics, terminology, media and protocols.

CTI-240 Virtualization Admin I 1 4 3
Prerequisites: C or better in NET-125, NOS-120, and NOS-130
Corequisites: None
This course covers datacenter virtualization concepts. Topics include data storage, virtual network configuration, virtual machine and virtual application deployment. Upon completion, students should be able to perform tasks related to virtual machine and hypervisor installation and configuration

Computer Information Technology

CTS-115 Info Sys Business Concepts 3 0 3
Prerequisites: None
Corequisites: None
The course introduces the role of IT in managing business processes and the need for business process and IT alignment. Emphasis is placed on industry need for understanding business challenges and developing/managing information systems to contribute to the decision making process based on these challenges. Upon completion, students should be able to demonstrate knowledge of the 'hybrid business manager' and the potential offered by new technology and systems. This course has been approved for transfer under the CAA as a premajor and/or elective course requirement.

CTS-130 Spreadsheet 2 2 3
Prerequisites: C or better in CIS-110 or OST-137
Corequisites: None
This course introduces basic spreadsheet design and development. Topics include writing formulas, using functions, enhancing spreadsheets, creating charts, and printing. Upon completion, students should be able to design and print basic spreadsheets and charts. This course covers advanced functions, charting, macros, databases, and linking.

CTS 210 Computer Ethics 3 0 3
Prerequisites: None
Corequisites: None
This course introduces the student to current legal and ethical issues in the computer/engineering field. Topics include moral reasoning, ethical standards, intellectual property, social issues, encryption, software piracy, constitutional issues, and public policy in related matters. Upon completion, students should be able to demonstrate an understanding of the moral and social responsibilities and public policy issues facing an industry.

CTS-217 Computer Training/Support 2 2 3
Prerequisites: C or better in CTS 135 or CTI 110 and C or better in CTI 120
Corequisites: None
This course introduces computer training and support techniques. Topics include methods of adult learning, training design, delivery, and evaluation, creating documentation, and user support methods. Upon completion, students should be able to design and implement training and provide continued support for computer users.

***CTS-289 System Support Project 1 4 3**
Prerequisites: C or better in CTI-110, CTI-120, and CTS-115
Corequisites: None
This course provides an opportunity to complete a significant support project with minimal instructor assistance. Emphasis is placed on written and oral communication skills, project definition, documentation, installation, testing, presentation, and user training. Upon completion, students should be able to complete a project from the definition phase through implementation.

Culinary

CUL-110 Sanitation & Safety 2 0 2
Prerequisites: None
Corequisites: None
This course introduces the basic principles of sanitation and safety relative to the hospitality industry. Topics include personal hygiene, sanitation and safety regulations, use and care of equipment, the principles of food-borne illness, and other related topics. Upon completion, students should be able to demonstrate an understanding of the content necessary for successful completion of a nationally recognized food/safety/sanitation exam.

CUL-112 Nutrition for Foodservice 3 0 3
Prerequisites: None
Corequisites: None
This course covers the principles of nutrition and its relationship to the foodservice industry. Topics include personal nutrition fundamentals, weight management, exercise, nutritional adaptation/analysis of recipes/menus, healthy cooking techniques and marketing nutrition in a foodservice operation. Upon completion, students should be able to apply basic nutritional concepts to food preparation and selection.

***CUL-135 Food & Beverage Service 2 0 2**
Prerequisites: CUL-230 or HRM-124
Corequisites: CUL-135A
This course is designed to cover the practical skills and knowledge necessary for effective food and beverage service in a variety of settings. Topics include greeting/service of guests, dining room set-up, profitability, menu sales and merchandising, service styles and reservations. Upon completion, students should be able to demonstrate competence in human relations and the skills required in the service of foods and beverages.

***CUL-135A Food & Beverage Serv Lab 0 2 1**
Prerequisites: CUL-230 or HRM-124
Corequisites: CUL-135
This course provides a laboratory experience for enhancing student skills in effective food and beverage service. Emphasis is placed on practical experiences including greeting/service of guests, dining room set-up, profitability, menu sales and merchandising, service styles and reservations. Upon completion, students should be able to demonstrate practical applications of human relations and the skills required in the service of foods and beverages.

***CUL-140 Culinary Skills I 2 6 5**
Prerequisites: None
Corequisites: CUL-110 and CUL-140A
This course introduces the fundamental concepts, skills, and techniques in basic cookery, and moist, dry and combination heat. Emphasis is placed on recipe conversion, measurements, terminology, classical knife cuts, safe food/equipment handling, flavorings/seasonings, stocks/sauces/soups, and related topics. Upon completion, students should be able to exhibit the basic cooking skills used in the food service industry. Weekly participation in Global Cuisine buffets, banquets, and a la carte production enhances students' culinary and service skills.

***CUL-140A Culinary Skills I Lab 0 3 1**
Prerequisites: None
Corequisites: CUL-110, CUL-140
This course provides laboratory experience for enhancing student skills in the fundamental concepts, skills and techniques in basic cookery, and moist, dry and combination heat. Emphasis is placed on practical experiences including recipe conversion, measurements, terminology, classical knife cuts, safe food/equipment handling, flavorings/seasonings, stocks/sauces/soups, and related topics. Upon completion, students should be able to demonstrate competency in the basic cooking skills used in the foodservice industry.

***CUL-150 Food Science 1 2 2**
Prerequisites: None
Corequisites: CUL-110
This course covers the chemical and physical changes in foods that occur with cooking, handling, and processing. Emphasis is placed on practical application of heat transfer and its effect on color/flavor/texture, emulsification, protein coagulation, leavening agents, viscosity, and gel formation. Upon completion, students should be able to demonstrate an understanding of these principles as they apply to food preparation in an experimental setting.

***CUL-160 Baking I 1 4 3**
Prerequisites: None
Corequisites: CUL-110
This course covers basic ingredients, techniques, weights and measures, baking terminology, and formula calculations. Topics include yeast/chemically leavened products, laminated doughs, pastry dough batter, pies/tarts, meringue, custard, cakes and cookies, icings, glazes and basic sauces. Upon completion, students should be able to demonstrate proper scaling and measurement techniques, and prepare and evaluate a variety of bakery products.

***CUL 160A Baking I Lab 0 3 1**
Prerequisites: None
Corequisites: CUL 160 and CUL 110
This course provides a laboratory experience for enhancing student skills in basic baking. Emphasis is placed on the practical experiences of yeast/chemically leavened products, laminated/pastry dough, batter, pies/tarts, meringue, custard, cakes and cookies, icings, glazes and basic sauces. Upon completion, students should be able to demonstrate a basic proficiency in bakeshop applications.

***CUL 165 Therapeutic Cuisine 1 4 3**
Prerequisites: CUL-110 and CUL-140
Corequisites: None
This course covers the principles of therapeutic cooking with an emphasis on gluten free, allergy free, and vegan cooking. Topics include vegan, lacto-ovo, vegetarian, nut-free, dairy-free, wheat-free, soy-free, and corn-free meal preparation. Upon completion, students should be able to demonstrate an understanding of common dietary preferences and intolerances, and be able to safely and accurately execute allergy-free meal plan preparation.

***CUL-170 Garde Manger I 1 4 3**
Prerequisites: CUL 140 and CUL 140A
Corequisites: CUL-110
This course introduces basic cold food preparation techniques and pantry production. Topics include salads, sandwiches, appetizers, dressings, basic garnishes, cheeses, cold sauces, and related food items. Upon completion, students should be able to present a cold food display and exhibit an understanding of the cold kitchen and its related terminology.

***CUL-230 Global Cuisines 1 8 5**
Prerequisites: CUL-110, CUL-140, CUL-140A, CUL-150, CUL-240, CUL-240A and WBL-112
Corequisites: None
This course provides practical experience in the planning, preparation, and presentation of representative foods from a variety of world cuisines. Emphasis is placed on indigenous ingredients and customs, nutritional concerns, and cooking techniques. Upon completion, students should be able to research and execute a variety of international and domestic menus. Weekly participation in buffets, banquets, and a la carte production enhances students' supervisory and technical skills.

***CUL-240 Culinary Skills II 1 8 5**
Prerequisites: CUL-110, CUL-140, and CUL-140A
Corequisites:CUL-240A
This course is designed to further students' knowledge of the fundamental concepts, skills, and techniques involved in basic cookery. Emphasis is placed on meat identification/fabrication, butchery and cooking techniques/methods; appropriate vegetable/starch accompaniments; compound sauces; plate presentation; breakfast cookery; and quantity food preparation. Upon completion, students should be able to plan, execute, and successfully serve entrees with complementary side items.

***CUL-240A Culinary Skills II Lab 0 3 1**
Prerequisites: CUL-110, CUL-140, and CUL-140A
Corequisites: CUL-240
This course provides a laboratory experience for furthering students' knowledge of the fundamental concepts, skills, and techniques involved in basic cookery. Emphasis is placed on practical applications of meat identification/fabrication; butchery and cooking techniques/methods; appropriate vegetable/starch accompaniments; compound sauces; plate presentation; breakfast cookery; and food preparation. Upon completion, students should be able to demonstrate a basic proficiency in the preparation of entrées and accompaniments. Weekly participation in a la carte production enhances students' culinary and service skills.

***CUL-250 Classical Cuisine 1 8 5**
Prerequisites: CUL-110, CUL-140, CUL-140A, CUL-160, CUL-230, CUL-240, CUL-240A, CUL-270, and WBL-112
Corequisites: CUL-135 and CUL-135A
This course is designed to reinforce the classical culinary kitchen. Topics include the working Grand Brigade of the kitchen, signature dishes, and classical banquets. Upon completion, students should be able to demonstrate competence in food preparation in a classical/upscale restaurant or banquet setting. This course includes weekly a la carte service encompassing contemporary and classical preparation and a capstone final exam.

***CUL-260 Baking II 1 4 3**
Prerequisites: CUL-110 and CUL-160
Corequisites: None
This course is designed to further students' knowledge in ingredients, weights and measures, baking terminology and formula calculation. Topics include classical desserts, frozen desserts, cake and torte production, decorating and icings/glazes, dessert plating and presentation. Upon completion, students should be able to demonstrate pastry preparation, plating, and dessert buffet production skills.

***CUL-270 Garde Manger II 1 4 3**
Prerequisites: CUL-110, CUL-140, CUL-140A, CUL-170, CUL-240, and CUL-240A
Corequisites: None
This course is designed to further students' knowledge in basic cold food preparation techniques and pantry production. Topics include pâtés, terrines, galantines, decorative garnishing skills, carving, charcuterie, smoking, canapés, hors d'oeuvres, and related food items. Upon completion, students should be able to design, set up, and evaluate a catering/event display to include a cold buffet with appropriate showpieces.

***CUL 288 Practical Meat Cutting 2 6 5**
Prerequisites: CUL 110, CUL 112, CUL 140, CUL 140A, CUL 150, CUL 170, CUL 240, CUL 270 and HRM 220
Corequisites: None
This course covers the principles of meat cutting including anatomy, product evaluation, sourcing, storage, sanitation, costing and pricing, equipment maintenance, government regulations, and lifecycle management of pork, beef, and poultry. Upon completion, students should be able to demonstrate an understanding of accurate and safe utilization of proteins for restaurant or commercial applications.

Cardiovascular Sonography

CVS-160 CVS Clinical Ed I 0 4 9 5
Prerequisites: None
Corequisites: None
This course provides active participation in clinical sonography. Emphasis is placed on imaging, processing, and technically evaluating sonographic examinations. Upon completion, students should be able to image, process, and evaluate sonographic examinations.

CVS-161 CVS Clinical Ed II 0 0 24 8
Prerequisites: Take CVS-160
Corequisites: None
This course provides continued participation in clinical sonography. Emphasis is placed on imaging, processing, and technically evaluating sonographic examinations. Upon completion, students should be able to image, process, and evaluate sonographic examinations.

CVS-162 CVS Clinical Ed III 0 0 15 5
Prerequisites: Take CVS-161
Corequisites: None
This course provides continued participation in clinical sonography. Emphasis is placed on imaging, processing, and technically evaluating sonographic examinations. Upon completion, students should be able to image, process, and evaluate sonographic examinations.

CVS-163 Echo I 3 2 0 4
Prerequisites: None
Corequisites: None
This course covers cardiac anatomy and introduces cardiac scanning techniques. Topics include normal cardiac anatomy, Doppler physics, and 2-D and M-mode imaging. Upon completion, students should be able to perform 2-D and M-mode studies.

CVS-164 Echo II 3 2 0 4
Prerequisites: Take CVS-163
Corequisites: None
This course is a continuation of CVS 163 with continued study of 2-D and M-mode imaging. Emphasis is placed on continuous wave, pulsed wave, color, and power Doppler imaging of normal and abnormal cardiac conditions. Upon completion, students should be able to perform and recognize normal and abnormal cardiac studies.

CVS-260 CVS Clinical Ed IV 0 0 24 8
Prerequisites: Take CVS-162
Corequisites: None
This course provides continued active participation in clinical sonography. Emphasis is placed on imaging, processing, and technically evaluating sonographic examinations. Upon completion, students should be able to image, process, and evaluate sonographic examinations.

CVS-261 CVS Clinical Ed V 0 0 24 8
Prerequisites: Take CVS-260
Corequisites: None
This course provides continued active participation in clinical sonography. Emphasis is placed on imaging, processing, and technically evaluating sonographic examinations. Upon completion, students should be able to image, process, and evaluate sonographic examinations.

CVS-277 Cardiovascular Topics 2 0 0 2
Prerequisites: None
Corequisites: None
This course provides an overview of cardiovascular topics in preparation for certification examinations. Emphasis is placed on registry preparation. Upon completion, students should be able to sit for the registry examinations.

Database Management Technology

DBA-120 Database Programming I 2 2 3
Prerequisites: C or better in CIS-110, CIS-115, or CTI-110
Corequisites: None
This course is designed to develop SQL programming proficiency. Emphasis is placed on data definition, data manipulation, and data control statements as well as on report generation. Upon completion, students should be able to write programs which create, update and produce reports.

DBA-210 Database Administration 2 3 3
Prerequisites: C or better in DBA-120
Corequisites: None
This course covers database administration issues and distributed database concepts. Topics include database administrator (DBA) goals and functions, backup and recovery, standards and procedures, training, and database security and performance evaluations. Upon completion, students should be able to produce functional DBA documentation and administer a database.

Developmental Disabilities

***DDT-110 Intellectual/Dev Disabilities 3 0 0 3**
Prerequisites: None
Corequisites: None
This course covers intellectual and developmental disabilities. Emphasis is placed on causes of intellectual/developmental disabilities, service provision and advocacy. Upon completion, students should be able to demonstrate a general knowledge of serving individuals with intellectual/developmental disabilities.

Dental

DEN-100 Basic Orofacial Anatomy 2 0 0 2
Prerequisites: None
Corequisites: None
This course provides a basic introduction to the structures of the head, neck, and oral cavity. Topics include tooth morphology, head and neck anatomy, histology, and embryology. Upon completion, students should be able to demonstrate knowledge of normal structures and development and how they relate to the practice of dental assisting.

DEN-101 Preclinical Procedures 4 6 0 7
Prerequisites: None
Corequisites: None
This course provides instruction in procedures for the clinical dental assistant as specified by the North Carolina Dental Practice Act. Emphasis is placed on orientation to profession, infection control techniques, instruments, related expanded functions, and diagnostic, operative, and specialty procedures. Upon completion, students should be able to demonstrate proficiency in clinical dental assisting procedures

***DEN-102 Dental Materials 2 4 0 4**
Prerequisites: None
Corequisites: None
This course provides instruction in identification, properties, evaluation of quality, principles, and procedures related to manipulation and storage of operative and specialty dental materials. Emphasis is placed on the understanding and safe application of materials used in the dental office and laboratory. Upon completion, students should be able to demonstrate proficiency in the laboratory and clinical application of routinely used dental materials. This is a diploma-level course.

DEN-103 Dental Sciences 2 0 0 2
Prerequisites: None
Corequisites: None
This course is a study of oral pathology, pharmacology, and dental office emergencies. Topics include oral pathological conditions, dental therapeutics, and management of emergency situations. Upon completion, students should be able to recognize abnormal oral conditions, identify classifications, describe actions and effects of commonly prescribed drugs, and respond to medical emergencies. This is a diploma-level course.

***DEN-104 Dental Health Education 2 2 0 3**
Prerequisites: None
Corequisites: None
This course covers the study of preventative dentistry to prepare dental assisting students for the role of dental health educator. Topics include etiology of dental diseases, preventative procedures, and patient education theory and practice. Upon completion, students should be able to demonstrate proficiency in patient counseling and oral health instruction in private practice or public health settings. This is a diploma-level course.

***DEN-105 Practice Management 2 0 0 2**
Prerequisites: None
Corequisites: None
This course provides a study of principles and procedures related to management of the dental practice. Emphasis is placed on maintaining clinical and financial records, patient scheduling, and supply and inventory control. Upon completion, students should be able to demonstrate fundamental skills in dental practice management. This is a diploma-level course.

***DEN-106 Clinical Practice I 2 0 12 6**
Prerequisites: DEN 100, DEN 101, DEN 103, DEN 111, and DEN 112
Corequisites: None
This course is designed to provide experience assisting in a clinical setting. Emphasis is placed on the application of principles and procedures of four-handed dentistry and laboratory and clinical support functions. Upon completion, students should be able to utilize classroom theory, laboratory, and clinical skills in a dental setting. This is a diploma-level course.

***DEN-107 Clinical Practice II 1 0 12 5**
Prerequisites: DEN-106
Corequisites: None
This course is designed to increase the level of proficiency in assisting in a clinical setting. Emphasis is placed on the application of principles and procedures of four-handed dentistry and laboratory and clinical support functions. Upon completion, students should be able to combine theoretical and ethical principles necessary to perform entry-level skills including functions delegable to a DA II. This is a diploma-level course.

DEN-110 Orofacial Anatomy 2 2 0 3
Prerequisites: None
Corequisites: None
This course introduces the structures of the head, neck, and oral cavity. Topics include tooth morphology, head and neck anatomy, histology, and embryology. Upon completion, students should be able to relate the identification of normal structures and development to the practice of dental assisting and dental hygiene.

DEN-111 Infection/Hazard Control 2 0 0 2
Prerequisites: None
Corequisites: None
This course introduces the infection and hazard control procedures necessary for the safe practice of dentistry. Topics include microbiology, practical infection control, sterilization and monitoring, chemical disinfectants, aseptic technique, infectious diseases, OSHA standards, and applicable North Carolina laws. Upon completion, students should be able to understand infectious diseases, disease transmission, infection control procedures, biohazard management, OSHA standards, and applicable North Carolina laws. Upon successful completion, students will also meet the requirements of 10ANC Administrative Code 41A.0206 for SPICE training.

DEN-112 Dental Radiography 2 3 0 3
Prerequisites: None
Corequisites: None
This course provides a comprehensive view of the principles and procedures of radiology as they apply to dentistry. Topics include techniques in exposing, processing, and evaluating radiographs, as well as radiation safety, quality assurance, and legal issues. Upon completion, students should be able to demonstrate proficiency in the production of diagnostically acceptable radiographs using appropriate safety precautions.

DEN-120 Dental Hyg Preclinic Lec 2 0 0 2
Prerequisites: None
Corequisites: DEN-121
This course introduces preoperative and clinical dental hygiene concepts. Emphasis is placed on the assessment phase of patient care as well as the theory of basic dental hygiene instrumentation. Upon completion, students should be able to collect and evaluate patient data at a basic level and demonstrate knowledge of dental hygiene instrumentation.

***DEN-121 Dental Hyg Preclinic Lab 0 6 0 2**
Prerequisites: None
Corequisites: DEN-120
This course provides the opportunity to perform clinical dental hygiene procedures discussed in DEN 120. Emphasis is placed on clinical skills in patient assessment and instrumentation techniques. Upon completion, students should be able to demonstrate the ability to perform specific preclinical procedures. Also, students should be able to demonstrate aseptic technique used in a dental environment.

DEN-123 Nutrition/Dental Health 2 0 0 2
Prerequisites: None
Corequisites: None
This course introduces basic principles of nutrition with emphasis on nutritional requirements and their application to individual patient needs. Topics include the study of Federal Nutritional Guidelines, nutrient functions, Recommended Daily Allowances, Adequate Intake, Tolerable Upper Intake Level, Estimated Average Requirement, and related psychological principles. Upon completion, students should be able to recommend and counsel individuals on their food intake as related to their dental health.

DEN-124 Periodontology 2 0 0 2
Prerequisites: DEN-110
Corequisites: None
This course provides an in-depth study of the periodontium, periodontal pathology, periodontal monitoring, and the principles of periodontal therapy. Topics include periodontal anatomy and a study of the etiology, classification, and treatment modalities of periodontal diseases. Upon completion, students should be able to describe, compare, and contrast techniques involved in periodontal/maintenance therapy, as well as patient care management.

***DEN-125 Dental Office Emergencies 0 2 0 1**
Prerequisites: None
Corequisites: None
This course provides a study of the management of dental office emergencies. Topics include methods of prevention, necessary equipment/drugs, medicolegal considerations, recognition and effective initial management of a variety of emergencies. Upon completion, students should be able to recognize, assess, and manage various dental office emergencies and activate advanced medical support when indicated.

***DEN-130 Dental Hygiene Theory I 2 0 0 2**
Prerequisites:DEN 111, DEN 112 and DEN 120
Corequisites: DEN-131
This course is a continuation of the didactic dental hygiene concepts necessary for providing an oral prophylaxis. Topics include deposits/removal, instrument sharpening, patient education, fluorides, planning for dental hygiene treatment, charting, and clinical records and procedures. Upon completion, students should be able to demonstrate knowledge needed to complete a thorough oral prophylaxis.

***DEN-131 Dental Hygiene Clinic I 0 0 9 3**
Prerequisites: DEN 111, DEN 112 and DEN 121
Corequisites: DEN-130
This course continues skill development in providing an oral prophylaxis. Emphasis is placed on treatment of the recall patients with gingivitis or light deposits. Upon completion, students should be able to assess these patients' needs and complete the necessary dental hygiene treatment.

***DEN 140 Dental Hygiene Theory II 1 2 0 2**
Prerequisites: DEN 130
Corequisites: DEN 141
This course introduces principles in treatment modification. Topics include modification of treatment for pain management and advanced radiographic interpretation. Upon completion, students should be able to differentiate necessary treatment modifications, radiographic abnormalities, and be certified in the administration of local anesthesia.

***DEN-141 Dental Hygiene Clinic II 0 0 6 2**
Prerequisites: DEN-131
Corequisites: DEN-140
This course continues skill development in providing an oral prophylaxis. Emphasis is placed on treatment of patients with early periodontal disease and subgingival deposits. Upon completion, students should be able to assess these patients' needs and complete the necessary dental hygiene treatment.

***DEN-220 Dental Hygiene Theory III 2 0 0 2**
Prerequisites: DEN-140
Corequisites: DEN-221
This course introduces advanced principles of patient care. Topics include advanced periodontal debridement, subgingival irrigation, air polishing, special needs and case presentations. Upon completion, students should be able to demonstrate knowledge of methods of treatment and management of periodontally compromised and special needs patients.

***DEN-221 Dental Hygiene Clinic III 0 0 12 4**
Prerequisites: DEN-141
Corequisites: DEN-220
This course continues skill development in providing an oral prophylaxis. Emphasis is placed on treatment of patients with moderate to advanced periodontal involvement and moderate deposits. Upon completion, students should be able to assess these patients' needs and complete the necessary dental hygiene treatment.

DEN-222 General & Oral Pathology 2 0 0 2
Prerequisites: BIO-163, BIO-165, or BIO-168
Corequisites: None
This course provides a general knowledge of oral pathological manifestations associated with selected systemic and oral diseases. Topics include developmental and degenerative diseases, selected microbial diseases, specific and nonspecific immune and inflammatory responses with emphasis on recognizing abnormalities. Upon completion, students should be able to differentiate between normal and abnormal tissues and refer unusual findings to the dentist for diagnosis.

DEN-223 Dental Pharmacology 2 0 0 2
Prerequisites: None
Corequisites: Select one: BIO-163, BIO-165 or BIO-168
This course provides basic drug terminology, general principles of drug actions, dosages, routes of administration, adverse reactions, and basic principles of anesthesiology. Emphasis is placed on knowledge of drugs in overall understanding of patient histories and health status. Upon completion, students should be able to recognize that each patient's general health or drug usage may require modification of the treatment procedures.

***DEN-224 Materials and Procedures 1 3 0 2**
Prerequisites: DEN-111
Corequisites: None
This course introduces the physical properties of materials and related procedures used in dentistry. Topics include restorative and preventative materials, fabrication of casts and appliances, and chair-side functions of the dental hygienist. Upon completion, students should be able to demonstrate proficiency in the laboratory and/or clinical application of routinely used dental materials and chair-side functions.

***DEN-230 Dental Hygiene Theory IV 1 0 0 1**
Prerequisites: DEN-220
Corequisites: DEN-231
This course provides an opportunity to increase knowledge of the profession. Emphasis is placed on dental specialties, technological advances, and completion of a case study presentation. Upon completion, students should be able to demonstrate knowledge of various disciplines of dentistry, technological advances and principles of case presentations.

***DEN-231 Dental Hygiene Clinic IV 0 0 12 4**
Prerequisites: DEN-221
Corequisites: DEN-230
This course continues skill development in providing an oral prophylaxis. Emphasis is placed on periodontal maintenance and on treating patients with moderate to advanced/refractory periodontal disease. Upon completion, students should be able to assess these patients' needs and complete the necessary dental hygiene treatment.

***DEN-232 Community Dental Health 2 3 0 3**
Prerequisites: None
Corequisites: None
This course provides a study of the principles and methods used in assessing, planning, implementing, and evaluating community dental health programs. Topics include epidemiology, research methodology, biostatistics, preventive dental care, dental health education, program planning, and financing and utilization of dental services. Upon completion, students should be able to assess, plan, implement, and evaluate a community dental health program.

***DEN-233 Professional Development 2 0 0 2**
Prerequisites: None
Corequisites: None
This course includes professional development, ethics, and jurisprudence with applications to practice management. Topics include conflict management, state laws, resumes, interviews, and legal liabilities as health care professionals. Upon completion, students should be able to demonstrate the ability to practice dental hygiene within established ethical standards and state laws.

Drafting

DFT-151 CAD I 2 3 3
Prerequisites: None
Corequisites: None
This course introduces CAD software as a drawing tool. Topics include drawing, editing, file management, and plotting. Upon completion, students should be able to produce and plot a CAD drawing.

DFT-152 CAD II 2 3 3
Prerequisites: DFT-151
Corequisites: None
This course is a continuation of DFT 151. Topics include advanced two-dimensional, three-dimensional, and solid modeling and extended CAD applications. Upon completion, students should be able to generate and manage CAD drawings and models to produce engineering documents.

***DFT-153 CAD III 2 3 3**
Prerequisites: DFT-151
Corequisites: None
This course covers basic principles of three-dimensional CAD wireframe and surface models. Topics include user coordinate systems, three-dimensional viewpoints, three-dimensional wireframes, and surface components and viewpoints. Upon completion, students should be able to create and manipulate three-dimensional wireframe and surface models.

DFT-154 Intro Solid Modeling 2 3 3
Prerequisites: None
Corequisites: None
This course in an introduction to basic three-dimensional solid modeling and design software. Topics include basic design, creation, editing, rendering and analysis of solid models and creation of multi - view drawings. Upon completion, students should be able to use design techniques to create, edit, render and generate a multi - view drawing.

***DFT-170 Engineering Graphics 2 2 3**
Prerequisites: None
Corequisites: None
This course introduces basic engineering graphics skills and applications. Topics include sketching, selection and use of current methods and tools, and the use of engineering graphics applications. Upon completion, students should be able to demonstrate an understanding of basic engineering graphics principles and practices. This course has been approved for transfer under the CAA as a premajor and/or elective course requirement.

***DFT-254 Intermediate Solid Model/Render 2 3 3**
Prerequisites: DFT-154
Corequisites: None
This course is a continuation of basic three-dimensional solid modeling and design software. Topics include advanced study of parametric design, creation, editing, rendering, and analysis of solid model assemblies and multi-view drawing generation. Upon completion, students should be able to use parametric design techniques to create and analyze the engineering design properties of a model assembly.

Economics

***ECO-251 Prin of Microeconomics 3 0 3**
Prerequisites: None
Corequisites: None
This course introduces economic analysis of individual, business, and industry choices in the market economy. Topics include the price mechanism, supply and demand, optimizing economic behavior, costs and revenue, market structures, factor markets, income distribution, market failure, and government intervention. Upon completion, students should be able to identify and evaluate consumer and business alternatives in order to efficiently achieve economic objectives. This is a Universal General Education Transfer Component (UGETC) course that satisfies Social/Behavioral Sciences.

***ECO-252 Prin of Macroeconomics 3 0 3**
Prerequisites: None
Corequisites: None
This course introduces economic analysis of aggregate employment, income, and prices. Topics include major schools of economic thought; aggregate supply and demand; economic measures, fluctuations, and growth; money and banking; stabilization techniques; and international trade. Upon completion, students should be able to evaluate national economic components, conditions, and alternatives for achieving socioeconomic goals. This is a Universal General Education Transfer Component (UGETC) course that satisfies Social/Behavioral Sciences.

Education

EDU-119 Intro to Early Child Education 4 0 4
Prerequisites: None
Corequisites: None
This course introduces the foundations of culturally responsive, equitable and inclusive early childhood education, planning intentional developmentally appropriate experiences, learning activities, and teaching strategies for indoor and outdoor environments for all young children, guidance techniques, and professionalism. Topics include theoretical foundations, national early learning standards, NC Foundations for Early Learning and Development, state regulations, program types, career options, professionalism, ethical conduct, quality inclusive environments, guidance techniques, and curriculum responsive to the needs of each child/family. Upon completion, students should be able to implement developmentally appropriate environments, guidance techniques, schedules, and teaching strategies across developmental domains to support culturally, linguistically, and ability diverse children and their families in inclusive settings, and design a personal career/professional development plan.

EDU-131 Child, Family, & Community 3 0 3
Prerequisites: None
Corequisites: None
This course covers the development of partnerships among culturally, linguistically and ability diverse families, children, schools and communities through the use of evidence-based strategies. Emphasis is placed on developing skills and identifying benefits for establishing and supporting respectful relationships between diverse families, programs/schools, and community agencies/resources reflective of the NAEYC Code of Ethical Conduct and the Code of Ethics for North Carolina Educators. Upon completion, students should be able to identify appropriate relationship building strategies between diverse families, children birth through adolescence, schools, and communities and demonstrate a variety of communication skills including appropriate use of technology to support every child.

EDU-144 Child Development I 3 0 3
Prerequisites: None
Corequisites: None
This course includes the theories of child development, observation and assessment, milestones, and factors that influence development, from conception through approximately 36 months. Emphasis is placed on knowledge, observation and assessment of developmental sequences in approaches to play/learning, emotional/social, health/physical, language/communication and cognitive domains. Upon completion, students should be able to compare/contrast typical/atypical developmental characteristics, explain biological and environmental factors that impact development, and identify evidence-based strategies for enhancing development for children that are culturally, linguistically, and ability diverse. This course has been approved for transfer under the CAA as a premajor and/or elective course requirement.

EDU-145 Child Development II 3 0 3
Prerequisites: None
Corequisites: None
This course includes the theories of child development, observation and assessment, milestones, and factors that influence development, from preschool through middle childhood. Emphasis is placed on knowledge, observation and assessment of developmental sequences in approaches to play/learning, emotional/social, health/physical, language/communication and cognitive domains. Upon completion, students should be able to compare/contrast typical/atypical developmental characteristics, explain biological and environmental factors that impact development, and identify evidence-based strategies for enhancing development for children that are culturally, linguistically, and ability diverse. This course has been approved for transfer under the CAA as a premajor and/or elective course requirement.

EDU-146 Child Guidance 3 0 3
Prerequisites: None
Corequisites: None
This course introduces evidence-based strategies to build nurturing relationships with each child by applying principles and practical techniques to facilitate developmentally appropriate guidance. Topics include designing responsive/supportive learning environments, cultural, linguistic and socio-economic influences on behavior, appropriate expectations, the importance of communication with children/families including using technology and the use of formative assessments in establishing intentional strategies for children with unique needs. Upon completion, students should be able to demonstrate direct/indirect strategies to encourage social skills, self-regulation, emotional expression and positive behaviors while recognizing the relationship between children's social, emotional and cognitive development.

EDU-151 Creative Activities 3 0 3
Prerequisites: None
Corequisites: None
This course introduces developmentally supportive, diverse, equitable, and inclusive creative learning environments with attention to divergent thinking, creative problem-solving, evidence-based teaching practices, and open-ended learning materials and activities that align with the NC Foundations for Early Learning and Development. Emphasis is placed on best practices providing process-driven culturally diverse, learning experiences in art, music, creative movement, dance, and dramatic play integrated across all domains and academic content in indoor/outdoor environments for every young child age birth through age eight. Upon completion, students should be able to observe, examine, create, adapt, and advocate for developmentally appropriate creative learning materials, experiences, and environments for children that are culturally, linguistically, and ability diverse.

EDU-153 Health, Safety and Nutrition 3 0 3
Prerequisites: None
Corequisites: None
This course covers promoting and maintaining the health and well-being of every child. Topics include health and nutritional guidelines, common childhood illnesses, maintaining safe and healthy learning environments, health benefits of active play, recognition and reporting of abuse/neglect, and state regulations. Upon completion, students should be able to apply knowledge of NC Foundations for Early Learning and Development for health, safety, nutritional needs and safe learning environments.

EDU-187 Teaching and Learning for All 3 3 4
Prerequisites: None
Corequisites: None
This course introduces students to knowledge, concepts, and best practices needed to provide developmentally appropriate, effective, inclusive, and culturally responsive educational experiences in the classroom. Topics include growth and development, learning theory, student motivation, teaching diverse learners, classroom management, inclusive environments, student-centered practices, instructional strategies, teaching methodologies, observation/assessment techniques, educational planning, reflective practice, collaboration, cultural competence, ethics, professionalism, and leadership. Upon completion, students should be able to identify the knowledge, skills, roles, and responsibilities of an effective educator as defined by state and national professional teaching standards.

EDU-216 Foundations of Education 3 0 3
Prerequisites: None
Corequisites: None
This course introduces the examination of the American educational systems and the teaching profession. Topics include the historical and philosophical influences on education, various perspectives on educational issues, and experiences in birth through grade 12 classrooms. Upon completion, students should be able to reflect on classroom observations, analyze the different educational approaches, including classical/traditional and progressive, and have knowledge of the various roles of educational systems at the federal, state and local level. This course has been approved for transfer under the CAA as a premajor and/or elective course requirement.

EDU-221 Children with Exceptionalities 3 0 3
Prerequisites: Take one set
Set 1: EDU-144 and EDU-145
Set 2: PSY-244 and PSY-245
Corequisites: None
This course covers atypical patterns of child development, inclusive/diverse settings, evidenced-based educational/family plans, differentiated instruction, adaptive materials, and assistive technology. Emphasis is placed on the characteristics of exceptionalities and delays, early intervention/special education, transitions, observation, developmental screening, formative assessment of children, and collaborating with families and community partners. Upon completion, students should be able to recognize diverse abilities, describe the referral process, identify community resources, explain the importance of collaboration with families/professionals, and develop appropriate strategies/adaptations to support children in all environments with best practices as defined by laws, policies and the NC Foundations for Early Learning and Development. This course has been approved for transfer under the CAA as a premajor and/or elective course requirement.

EDU-234 Infants, Toddlers, and Twos 3 0 3
Prerequisites: EDU-119
Corequisites: None
This course covers the development of high-quality, individualized, responsive/engaging relationships and experiences for infants, toddlers, and twos. Emphasis is placed on typical and atypical child development, working with diverse families to provide positive, supportive, and engaging early learning activities and interactions through field experiences and the application of the NC Foundations for Early Learning and Development. Upon completion, students should be able to demonstrate responsive curriculum planning, respectful relationships and exposure to a variety of developmentally appropriate experiences/materials that support a foundation for healthy development and growth of culturally, linguistically and ability diverse children birth to 36 months.

EDU-250 Teacher Licensure Preparation 3 0 3
Prerequisites: None
Corequisites: Take one set:
Set 1: ENG-111 and MAT-143
Set 2: ENG-111 and MAT-152
Set 3: ENG-111 and MAT-171
This course provides information and strategies necessary for transfer to a teacher licensure program at a senior institution. Topics include entry level teacher licensure exam preparation, performance based assessment systems, requirements for entry into teacher education programs, the process to become a licensed teacher in North Carolina, and professionalism including expectations within the field of education. Upon completion, students should be able to utilize educational terminology and demonstrate knowledge of teacher licensure processes including exam preparation, technology based portfolio assessment, and secondary admissions processes to the school of education at a senior institution.

*The numbers following course titles indicate **class**, **lab**, **clinic/co-op/shop**, and **credit** hours, respectively.*

EDU-259 Curriculum Planning 3 0 3
Prerequisites: EDU-119
Corequisites: None
This course is designed to focus on using content knowledge to build effective developmentally appropriate approaches that are culturally responsive, equitable, and ability diverse for young children. Topics include components of curriculum, a variety of curriculum models, authentic observation and assessment, and planning developmentally appropriate experiences and indoor/outdoor environments aligned with the NC Foundations for Early Learning and Development. Upon completion, students should be able to understand, evaluate, and use developmentally appropriate curriculum to plan for the individual/group needs of young children.

EDU-261 Early Childhood Admin I 3 0 3
Prerequisites: None
Corequisites: EDU-119
This course introduces principles and practices essential to preparing and supporting child care administrators. Topics include program philosophy, policies and procedures, NC Child Care Law and Rules, business planning, personnel and fiscal management, and NAEYC Code of Ethical Conduct Supplement for Early Childhood Program Administration. Upon completion, students should be able to articulate a developmentally appropriate program philosophy, locate current state licensing regulations, analyze a business plan and examine comprehensive program policies and procedures.

EDU-262 Early Childhood Admin II 3 0 3
Prerequisites: EDU-119 and EDU-261
Corequisites: None
This course focuses on advocacy/leadership, public relations/community outreach and program quality/evaluation for diverse early childhood programs. Topics include program evaluation/accreditation, involvement in early childhood professional organizations, leadership/mentoring, family, volunteer and community involvement and early childhood advocacy. Upon completion, students should be able to define and evaluate all components of early childhood programs, develop strategies for advocacy and integrate community into programs.

EDU-279 Literacy Develop and Instruct 3 3 4
Prerequisites: None
Corequisites: None
This course is designed to provide students with concepts and skills of literacy development, instructional methods/materials and assessment techniques needed to provide scientifically-based, systematic reading and writing instruction into educational practice. Topics include literacy concepts, reading and writing development, developmentally appropriate pedagogy, culturally-responsive instruction, standards-based outcomes, lesson planning, formative/summative assessment, recognizing reading difficulties, research-based interventions, authentic learning experiences, classroom implementation, and reflective practice. Upon completion, students should be able to plan, implement, assess, evaluate, and demonstrate developmentally appropriate literacy instruction aligned to the NC Standard Course of Study and other state and national standards.

EDU-280 Language/Literacy Experiences 3 0 3
Prerequisites: None
Corequisites: None
This course provides evidence-based strategies for enhancing language and literacy experiences that align with NC Foundations for Early Learning and Development. Topics include developmental sequences for children's emergent receptive and expressive language, print concepts, appropriate observations/assessments, literacy enriched environments, quality selection of diverse literature, interactive media, and inclusive practices. Upon completion, students should be able to select, plan, implement and evaluate developmentally appropriate language and literacy experiences for children who are culturally, linguistically and ability diverse.

EDU-284 Early Child Capstone Prac 1 9 4
Prerequisites: Take one set
Set 1: EDU-119, EDU-144, EDU-145, EDU-146, and EDU-151
Set 2: EDU-119, EDU-146, EDU-151, PSY-244, and PSY-245,
Set 3: EDU-119, EDU-144, EDU-146, EDU-151, and PSY-245,
Set 4: EDU-119, EDU-145, EDU-146, EDU-151, and PSY-244,
Corequisites: None
This course is designed to allow students to demonstrate acquired skills in a three star (minimum) or NAEYC accredited or equivalent, quality early childhood environment. Emphasis is placed on designing, implementing and evaluating developmentally appropriate activities and environments for all children; supporting/engaging families; and modeling reflective and professional practices based on national and state guidelines. Upon completion, students should be able to apply NC Foundations for Early Learning and Development to demonstrate developmentally appropriate plans/assessments, appropriate guidance techniques and ethical/professional behaviors, including the use of appropriate technology, as indicated by assignments and onsite faculty assessments.

Engineering

EGR-110 Intro to Engineering Tech 1 2 2
Prerequisites: None
Corequisites: None
This course introduces general topics relevant to engineering technology. Topics include career assessment, professional ethics, critical thinking and problem solving, usage of college resources for study and research, and using tools for engineering computations. Upon completion, students should be able to choose a career option in engineering technology and utilize college resources to meet their educational goals.

***EGR-220 Engineering Statics 3 0 3**
Prerequisites: PHY-251
Corequisites: MAT-272
This course introduces the concepts of engineering based on forces in equilibrium. Topics include concentrated forces, distributed forces, forces due to friction and inertia as they apply to machines, structures, and systems. Upon completion, students should be able to solve problems which require the ability to analyze systems of forces in static equilibrium. This course has been approved for transfer under the CAA as a premajor and/or elective course requirement.

*EGR-250 Statics/Strength of Mater 4 3 5

Prerequisites: MAT-121 or MAT-171
Corequisites: None

This course includes vector analysis, equilibrium of force systems, friction, sectional properties, stress/strain, and deformation. Topics include resultants and components of forces, moments and couples, free-body diagrams, shear and moment diagrams, trusses, frames, beams, columns, connections, and combined stresses. Upon completion, students should be able to analyze simple structures.

*EGR-285 Design Project 0 4 2

Prerequisites: Department Chair Approval
Corequisites: None

This course provides the opportunity to design an instructor-approved project using previously acquired skills. Emphasis is placed on selection, proposal, design, testing, and documentation of the approved project. Upon completion, students should be able to present and demonstrate projects.

Electrical

ELC-111 Intro to Electricity 2 2 3

Prerequisites: None
Corequisites: None

This course introduces the fundamental concepts of electricity and test equipment to nonelectrical/electronic majors. Topics include basic DC and AC principles (voltage, resistance, current, impedance); components (resistors, inductors, and capacitors); power; and operation of test equipment. Upon completion, students should be able to construct and analyze simple DC and AC circuits using electrical test equipment.

ELC-113 Residential Wiring 2 6 4

Prerequisites: None
Corequisites: None

This course introduces the care/usage of tools and materials used in residential electrical installations and the requirements of the National Electrical Code (NEC). Topics include NEC, electrical safety, and electrical print reading; planning, layout; and installation of electrical distribution equipment; lighting; overcurrent protection; conductors; branch circuits; and conduits. Upon completion, students should be able to properly install conduits, wiring, and electrical distribution equipment associated with residential electrical

ELC 114 Commercial Wiring 2 6 4

Prerequisites: None
Corequisites: None

This course provides instruction in the application of electrical tools, materials, and test equipment associated with commercial electrical installations. Topics include the NEC;safety; electrical blueprints; planning, layout, and installation of equipment and conduits; and wiring devices such as panels and overcurrent devices. Upon completion, students should be able to properly install equipment and conduit associated with commercial electrical installations.

*ELC-115 Industrial Wiring 2 6 4

Prerequisites: None
Corequisites: None

This course covers layout, planning, and installation of wiring systems in industrial facilities. Emphasis is placed on industrial wiring methods and materials. Upon completion, students should be able to install industrial systems and equipment.

*ELC-117 Motors and Controls 2 6 4

Prerequisites: Select one: AHR-111 or ELC-111, or ELC 113
Corequisites: None

This course introduces the fundamental concepts of motors and motor controls. Topics include ladder diagrams, pilot devices, contactors, motor starters, motors, and other control devices. Upon completion, students should be able to properly select, connect, and troubleshoot motors and control circuits.

ELC-118 National Electrical Code 1 2 2

Prerequisites: None
Corequisites: ELC-113 or ELC-115

This course covers the use of the current National Electrical Code (NEC). Topics include the NEC history, wiring methods, overcurrent protection, materials, and other related topics. Upon completion, students should be able to effectively use the NEC.

ELC-131 Circuit Analysis I 3 3 4

Prerequisites: ELC-111
Corequisites: None

This course introduces DC and AC electricity with an emphasis on circuit analysis, measurements, and operation of test equipment. Topics include DC and AC principles, circuit analysis laws and theorems, components, test equipment operation, circuit simulation, and other related topics. Upon completion, students should be able to interpret circuit schematics; design, construct, verify, and analyze DC/AC circuits; and properly use test equipment.

*ELC-131A Circuit Analysis I Lab 0 3 1

Prerequisites: None
Corequisites: ELC-131

This course provides laboratory assignments as applied to fundamental principles of DC/AC electricity. Emphasis is placed on measurements and evaluation of electrical components, devices and circuits. Upon completion, the students will gain hands-on experience by measuring voltage, current, and opposition to current flow utilizing various meters and test equipment.

ELC-132 Electrical Drawings 1 3 2

Prerequisites: None
Corequisites: None

This course introduces the technical documentation that is typically found or used in the industrial environment. Topics include interpretation of service manuals, freehand sketching of lines, orthographic views and dimensions, and blueprint reading. Upon completion, students should be able to interpret technical documents and blueprints and use basic drafting skills to prepare usable field drawings.

*ELC-213 Instrumentation 3 2 4

Prerequisites: None
Corequisites: Select one: AHR-111 or ELC-111

This course covers the fundamentals of instrumentation used in industry. Emphasis is placed on electric, electronic, and pneumatic instruments. Upon completion, students should be able to design, install, maintain, and calibrate instrumentation.

ELC-220 Photovoltaic Sys Tech 2 3 3

Prerequisites: None
Corequisites: ELC-111

This course introduces the concepts, tools, techniques, and materials needed to understand systems that convert solar energy into electricity with photovoltaic (PV) technologies. Topics include site analysis for system integration, building codes, and advances in photovoltaic technology. Upon completion, students should be able to demonstrate an understanding of the principles of photovoltaic technology and current applications.

ELC-221 Advanced PV Sys Designs 2 3 3
Prerequisites: ELC-220
Corequisites: None

This course introduces specific elements in photovoltaic (pv) systems technologies including efficiency, modules, inverters, charge controllers, batteries, and system installation. Topics include National Electrical Code (NEC), electrical specifications, photovoltaic system components, array design and power integration requirements that combine to form a unified structure. Upon completion, students should be able to demonstrate an understanding of various photovoltaic designs and proper installation of NEC compliant solar electric power systems.

***ELC-228 PLC Applications 2 6 4**
Prerequisites: ELC-260
Corequisites: None

This course covers programming and applications of programmable logic controllers. Emphasis is placed on programming techniques, networking, specialty I/O modules, and system troubleshooting. Upon completion, students should be able to specify, implement, and maintain complex PLC controlled systems.

Electronics

***ELN-131 Analog Electronics I 3 3 4**
Prerequisites: ELC-131
Corequisites: None

This course introduces the characteristics and applications of semiconductor devices and circuits. Emphasis is placed on analysis, selection, biasing, and applications. Upon completion, students should be able to construct, analyze, verify, and troubleshoot analog circuits using appropriate techniques and test equipment.

***ELN-133 Digital Electronics 3 3 4**
Prerequisites: ELC-111
Corequisites: None

This course covers combinational and sequential logic circuits. Topics include number systems, Boolean algebra, logic families, MSI and LSI circuits, AC/DC converters, and other related topics. Upon completion, students should be able to construct, analyze, verify, and troubleshoot digital circuits using appropriate techniques and test equipment.

***ELN-152 Fabrication Techniques 1 3 2**
Prerequisites: None
Corequisites: None

This course covers the fabrication methods required to create a prototype product from the initial circuit design. Topics include CAD, layout, sheet metal working, component selection, wire wrapping, PC board layout and construction, reverse engineering, soldering, and other related topics. Upon completion, students should be able to design and construct an electronic product with all its associated documentation.

***ELN-232 Introduction to Microprocessors 3 3 4**
Prerequisites: None
Corequisites: None

This course introduces microprocessor architecture and microcomputer systems including memory and input/output interfacing. Topics include assembly language programming, bus architecture, bus cycle types, I/O systems, memory systems, interrupts, and other related topics. Upon completion, students should be able to interpret, analyze, verify, and troubleshoot fundamental microprocessor circuits and programs using appropriate techniques and test equipment.

***ELN-234 Communication Systems 3 3 4**
Prerequisites: ELN-131
Corequisites: None

This course introduces the fundamentals of electronic communication systems. Topics include the frequency spectrum, electrical noise, modulation techniques, characteristics of transmitters and receivers, and digital communications. Upon completion, students should be able to interpret analog and digital communication circuit diagrams, analyze transmitter and receiver circuits, and use appropriate communication test equipment.

ELN 260 Prog Logic Controllers 3 3 4
Prerequisites: None
Corequisites: None

This course provides a detailed study of PLC applications, with a focus on design of industrial controls using the PLC. Topics include PLC components, memory organization, math instructions, documentation, input/output devices, and applying PLCs in industrial control systems. Upon completion, students should be able to select and program a PLC system to perform a wide variety of industrial control functions.

Emergency Medical Science

***EMS-110 EMT 6 6 3 9**
Prerequisites: None
Corequisites: None

This course introduces basic emergency medical care. Topics include preparatory, airway, patient assessment, medical emergencies, trauma, infants and children, and operations. Upon completion, students should be able to demonstrate the knowledge and skills necessary to achieve North Carolina State or National Registry EMT certification.

***EMS-122 EMS Clinical Practicum I 0 0 3 1**
Prerequisites: EMS-110
Corequisites: EMS-130

This course provides the introductory hospital clinical experience for the paramedic student. Emphasis is placed on mastering fundamental paramedic skills. Upon completion, students should be able to demonstrate competency with fundamental paramedic level skills. Current N.C. EMT certification is required for students enrolling in this course.

***EMS-130 Pharmacology 3 3 0 4**
Prerequisites: EMS-110, MAT-110, and ENG-111
Corequisites: EMS-122

This course introduces the fundamental principles of pharmacology and medication administration and is required for paramedic certification. Topics include medical terminology, pharmacological concepts, weights, measures, drug calculations, vascular access for fluids and medication administration and legislation. Upon completion, students should be able to accurately calculate drug dosages, properly administer medications, and demonstrate general knowledge of pharmacology.

***EMS-131 Advanced Airway Management 1 2 0 2**
Prerequisites: EMS-110
Corequisites: EMS-130

This course is designed to provide advanced airway management techniques and is required for paramedic certification. Topics must meet current guidelines for advanced airway management in the pre-hospital setting. Upon completion, students should be able to properly utilize all airway adjuncts and pharmacology associated with airway control and maintenance.

***EMS-140 Rescue Scene Management 1 3 0 2**
Prerequisites: None
Corequisites: None
This course introduces rescue scene management. Topics include response to hazardous material conditions, incident command, and extrication of patients from a variety of situations. Upon completion, students should be able to recognize and manage rescue operations based upon initial and follow-up scene assessment.

***EMS-150 Emergency Vehicles & EMS Comm 1 3 0 2**
Prerequisites: None
Corequisites: None
This course examines the principles governing maintenance of emergency vehicles and EMS communication equipment and is required for paramedic certification. Topics include applicable motor vehicle laws affecting emergency vehicle operation, defensive driving, collision avoidance techniques, communication systems, and information management systems. Upon completion, students should have a basic knowledge of emergency vehicles, maintenance, and communication needs.

***EMS-160 Cardiology I 2 3 0 3**
Prerequisites: EMS-110
Corequisites: EMS-130
This course introduces the study of cardiovascular emergencies and is required for paramedic certification. Topics include anatomy and physiology, pathophysiology, electrophysiology, and rhythm interpretation. Upon completion, students should be able to recognize and interpret rhythms.

***EMS 210 Adv. Patient Assessment 1 3 0 2**
Prerequisites: EMS 110
Corequisites: None
This course covers advanced patient assessment techniques and is required for paramedic certification. Topics include initial assessment, medical-trauma history, field impression, complete physical exam process, on-going assessment, and documentation skills. Upon completion, students should be able to utilize basic communication skills and record and report collected patient data.

***EMS-220 Cardiology II 2 3 0 3**
Prerequisites: EMS-122, EMS-130, and EMS-160
Corequisites: EMS-221
This course provides an in-depth study of cardiovascular emergencies and is required for paramedic certification. Topics include assessment and treatment of cardiac emergencies, cardiac pharmacology, and patient care. Upon completion, students should be able to manage the cardiac patient.

***EMS-221 EMS Clinical Practicum II 0 0 6 2**
Prerequisites: EMS-121 or EMS-122
Corequisites: EMS-220
This course provides clinical experiences in the hospital and/or field. Emphasis is placed on increasing the proficiency of students' skills and abilities in patient assessments and the delivery of care. Upon completion, students should be able to demonstrate continued progress in advanced-level patient care.

***EMS-231 EMS Clinical Pract III 0 0 9 3**
Prerequisites: EMS 130, EMS 220, EMS 221, and EMS 240
Corequisites: None
This course provides clinical experiences in the hospital and/or field. Emphasis is placed on enhancing the students' skills and abilities in providing advanced-level care. Upon completion, students should be able to demonstrate continued progress in advanced-level patient care.

*The numbers following course titles indicate **class**, **lab**, **clinic/co-op/shop**, and **credit** hours, respectively.*

***EMS-240 Patients W/ Special Challenges 1 2 0 2**
Prerequisites: EMS-122 and EMS-130
Corequisites: EMS 221
This course includes concepts of crisis intervention and techniques of interacting with patients with special challenges and is required for paramedic certification. Topics include appropriate intervention and interaction for neglected, abused, terminally ill, chronically ill, technology assisted, bariatric, physically challenged, mentally challenged, or assaulted patients as well as behavioral emergencies. Upon completion, students should be able to recognize and manage the care of patients with special challenges.

***EMS-241 EMS Clinical Practicum IV 0 0 12 4**
Prerequisites: EMS-130 and EMS-231
Corequisites: EMS 285
This course provides clinical experiences in the hospital and/or field. Emphasis is placed on mastering the skills/competencies required of the paramedic providing advanced-level care. Upon completion, students should be able to provide advanced-level patient care as an entry-level paramedic.

***EMS-250 Medical Emergencies 3 3 0 4**
Prerequisites: EMS-122 and EMS-130
Corequisites: EMS 231
This course provides an in-depth study of medical conditions frequently encountered in the prehospital setting and is required for paramedic certification. Topics include appropriate interventions/treatments for disorders/diseases/injuries affecting the following systems: respiratory, neurological, abdominal/gastrointestinal, endocrine, genitourinary, musculoskeletal, and immunological as well as toxicology, infectious diseases and diseases of the eyes, ears, nose and throat. Upon completion, students should be able to recognize, assess and manage the care of frequently encountered medical conditions based upon initial patient assessment.

***EMS-260 Trauma Emergencies 1 3 0 2**
Prerequisites: EMS-122 and EMS-130
Corequisites: EMS 231
This course provides in-depth study of trauma including pharmacological interventions for conditions frequently encountered in the prehospital setting and is required for paramedic certification. Topics include an overview of thoracic, abdominal, genitourinary, orthopedic, neurological, and multi-system trauma, soft tissue trauma of the head, neck, and face as well as environmental emergencies. Upon completion, students should be able to recognize and manage trauma situations based upon patient assessment and should adhere to standards of care.

***EMS-270 Life Span Emergencies 3 3 0 4**
Prerequisites: EMS-122 and EMS-130
Corequisites: EMS 231
This course covers medical/ethical/legal issues and the spectrum of age-specific emergencies from conception through death required for paramedic certification. Topics include gynecological, obstetrical, neonatal, pediatric, and geriatric emergencies and pharmacological therapeutics. Upon completion, students should be able to recognize and treat age-specific emergencies.

***EMS-280 EMS Bridging Course 2 2 0 3**
Prerequisites: None
Corequisites: None
This course is designed to provide currently credentialed state or national Paramedic students with the most current education trends in Paramedic Practice. Emphasis is placed on transitions in healthcare. Upon completion, students should be able to integrate emerging trends in pre-hospital care.

***EMS-285 EMS Capstone** 1 3 0 2
Prerequisites: EMS-220, EMS-231, EMS-250, and EMS-260
Corequisites: EMS-241
This course provides an opportunity to demonstrate problem-solving skills as a team leader in simulated patient scenarios and is required for paramedic certification. Emphasis is placed on critical thinking, integration of didactic and psychomotor skills, and effective performance in simulated emergency situations. Upon completion, students should be able to recognize and appropriately respond to a variety of EMS related events.

English

ENG 002 Transition English 0 6 3
Prerequisites: None
Corequisites: None
This course provides an opportunity to customize foundational English content in specific areas and will include developing a growth mindset. Topics include developing the academic habits, learning strategies, social skills, and growth mindset necessary to be successful in college-level English. Upon completion, students should be able to build a stronger foundation for success in their gateway level English courses by obtaining skills through a variety of instructional strategies with emphasis placed on the most essential prerequisite knowledge.

ENG-011 Writing and Inquiry Support 1 2 2
Prerequisites: None
Corequisites: None
This course is designed to support students in the development of skills necessary for success in ENG 111 by complementing, supporting, and reinforcing ENG 111 Student Learning Outcomes. Emphasis is placed on developing a growth mindset, expanding skills for use in active reading and writing processes, recognizing organizational relationships within texts from a variety of genres and formats, and employing appropriate technology when reading and composing texts. Upon completion, students should be able to apply active reading strategies to college-level texts and produce unified, well-developed writing using standard written English.

ENG-110 Freshman Composition 3 0 3
Prerequisites: Take one set:
Set 1: DRE 097
Set 2: ENG 002
Set 3: BSP 4002
Set 4: ENG 025
Corequisites: None
This course is designed to develop informative and business writing skills. Emphasis is placed on logical organization of writing, including effective introductions and conclusions, precise use of grammar, and appropriate selection and use of sources. Upon completion, students should be able to produce clear, concise, well-organized short papers.

ENG-111 Writing and Inquiry 3 0 3
Prerequisites: Take one set:
Set 1: DRE 097
Set 2: ENG 002
Set 3: BSP 4002
Set 4: ENG 025
Corequisites: ENG 011 or ENG 045
This course is designed to develop the ability to produce clear writing in a variety of genres and formats using a recursive process. Emphasis includes inquiry, analysis, effective use of rhetorical strategies, thesis development, audience awareness, and revision. Upon completion, students should be able to produce unified, coherent, well-developed essays using standard written English. This is a Universal General Education Transfer Component (UGETC) course that satisfies English Composition.

ENG-112 Writing/Research in the Disc 3 0 3
Prerequisites: C or better in ENG-111
Corequisites: None
This course, the second in a series of two, introduces research techniques, documentation styles, and writing strategies. Emphasis is placed on analyzing information and ideas and incorporating research findings into documented writing and research projects. Upon completion, students should be able to evaluate and synthesize information from primary and secondary sources using documentation appropriate to various disciplines. This is a Universal General Education Transfer Component (UGETC) course that satisfies English Composition.

ENG-114 Prof Research and Reporting 3 0 3
Prerequisites: C or better in ENG-111
Corequisites: None
This course, the second in a series of two, is designed to teach professional communication skills. Emphasis is placed on research, listening, critical reading and thinking, analysis, interpretation, and design used in oral and written presentations. Upon completion, students should be able to work individually and collaboratively to produce well-designed business and professional written and oral presentations. Students entering this course should be able to demonstrate in-depth knowledge in a technical field and should anticipate interdepartmental evaluation of course projects. This course has been approved for transfer under the CAA as a general education course in English Composition.

ENG-125 Creative Writing I 3 0 3
Prerequisites: C or better in ENG-111
Corequisites: None
This course is designed to provide students with the opportunity to practice the art of creative writing. Emphasis is placed on writing fiction, poetry, and sketches. Upon completion, students should be able to craft and critique their own writing and critique the writing of others. This course has been approved for transfer under the CAA as a premajor and/or elective course requirement.

ENG-231 American Literature I 3 0 3
Prerequisites: C or better in ENG-112 or ENG-114
Corequisites: None
This course covers selected works in American literature from its beginnings to 1865. Emphasis is placed on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to analyze and interpret literary works in their historical and cultural contexts. This is a Universal General Education Transfer Component (UGETC) course that satisfies Humanities/Fine Arts.

ENG-232 American Literature II 3 0 3
Prerequisites: C or better in ENG-112 or ENG-114
Corequisites: None
This course covers selected works in American literature from 1865 to the present. Emphasis is placed on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to analyze and interpret literary works in their historical and cultural contexts. This is a Universal General Education Transfer Component (UGETC) course that satisfies Humanities/Fine Arts.

ENG-241 British Literature I 3 0 3
Prerequisites: C or better in ENG-112 or ENG-114
Corequisites: None
This course covers selected works in British literature from its beginnings to the Romantic Period. Emphasis is placed on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to interpret, analyze, and respond to literary works in their historical and cultural contexts. Reading an eighteenth century novel is required. This is a Universal General Education Transfer Component (UGETC) course that satisfies Humanities/Fine Arts.

ENG-242 British Literature II 3 0 3
Prerequisites: C or better in ENG-112 or ENG-114
Corequisites: None
This course covers selected works in British literature from the Romantic Period to the present. Emphasis is placed on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to interpret, analyze, and respond to literary works in their historical and cultural contexts. Reading a nineteenth century novel is required. This is a Universal General Education Transfer Component (UGETC) course that satisfies Humanities/Fine Arts.

Entrepreneurship

ETR 210 Intro to Entrepreneurship 3 0 3
Prerequisites: None
Corequisites: None
This course provides a survey of the starting and operating of an entrepreneurial venture. Topics include new venture creation, the business plan, economics of the business, determining resource needs and acquiring resources, marketing, technology, leadership skills, and business ethics. Upon completion, students should be able to demonstrate an understanding of entrepreneurship concepts and how to use the entrepreneurial mindset to succeed in their careers.

ETR 215 Law for Entrepreneurs 3 0 3
Prerequisites: None
Corequisites: None
This course introduces students to basic legal concepts specifically relevant to a business start-up venture. Topics include bailments and documents of title, nature and form of sales, risk and property rights, obligations and performance, business organizations, and agency and employment. Upon completion, students should be able to assess the legal responsibilities of a business start-up.

ETR 220 Innovation and Creativity 3 0 3
Prerequisites: None
Corequisites: None
This course provides a study of developing and enhancing individual and organizational creativity and innovation. Topics include that innovation needs to be applied to products, services, and processes to increase competitive advantages and add value to businesses. Upon completion, students should be able to apply innovation and creativity principles in the work place.

French

FRE-111 Elementary French I 3 0 3
Prerequisites: DRE 097, DRE 098, ENG 002 Tier 1, ENG 025, or C or better in ENG 110 or ENG 111
Corequisites: None
This course introduces the fundamental elements of the French language within a cultural context. Emphasis is placed on the development of basic listening, speaking, reading, and writing skills. Upon completion, students should be able to comprehend and respond with grammatical accuracy to spoken and written French and demonstrate cultural awareness. This course has been approved for transfer under the CAA as a general education course in Humanities/Fine Arts.

FRE-112 Elementary French II 3 0 3
Prerequisites: C or better in FRE-111
Corequisites: None
This course is a continuation of FRE 111 focusing on the fundamental elements of the French language within a cultural context. Emphasis is placed on the progressive development of listening, speaking, reading, and writing skills. Upon completion, students should be able to comprehend and respond with increasing proficiency to spoken and written French and demonstrate further cultural awareness. This course has been approved for transfer under the CAA as a general education course in Humanities/Fine Arts.

FRE-211 Intermediate French I 3 0 3
Prerequisites: C or better in FRE-112
Corequisites: None
This course provides a review and expansion of the essential skills of the French language. Emphasis is placed on the study of authentic and representative literary and cultural texts. Upon completion, students should be able to communicate effectively, accurately, and creatively about the past, present, and future. This course has been approved for transfer under the CAA as a general education course in Humanities/Fine Arts.

FRE-212 Intermediate French II 3 0 3
Prerequisites: C or better in FRE-211
Corequisites: None
This course is a continuation of FRE 211. Emphasis is placed on the continuing study of authentic and representative literary and cultural texts. Upon completion, students should be able to communicate spontaneously and accurately with increasing complexity and sophistication. This course has been approved for transfer under the CAA as a general education course in Humanities/Fine Arts.

Geographic Information Systems

GIS-111 Introduction to GIS 2 2 3
Prerequisites: None
Corequisites: None
This course introduces the hardware and software components of a Geographic Information System and reviews GIS applications. Topics include data structures and basic functions, methods of data capture and sources of data, and the nature and characteristics of spatial data and objects. Upon completion, students should be able to identify GIS hardware components, typical operations, products/applications, and differences between database models and between raster and vector systems. The ESRI software used in the course only works in a Windows environment. This course has been approved for transfer under the CAA as a premajor and/or elective course requirement.

GIS-121 Georeferencing & Mapping 2 2 3
Prerequisites: C or better in GIS 111
Corequisites: None
This course introduces coordinate systems, fundamentals of surveying, and cartography. Topics include the theory, acquisition, and use of locational data using both continuous and discrete georeferencing methods. Upon completion, students should be able to identify appropriate coordinate systems for a situation and translate data into correct map form.

GIS-215 GIS Data Models 2 2 3
Prerequisites: C or better in GIS-111
Corequisites: None
This course covers interpreting and understanding of a variety data formats available in GIS. Topics include the similarities and differences between data models as well as how data is treated differently within each format, to include the conversion of data between different environments. Upon completion, students should be able to demonstrate an understanding of the fundamentals of GIS data storage and interoperability.

Health

HEA-110 Personal Health/Wellness 3 0 3
Prerequisites: None
Corequisites: None
This course provides an introduction to basic personal health and wellness. Emphasis is placed on current health issues such as nutrition, mental health, and fitness. Upon completion, students should be able to demonstrate an understanding of the factors necessary to the maintenance of health and wellness. This course has been approved for transfer under the CAA as a premajor and/or elective course requirement.

HEA-112 First Aid and CPR 1 2 2
Prerequisites: None
Corequisites: None
This course introduces the basics of emergency first aid treatment. Topics include rescue breathing, CPR, first aid for choking and bleeding, and other first aid procedures. Upon completion, students should be able to demonstrate skills in providing emergency care for the sick and injured until medical help can be obtained. This course has been approved for transfer under the CAA as a premajor and/or elective course requirement.

Heavy Equipment Maintenance

***HET-110 Diesel Engines 3 9 6**
Prerequisites: None
Corequisites: None
This course introduces theory, design, terminology, and operating adjustments for diesel engines. Emphasis is placed on safety, theory of operation, inspection, measuring, and rebuilding diesel engines according to factory specifications. Upon completion, students should be able to measure, diagnose problems, and repair diesel engines.

***HET-114 Power Trains 3 6 5**
Prerequisites: None
Corequisites: None
This course introduces power transmission devices. Topics include function and operation of gears, chains, clutches, planetary gears, drive lines, differentials, and transmissions. Upon completion, students should be able to identify, research specifications, repair, and adjust power train components.

***HET-115 Electronic Engines 2 3 3**
Prerequisites: None
Corequisites: None
This course introduces the principles of electronically controlled diesel engines. Emphasis is placed on testing and adjusting diesel engines in accordance with manufacturers' specifications. Upon completion, students should be able to diagnose, test, and calibrate electronically controlled diesel engines.

***HET-119 Mechanical Transmissions 2 2 3**
Prerequisites: None
Corequisites: None
This course introduces the operating principles of mechanical medium and heavy duty truck transmissions. Topics include multiple counter shafts, power take-offs, sliding idler clutches, and friction clutches. Upon completion, students should be able to diagnose, inspect, and repair mechanical transmissions.

***HET-125 Preventive Maintenance 1 3 2**
Prerequisites: None
Corequisites: None
This course introduces preventive maintenance practices used on medium and heavy duty vehicles and rolling assemblies. Topics include preventive maintenance schedules, services, DOT rules and regulations, and road-ability. Upon completion, students should be able to set up and follow a preventive maintenance schedule as directed by manufacturers.

***HET-231 Med/Hvy Duty Brake Systems 1 3 2**
Prerequisites: None
Corequisites: None
This course covers the theory and repair of braking systems used in medium and heavy duty vehicles. Topics include air, hydraulic, and ABS system diagnosis and repair. Upon completion, students should be able to troubleshoot, adjust, and repair braking systems on medium and heavy duty vehicles.

***HET-233 Suspension and Steering 2 4 4**
Prerequisites: None
Corequisites: None
This course introduces the theory and principles of medium and heavy duty steering and suspension systems. Topics include wheel and tire problems, frame members, fifth wheel, bearings, and coupling systems. Upon completion, students should be able to troubleshoot, adjust, and repair suspension and steering components on medium and heavy duty vehicles.

Health and Fitness Science

HFS-110 Exercise Science 4 0 4
Prerequisites: None
Corequisites: None
This course is a survey of scientific principles, methodologies, and research as applied to exercise and physical adaptations to exercise. Topics include the basic elements of kinesiology, biomechanics, and motor learning. Upon completion, students should be able to identify and describe physiological responses and adaptations to exercise.

HFS-111 Fitness & Exercise Testing I 3 2 4
Prerequisites: None
Corequisites: None
This course introduces the student to graded exercise testing. Topics include various exercise testing protocols with methods for prescribing exercise programs based on exercise tolerance tests and the use of various equipment and protocols. Upon completion, students should be able to conduct specific exercise tests and the use of various equipment.

HFS-114 Physical Fit Theory & Instr 4 0 4
Prerequisites: HFS 110
Corequisites: None
This course provides information about related components of fitness and general information about the industry. Topics include the study of the components of fitness, theories of exercise and fitness, and information about the industry. Upon completion, students should be able to identify fitness components and demonstrate these in an exercise setting.

HFS-116 Pvnt & Care Exer Injuries 2 2 3
Prerequisites: None
Corequisites: None
This course provides information about the care and prevention of exercise injuries. Topics include proper procedures, prevention techniques, and on-site care of injuries. Upon completion, students should be able to demonstrate the knowledge and skills necessary to prevent and care for exercise related injuries.

HFS-118 Fitness Facility Mgmt 4 0 4
Prerequisites: None
Corequisites: None
This course provides information about the management and operation of health and fitness facilities and programs. Topics include human resources, sales and marketing, member retention, financial management, facility design and maintenance, and risk management. Upon completion, students should be able to demonstrate the knowledge and skills necessary to effectively manage a fitness facility.

HFS-120 Group Exer Instruction 2 2 3
Prerequisites: HFS 110
Corequisites: None
This course introduces the concepts and guidelines of instructing exercise classes. Topics include program designs, working with special populations, and principles of teaching and monitoring physical activity. Upon completion, students should be able to demonstrate basic skills in instructing an exercise class and monitoring workout intensity.

HFS-210 Personal Training 2 2 3
Prerequisites: HFS-110 and HFS-111
Corequisites: None
This course introduces the student to the aspects of personal (one-on-one) training. Topics include training systems, marketing, and program development. Upon completion, students should be able to demonstrate personal training techniques and competencies of same.

HFS-212 Exercise Programming 2 2 3
Prerequisites: HFS-110
Corequisites: None
This course provides information about organizing, scheduling, and implementation of physical fitness programs. Topics include programming for various age groups, competitive activities and special events, and evaluating programs. Upon completion, students should be able to organize and implement exercise activities in a competent manner.

HFS-218 Lifestyle Chng & Wellness 3 2 4
Prerequisites: None
Corequisites: None
This course introduces health risk appraisals and their application to lifestyle changes. Topics include nutrition, weight control, stress management, and the principles of exercise. Upon completion, students should be able to conduct health risk appraisals and apply behavior modification techniques in a fitness setting.

History

HIS-111 World Civilizations I 3 0 3
Prerequisites: Take DRE 097, DRE 098, ENG 002 Tier 1, ENG 025, or C or better in ENG 110 or ENG 111
Corequisites: None
This course introduces world history from the dawn of civilization to the early modern era. Topics include Eurasian, African, American, and Greco-Roman civilizations and Christian, Islamic and Byzantine cultures. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in pre-modern world civilizations. This is a Universal General Education Transfer Component (UGETC) course that satisfies Social/Behavioral Sciences.

HIS-112 World Civilizations II 3 0 3
Prerequisites: Take DRE 097, DRE 098, ENG 002 Tier 1, ENG 025, or C or better in ENG 110 or ENG 111
Corequisites: None
This course introduces world history from the early modern era to the present. Topics include the cultures of Africa, Europe, India, China, Japan, and the Americas. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in modern world civilizations. This is a Universal General Education Transfer Component (UGETC) course that satisfies Social/Behavioral Sciences.

HIS-131 American History I 3 0 3
Prerequisites: Take DRE 097, DRE 098, ENG 002 Tier 1, ENG 025, or C or better in ENG 110 or ENG 111
Corequisites: None
This course is a survey of American history from pre-history through the Civil War era. Topics include the migrations to the Americas, the colonial and revolutionary periods, the development of the Republic, and the Civil War. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in early American history. This is a Universal General Education Transfer Component (UGETC) course that satisfies Social/Behavioral Sciences.

HIS-132 American History II 3 0 3
Prerequisites: Take DRE 097, DRE 098, ENG 002 Tier 1, ENG 025, or C or better in ENG 110 or ENG 111
Corequisites: None
This course is a survey of American history from the Civil War era to the present. Topics include industrialization, immigration, the Great Depression, the major wars, the Cold War, and social conflict. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in American history since the Civil War. This is a Universal General Education Transfer Component (UGETC) course that satisfies Social/Behavioral Sciences.

Hotel & Restaurant Management

***HRM-110 Intro to Hosp & Tourism 3 0 3**
Prerequisites: None
Corequisites: None
This course covers the growth and progress of the hospitality industry. Topics include tourism, lodging, resorts, gaming, restaurants, foodservice and clubs. Upon completion, students should be able to demonstrate an understanding of the background, context, and career opportunities that exist within the hospitality industry.

*HRM-120 Front Office Procedures 3 0 3

Prerequisites: None
Corequisites: None

This course introduces a systematic approach to lodging front office procedures. Topics include reservations, registration, guest satisfaction, occupancy and revenue management, security, interdepartmental communications, and related guest services. Upon completion, students should be able to demonstrate a basic understanding of current front office operating systems, including efficient and courteous guest service.

*HRM-124 Guest Service Management 2 2 3

Prerequisites: None
Corequisites: None

This course is designed to provide an introduction to the culture of dining room service management. Emphasis is placed on the dignity and psychology of service work, dining room organization/infrastructure, service delivery, and modeling management roles in a dining room environment. Upon completion, students should be able to demonstrate an understanding of the guest/server dynamic and apply these principles in a dining room setting.

*HRM-135 Facilities Management 3 0 3

Prerequisites: None
Corequisites: None

This course introduces the basic elements of planning and designing hospitality facilities, including environmental impacts, maintenance, and upkeep. Topics include equipment and plant preventive maintenance, engineering, interior design, space utilization, remodeling and expansion, and traffic and work flow patterns. Upon completion, students should be able to demonstrate an understanding of the planning, design, national certification, and maintenance of hospitality physical plants and equipment.

*HRM-140 Legal Issues–Hospitality 3 0 3

Prerequisites: None
Corequisites: None

This course covers the rights and responsibilities that the law grants to or imposes upon the hospitality industry. Topics include federal and state regulations, historical and current practices, safety and security, risk management, loss prevention, relevant torts, and contracts. Upon completion, students should be able to demonstrate an understanding of the legal system and the concepts necessary to prevent or minimize organizational liability.

*HRM 170 Food Truck Operations 3 0 3

Prerequisites: CUL 110, CUL 142, HRM 220 and HRM 245
Corequisites: None

This course introduces students to mobile food truck management and provide the fundamentals of establishing and operating a food truck. Emphasis is placed on marketing, budget management, menu development, interior food truck design, and business plan implementation. Upon completion, students should be able to formulate a food truck concept, understand local, state, and federal requirements, create menu content and a marketing strategy, and develop a viable business plan.

*HRM-180 The Business of Tourism 3 0 3

Prerequisites: HRM-110
Corequisites: None

This course covers concepts related to tourism through a global business perspective, examining management, marketing, and finance issues related to the tourism industry. Topics include marketing to the traveling public, delivering quality tourism services, the economic, environmental and political impacts of tourism and capturing technology’s competitive advantages in the tourism industry. Upon completion, students should be able to demonstrate an understanding of an integrated model of tourism that addresses consumer behavior, service quality and the future of tourism.

*HRM-215 Restaurant Management 3 0 3

Prerequisites: CUL-135, CUL-135A and HRM-124
Corequisites: HRM-215A

This course provides an overview of the responsibilities and activities encountered in managing a food and beverage operation. Topics include planning, organization, accounting, marketing, trends, and human resources from an integrated managerial viewpoint. Upon completion, students should be able to demonstrate an understanding of the operation of a restaurant. Students will also examine menu design, layout, marketing, concept development, target consumers and trends.

*HRM-215A Restaurant Management Lab 0 2 1

Prerequisites: CUL-135, CUL-135A and HRM-124
Corequisites: HRM-215

This course provides a laboratory experience for enhancing student skills in the responsibilities and activities encountered in managing a food and beverage operation. Emphasis is placed on practical applications of planning, organization, accounting, marketing, trends, and human resources from an integrated managerial viewpoint. Upon completion, students should be able to demonstrate a basic proficiency in restaurant management operations which may include overseeing and execution of production and service. Students will analyze menu mix and guest feedback as it relates to the overall success of foodservice operations.

*HRM-220 Cost Control–Food & Bev 3 0 3

Prerequisites: None
Corequisites: None

This course introduces controls and accounting procedures as applied to costs in the hospitality industry. Topics include reports, cost control, planning and forecasting, control systems, financial statements, operational efficiencies, labor controls and scheduling. Upon completion, students should be able to demonstrate an understanding of food, beverage, and labor cost control systems for operational troubleshooting and problem solving.

*HRM-225 Beverage Management 3 0 3

Prerequisites: None
Corequisites: None

This course introduces the management of beverages served in hospitality operations. Topics include history and trends; service, procurement and storage; knowledge and control of wines and fermented/distilled beverages; and non-alcoholic beverages, coffees, and teas. Upon completion, students should be able to demonstrate an understanding of responsible alcohol service and the knowledge of beverages consumed in a hospitality operation.

*HRM-240 Marketing for Hospitality 3 0 3

Prerequisites: None
Corequisites: None

This course covers planning, organizing, directing, and analyzing the results of marketing programs for the hospitality industry. Emphasis is placed on target marketing, marketing mix, analysis, product and image development, use of current media, sales planning, advertising, public relations, and collateral materials. Upon completion, students should be able to apply the marketing process as it relates to the hospitality industry.

***HRM-245 Human Resource Mgmt-Hosp 3 0 3**
Prerequisites: None
Corequisites: None
This course introduces a systematic approach to human resource management in the hospitality industry. Topics include training/development, staffing, selection, hiring, recruitment, evaluation, benefit administration, employee relations, labor regulations/laws, discipline, motivation, productivity, shift management, contract employees and organizational culture. Upon completion, students should be able to apply human resource management skills for the hospitality industry.

***HRM-280 Mgmt Problems–Hospitality 3 0 3**
Prerequisites: HRM-110, HRM-120, HRM-210, HRM-215, HRM-220, HRM-225, HRM-240, HRM-245 and WBL-112
Corequisites: None
This course is designed to introduce students to timely issues within the hospitality industry and is intended to move students into a managerial mindset. Emphasis is placed on problem-solving skills using currently available resources. Upon completion, students should be able to demonstrate knowledge of how hospitality management principles may be applied to real challenges facing industry managers.

Human Services

***HSE-110 Intro to Human Services 2 2 0 3**
Prerequisites: None
Corequisites: None
This course introduces the human services field, including the history, agencies, roles, and careers. Topics include personal/professional characteristics, diverse populations, community resources, disciplines in the field, systems, ethical standards, and major theoretical and treatment approaches. Upon completion, students should be able to identify the knowledge, skills, and roles of the human services worker. Check with the North Carolina Substance Abuse Professional Practice Board (NCSAPPB) to verify if this course has been approved for training/education credit for substance abuse certification/recertification. This course has been approved for transfer under the CAA as a premajor and/or elective course requirement.

***HSE-123 Interviewing Tech Human Services 2 2 0 3**
Prerequisites: None
Corequisites: None
This course covers the purpose, structure, focus, and techniques utilized in effective interviewing. Emphasis is placed on observing, attending, listening, responding, summarizing, and documenting with instructor supervision. Upon completion, students should be able to perform the basic interviewing skills needed to facilitate the helping relationship.

***HSE-210 Diversity Ethics and Trends 3 0 0 3**
Prerequisites: None
Corequisites: None
This course is designed to provide students with an in-depth understanding of the role of diversity and ethical considerations within the human services profession. Emphasis is placed on the knowledge and skills in the evolving landscape of human services. Upon completion, students should be able to apply ethical decision-making, demonstrate an understanding of diverse perspectives, and identify current trends in the human services field.

***HSE 212 Group Dynamics 3 0 0 3**
Prerequisites: None
Corequisites: None
This course introduces the concepts of group processes and group dynamics. Emphasis is placed on essential tools for understanding, participating in, and contributing to group processes. Upon completion, students should be able to identify and explain how people are influenced by their interactions in group settings and facilitate various groups.

***HSE-220 Case Management 2 2 0 3**
Prerequisites: HSE-110
Corequisites: None
This course covers a variety of tasks associated with professional case management. Topics include needs assessment, service planning, referral procedures, documentation, follow-up, and integration of services. Upon completion, students should be able to effectively manage the care of the whole person from initial contact through termination of services.

***HSE 223 Counseling Theories & Skills 3 0 0 3**
Prerequisites: None
Corequisites: None
This course provides an in-depth exploration of foundational theories and practical techniques essential for those working in diverse human services settings. Emphasis is placed on self-awareness, problem-solving, decision-making, and personal growth. Upon completion, students should be able to apply these theories to real-life scenarios, and develop professional skills crucial for fostering supportive relationships in various settings.

***HSE-225 Crisis Intervention 3 0 0 3**
Prerequisites: None
Corequisites: None
This course introduces the types of crises and the principles of intervention. Emphasis is placed on identifying culturally competent techniques for intervening in various crisis situations. Upon completion, students should be able to assess crisis situations and respond effectively.

Humanities

HUM-110 Technology and Society 3 0 3
Prerequisites: None
Corequisites: None
This course considers technological change from historical, artistic, and philosophical perspectives and its effect on human needs and concerns. Emphasis is placed on the causes and consequences of technological change. Upon completion, students should be able to critically evaluate the implications of technology. This course has been approved for transfer under the CAA as a general education course in Humanities/Fine Arts.

HUM-115 Critical Thinking 3 0 3
Prerequisites: Take DRE 097, DRE 098, ENG 002 Tier 1, ENG 025, or C or better in ENG 110 or ENG 111
Corequisites: None
This course introduces the use of critical thinking skills in the context of human conflict. Emphasis is placed on evaluating information, problem solving, approaching cross-cultural perspectives, and resolving controversies and dilemmas. Upon completion, students should be able to demonstrate orally and in writing the use of critical thinking skills in the analysis of appropriate texts. This course has been approved for transfer under the CAA as a general education course in Humanities/Fine Arts.

HUM-220 Human Values and Meaning 3 0 3
Prerequisites: C or better in ENG-111 and successful completion of 40 credit hours in the AA or AS program
Corequisites: None
This course presents some major dimensions of human experience as reflected in art, music, literature, philosophy, and history. Topics include the search for identity, the quest for knowledge, the need for love, the individual and society, and the meaning of life. Upon completion, students should be able to recognize interdisciplinary connections and distinguish between open and closed questions and between narrative and scientific models of understanding. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts and is restricted to students in the AA and AS programs who have completed a minimum of 40 credit hours.

Hydraulics

***HYD-110 Hydraulics/Pneumatics I 2 3 3**
Prerequisites: DMA-050 or MAT-003 Tier 2, or placement
Corequisites: None
This course introduces the basic components and functions of hydraulic and pneumatic systems. Topics include standard symbols, pumps, control valves, control assemblies, actuators, FRL, maintenance procedures, and switching and control devices. Upon completion, students should be able to understand the operation of a fluid power system, including design, application, and troubleshooting.

***HYD-112 Hydraulics-Med/Heavy Duty 1 2 2**
Prerequisites: None
Corequisites: None
This course introduces hydraulic theory and applications as applied to mobile equipment. Topics include component studies such as pumps, motors, valves, cylinders, filters, reservoirs, lines, and fittings. Upon completion, students should be able to identify, diagnose, test, and repair hydraulic systems using schematics and technical manuals.

Industrial Science

***ISC 116 Lean Mfg Principles/Practices 0 2 1**
Prerequisites: None
Corequisites: None
This course introduces lean concepts/techniques that streamline the manufacturing environment. Emphasis is placed on describing concepts of workflow, velocity, and lead-time; analyzing how waste affects both profit and customer satisfaction; applying concepts of lean manufacturing to include visual management, value stream analysis and Kaizan to improve performance. Upon completion, students should be able to apply lean manufacturing principles to maintain a high-quality, efficient production process.

***ISC-121 Envir Health & Safety 3 0 3**
Prerequisites: None
Corequisites: None
This course covers workplace environmental, health, and safety concepts. Emphasis is placed on managing the implementation and enforcement of environmental health and safety regulations and on preventing accidents, injuries, and illnesses. Upon completion, students should be able to demonstrate an understanding of basic concepts of environmental health and safety.

***ISC 132 Mfg Quality Control 2 3 3**
Prerequisites: None
Corequisites: None
This course introduces quality concepts and techniques used in industry. Topics include elementary statistics and probability, process control, process capability, and quality improvement tools. Upon completion, students should be able to demonstrate an understanding of the concepts and principles of quality and apply them to the work environment.

Law Enforcement Training

***LET 110 Basic Law Enforcement BLET 28 27 37**
Prerequisites: None

Corequisites: None
This course covers the basic knowledge and skills needed for entry-level employment as a law enforcement officer in North Carolina as required by the Criminal Justice Education and Training Standards Commission and the Sheriffs' Education and Training Standards Commission. Topics include Commission-mandated content specific to law enforcement in North Carolina, criminal investigations, traffic enforcement/investigations, patrol techniques, crisis intervention, communication and de-escalation skills, interviews and interrogations, criminal and constitutional law, court procedures, civil process, ethical problem solving, and officer wellness. Upon completion, students should be able to demonstrate competence in the content required for the state comprehensive certification examination administered by the NC Department of Justice.

Machining

MAC-122 CNC Turning 1 3 2
Prerequisites: BPR-111, MAC-121
Corequisites: None
This course introduces the programming, setup, and operation of CNC turning centers. Topics include programming formats, control functions, program editing, part production, and inspection. Upon completion, students should be able to manufacture simple parts using CNC turning centers.

MAC-124 CNC Milling 1 3 2
Prerequisites: BPR 111, MAC 121
Corequisites: None
This course introduces the manual programming, setup, and operation of CNC machining centers. Topics include programming formats, control functions, program editing, part production, and inspection. Upon completion, students should be able to manufacture simple parts using CNC machining centers.

MAC 131 Blueprint Reading/Mach I 1 2 2
Prerequisites: None
Corequisites: None
This course covers the basic principles of blueprint reading and sketching. Topics include multi-view drawings; interpretation of conventional lines; and dimensions, notes, and thread notations. Upon completion, students should be able to interpret basic drawings, visualize parts, and make pictorial

sketches.

MAC 132 Blueprint Reading/Mach II 1 2 2
Prerequisites: None
Corequisites: None
This course introduces more complex industrial blueprints. Emphasis is placed on auxiliary views, section views, violations of true project, special views, applications of GD & T, and interpretation of complex parts. Upon completion, students should be able to read and interpret complex industrial blueprints.

MAC-141 Machining Applications I 2 6 4
Prerequisites: None
Corequisites: None
This course provides an introduction to a variety of material-working processes that are common to the machining industry. Topics include safety, process-specific machining equipment, measurement devices, set-up and layout instruments, and common shop practices. Upon completion, students should be able to safely demonstrate basic machining operations, accurately measure components, and effectively use layout instruments.

MAC 141A Machining Applications I Lab 0 6 2
Prerequisites: None
Corequisites: None
This course provides an introduction to a variety of material-working processes, in a laboratory setting, that are common to the machining industry. Topics include safety, process-specific machining equipment, measurement devices, set-up and layout instruments, and common shop practices. Upon completion, students should be able to safely demonstrate basic machining operations, accurately measure components, and effectively use layout instruments.

MAC-142 Machining Applications II 2 6 4
Prerequisites: MAC-111 or MAC-141
Corequisites: None
This course provides instruction in the wide variety of processes associated with machining. Topics include safety, equipment set-up, holding fixtures, tooling, cutting speeds and depths, metal properties, and proper finishes. Upon completion, students should be able to safely demonstrate advanced machining operations, accurately measure components, and produce accurate components with a proper finish.

MAC 160 Coordinate Measuring Mach 2 2 3
Prerequisites: None
Corequisites: None
This course introduces methods in the setup and operation of coordinate measuring machines. Emphasis is placed on the programming of coordinate measuring machines and the measurement of complex parts. Upon completion, students should be able to demonstrate skills in programming, operation, and setup of coordinate measuring machines.

MAC 171 Measure/Material & Safety 0 2 1
Prerequisites: None
Corequisites: None
This course introduces precision measuring instruments, process control and adjustment, inspection, material handling and workplace safety. Topics include properly identifying and handling various measurement instruments and materials, process control, adjustment and improvement, personal protective equipment (PPE) and OSHA safety regulations. Upon completion, students should be able to safely demonstrate effective measurement techniques, identify and handle various materials, and explain safe industry practices.

MAC-226 CNC EDM Machining 1 3 2
Prerequisites: BPR-111, MAC-121
Corequisites: None
This course introduces the programming, setup, and operation of CNC electrical discharge machines. Topics include programming formats, control functions, program editing, production of parts, and inspection. Upon completion, students should be able to manufacture simple parts using CNC electrical discharge machines.

MAC 228 Advanced CNC Processes 2 3 3
Prerequisites: None
Corequisites: None
This course covers advanced programming, setup, and operation of CNC turning centers and CNC milling centers. Topics include advanced programming formats, control functions, program editing, and part production and inspection. Upon completion, students should be able to manufacture complex parts using CNC turning and milling centers.

MAC 234 Adv Multi-Axis Machin 2 3 3
Prerequisites: None
Corequisites: None
This course includes multi-axis machining using machining centers with multi-axis capabilities. Emphasis is placed on generation of machining center input with a CAM system and setup of pallet changer and rotary system for multi-axis machining fixtures. Upon completion, students should be able to convert CAD to output for multi-axis machining centers, including tooling, setup, and debugging processes.

MAC 234A Adv Multi-Axis Machin Lab 0 3 1
Prerequisites: None
Corequisites: None
This course covers the application of multi-axis machining using machining centers with multi-axis capabilities. Emphasis is placed on generation of machining center input with a CAM system and setup of pallet changer and rotary system for multi-axis machining fixtures. Upon completion, students should be able to convert CAD to output for multi-axis machining centers, including tooling, setup, and debugging processes.

MAC-245 Mold Construction I 2 6 4
Prerequisites: BPR-111, MAC-122, MAC-124, and MAC-226
Corequisites: None
This course introduces the principles of mold making. Topics include types, construction, and application of molds. Upon completion, students should be able to design and build simple molds.

MAC-248 Production Procedures 1 2 2
Prerequisites: Take 1 group:
Set 1: MAC 111 and MAC 121
Set 2: MAC 141 and MAC 121
Corequisites: None
This course covers product planning and control and scheduling and routing of operations. Topics include cost-effective production methods, dimensional and statistical quality control, and the tooling and machines required for production. Upon completion, students should be able to plan, set up, and produce cost-effective quality machined parts.

*The numbers following course titles indicate **class**, **lab**, **clinic/co-op/shop**, and **credit** hours, respectively.*

Mathematics

MAT 025 Concepts of Essential Math/Sta 3 0 3
Prerequisites: Placement
Corequisites: None

This course provides an opportunity to customize foundational math content and statistical concepts specific to real-world applications. Topics include decimals, percentages, ratios, proportions, solving basic equations, geometrical concepts, dimensional analysis, financial applications and elements of statistics and probability. Upon completion, students should be able to successfully demonstrate the use of mathematics, technology and statistical concepts to solve practical problems while developing positive academic habits, learning strategies and growth mindset.

MAT 035 Concepts of Algebra 3 0 3
Prerequisites: Placement
Corequisites: None

This course covers algebraic concepts with an emphasis on application and analysis. Topics include rational/radical expressions and equations, solving equations and inequalities, concepts of functions, factoring, and exponents. Upon completion, students should be able to successfully demonstrate mastery of algebraic concepts through application and analysis while developing positive academic habits, learning strategies and growth mindset.

MAT-110 Mathematical Measurement 2 2 3
Prerequisites: Take one set
Set 1: C or better in MAT 025
Set 2: C or better in MAT 035
Set 3: P1, P2, or P3 in MAT 003
Set 4: DMA 010, DMA 020, and DMA 030
Set 5: DMA 025
Set 6: MAT 060
Set 7: MAT 070
Set 8: MAT 080
Set 9: Placement
Corequisites: None

This course provides an activity-based approach that develops measurement skills and mathematical literacy using technology to solve problems for non-math intensive programs. Topics include unit conversions and estimation within a variety of measurement systems; ratio and proportion; basic geometric concepts; financial literacy; and statistics including measures of central tendency, dispersion, and charting of data. Upon completion, students should be able to demonstrate the use of mathematics and technology to solve practical problems, and to analyze and communicate results.

MAT-121 Algebra/Trigonometry I 2 2 3
Prerequisites: Take one set:
Set 1: C or better in MAT 035
Set 2: P3 In MAT 003
Set 3: DMA 010, DMA 020, DMA 030, DMA 040, DMA 050, DMA 060, DMA 070, and DMA 080
Set 4: MAT 080
Set 5: Placement
Corequisites: None

This course provides an integrated approach to technology and the skills required to manipulate, display, and interpret mathematical functions and formulas used in problem solving. Topics include the properties of plane and solid geometry, area and volume, and basic proportion applications; simplification, evaluation, and solving of algebraic equations and inequalities and radical functions; complex numbers; right triangle trigonometry; and systems of equations. Upon completion, students should be able to demonstrate the ability to use mathematics and technology for problem-solving, analyzing and communicating results.

MAT-143 Quantitative Literacy 2 2 3
Prerequisites: Take DRE 098, P1 In ENG 002, or ENG 025, and Take one set:
Set 1: C or better In MAT 025
Set 2: C or better in MAT 035
Set 3: P2 or P3 In MAT 003
Set 4: DMA 010, DMA 020, DMA 030, DMA 040, and DMA 050
Set 5: DMA 025 and DMA 045
Set 6: MAT 070
Set 7: MAT 080
Set 8: Placement
Corequisites: None

This course is designed to engage students in complex and realistic situations involving the mathematical phenomena of quantity, change and relationship, and uncertainty through project- and activity-based assessment. Emphasis is placed on authentic contexts which will introduce the concepts of numeracy, proportional reasoning, dimensional analysis, rates of growth, personal finance, consumer statistics, practical probabilities, and mathematics for citizenship. Upon completion, students will be consumers of quantitative information with the ability to use data to make personal, professional, and civic decisions by decoding, interpreting, using, and communicating quantitative information found in modern media and encountered in everyday life. This is a Universal General Education Transfer Component (UGETC) course that satisfies Mathematics (Quantitative) for the Associate in Arts.

MAT-152 Statistical Methods 1 3 2 4
Prerequisites: Take DRE 098, P1 In ENG 002, or ENG 025, and Take one set:
Set 1: C or better In MAT 025
Set 2: C or better in MAT 035
Set 3: P2 or P3 In MAT 003
Set 4: DMA 010, DMA 020, DMA 030, DMA 040, and DMA 050
Set 5: DMA 025 and DMA 045
Set 6: MAT 070
Set 7: MAT 080
Set 8: Placement
Corequisites: None

This course provides a project-based approach to introductory statistics with an emphasis on using real-world data and statistical literacy. Topics include descriptive statistics, correlation and regression, basic probability, discrete and continuous probability distributions, confidence intervals and hypothesis testing. Upon completion, students should be able to use appropriate technology to describe important characteristics of a data set, draw inferences about a population from sample data, and interpret and communicate results. This is a Universal General Education Transfer Component (UGETC) course that satisfies Mathematics (Quantitative) for the Associate in Arts.

MAT-171 Precalculus Algebra 3 2 4

Prerequisites: Take one set:
Set 1: C or better in MAT 035
Set 2: P3 In MAT 003
Set 3: DMA 010, DMA 020, DMA 030, DMA 040, DMA 050, DMA 060, DMA 070, and DME 080
Set 4: MAT 080
Set 5: C or better in MAT 121
Set 6: Placement
Corequisites: None

This course is designed to develop topics which are fundamental to the study of Calculus. Emphasis is placed on solving equations and inequalities, solving systems of equations and inequalities, and analysis of functions (absolute value, radical, polynomial, rational, exponential, and logarithmic) in multiple representations. Upon completion, students should be able to select and use appropriate models and techniques for finding solutions to algebra-related problems with and without technology. This is a Universal General Education Transfer Component (UGETC) course that satisfies Mathematics.

MAT-172 Precalculus Trigonometry 3 2 4

Prerequisites: C or better in MAT 171 or placement
Corequisites: None

This course is designed to develop an understanding of topics which are fundamental to the study of Calculus. Emphasis is placed on the analysis of trigonometric functions in multiple representations, right and oblique triangle, vectors, polar coordinates, conic sections, and parametric equations. Upon completion, students should be able to select and use appropriate models and techniques for finding solutions to trigonometry-related problems with and without technology. This is a Universal General Education Transfer Component (UGETC) course that satisfies Mathematics for the Associate in Science.

MAT 175 Precalculus 4 2 5

Prerequisites: Take one:
Set 1: MAT 171
Set 2: C or better In MAT 121 and MAT 122
Set 3: Placement
Corequisites: None

This course provides an intense study of the topics which are fundamental to the study of calculus. Emphasis is placed on equations and inequalities, functions and their graphs, with special attention to polynomial, rational, exponential, logarithmic and trigonometric functions, and analytic trigonometry and geometry. Upon completion, students should be able to solve practical problems and use appropriate models for analysis and prediction.

MAT-252 Statistical Methods II 3 2 4

Prerequisites: C or better in MAT-152
Corequisites: None

This course is designed to provide a technology-based treatment of multiple sample inferential statistics. Emphasis is placed on two sample hypothesis tests and confidence intervals, linear and multiple regression, analysis of variance, experimental design, and non-parametric techniques. Upon completion, students should be able to draw statistical inferences and communicate results on multiple sample data taken from business and health, social, natural, and applied sciences. This course has been approved for transfer under the CAA as a premajor and/or elective course requirement.

MAT-263 Brief Calculus 3 2 4

Prerequisites: C or better in MAT-171
Corequisites: None

This course is designed to introduce concepts of differentiation and integration and their applications to solving problems. Topics include graphing, differentiation, and integration with emphasis on applications drawn from business, economics, and biological and behavioral sciences. Upon completion, students should be able to demonstrate an understanding of the use of basic calculus and technology to solve problems and to analyze and communicate results effectively. This is a Universal General Education Transfer Component (UGETC) course that satisfies Mathematics for the Associate in Science.

MAT-271 Calculus I 3 2 4

Prerequisites: C or better in MAT-172
Corequisites: None

This course is designed to develop the topics of differential and integral calculus. Emphasis is placed on limits, continuity, derivatives and integrals of algebraic and transcendental functions of one variable. Upon completion, students should be able to select and use appropriate models and techniques for finding solutions to derivative-related problems with and without technology. This is a Universal General Education Transfer Component (UGETC) course that satisfies Mathematics for the Associate in Science.

MAT-272 Calculus II 3 2 4

Prerequisites: C or better in MAT-271
Corequisites: None

This course is designed to develop the topics of differential and integral calculus. Emphasis is placed on the applications of definite integrals, techniques of integration, indeterminate forms, improper integrals, infinite series, conic sections, parametric equations, polar coordinates, and differential equations. Upon completion, students should be able to select and use appropriate models and techniques for finding solutions to integral-related problems with and without technology. This is a Universal General Education Transfer Component (UGETC) course that satisfies Mathematics for the Associate in Science.

MAT-273 Calculus III 3 2 4

Prerequisites: C or better in MAT-272
Corequisites: None

This is designed to develop the topics of multivariate calculus. Emphasis is placed on multivariate functions, partial derivatives, multiple integration, solid analytical geometry, vector valued functions, and line and surface integrals. Upon completion, students should be able to select and use appropriate models and techniques for finding the solution to multivariate-related problems with and without technology. This course has been approved for transfer under the CAA as a general education course in Mathematics.

MAT-280 Linear Algebra 2 2 3

Prerequisites: C or better in MAT-271
Corequisites: None

This course provides an introduction to linear algebra topics. Emphasis is placed on the development of abstract concepts and applications for vectors, systems of equations, matrices, determinants, vector spaces, multi-dimensional linear transformations, eigenvectors, eigenvalues, diagonalization and orthogonality. Upon completion, students should be able to demonstrate understanding of the theoretical concepts and select and use appropriate models and techniques for finding solutions to linear algebra-related problems with and without technology. This course has been approved for transfer under the CAA as a premajor and/or elective course requirement.

MAT 285 Differential Equations 2 2 3
Prerequisites: C or better in MAT-272
Corequisites: None
This course provides an introduction to topics involving ordinary differential equations. Emphasis is placed on the development of abstract concepts and applications for first-order and linear higher-order differential equations, systems of differential equations, numerical methods, series solutions, eigenvalues and eigenvectors, and Laplace transforms. Upon completion, students should be able to demonstrate understanding of the theoretical concepts and select and use appropriate models and techniques for finding solutions to differential equations-related problems with and without technology. This course has been approved for transfer under the CAA as a premajor and/or elective course requirement.

Mechanical

MEC-110 Introduction to CAD/CAM 1 2 2
Prerequisites: None
Corequisites: None
This course introduces CAD/CAM. Emphasis is placed on transferring part geometry from CAD to CAM for the development of a CNC-ready program. Upon completion, students should be able to use CAD/CAM software to produce a CNC program.

***MEC 130 Mechanisms 2 2 3**
Prerequisites: None
Corequisites: None
This course introduces the purpose and action of various mechanical devices. Topics include cams, cables, gear trains, differentials, screws, belts, pulleys, shafts, levers, lubricants, and other devices. Upon completion, students should be able to analyze, maintain, and troubleshoot the components of mechanical systems.

***MEC-145 Mfg Materials I 2 3 3**
Prerequisites: None
Corequisites: None
This course introduces a variety of manufacturing materials and common processing techniques. Emphasis is placed on the processing, testing, and application of materials such as wood, metals, plastics, ceramics, and composites. Upon completion, students should be able to demonstrate an understanding of fundamental engineering applications for a variety of materials, including their process capabilities and limitations.

Medical Assisting

***MED-110 Orientation to Med Assist 1 0 0 1**
Prerequisites: None
Corequisites: None
This course covers the history of medicine and the role of the medical assistant in the health care setting. Emphasis is placed on professionalism, communication, attitude, behaviors, and duties in the medical environment. Upon completion, students should be able to project a positive attitude and promote the profession of medical assisting.

***MED-116 Introduction to A & P 3 2 0 4**
Prerequisites: None
Corequisites: None
This course introduces basic anatomy and physiology. Emphasis is placed on the relationship between body structure and function and the procedures common to health care. Upon completion, students should be able to identify body system components and functions relating this knowledge to the delivery of health care.

***MED-120 Survey of Med Terminology 2 0 0 2**
Prerequisites: None
Corequisites: None
This course introduces the vocabulary, abbreviations, and symbols used in the language of medicine. Emphasis is placed on building medical terms using prefixes, suffixes, and word roots. Upon completion, students should be able to pronounce, spell, and define accepted medical terms.

***MED-121 Medical Terminology I 3 0 0 3**
Prerequisites: None
Corequisites: None
This course introduces prefixes, suffixes, and word roots used in the language of medicine. Topics include medical vocabulary and the terms that relate to the anatomy, physiology, pathological conditions, and treatment of selected systems. Upon completion, students should be able to pronounce, spell, and define medical terms as related to selected body systems and their pathological disorders.

***MED-122 Medical Terminology II 3 0 0 3**
Prerequisites: MED-121
Corequisites: None
This course is the second in a series of medical terminology courses. Topics include medical vocabulary and the terms that relate to the anatomy, physiology, pathological conditions, and treatment of selected systems. Upon completion, students should be able to pronounce, spell, and define medical terms as related to selected body systems and their pathological disorders.

***MED-130 Admin Office Proc I 1 2 0 2**
Prerequisites: Enrollment in Medical Assisting program.
Corequisites: None
This course introduces medical office administrative procedures. Topics include appointment processing, written and oral communications, medical records, patient orientation, and safety. Upon completion, students should be able to perform basic administrative skills within the medical environment.

***MED-131 Admin Office Proc II 1 2 0 2**
Prerequisites: MED-130
Corequisites: None
This course provides medical office procedures in both economic and management skills. Topics include physical plant maintenance, equipment and supplies, liability coverage, medical economics, and introductory insurance procedures. Upon completion, students should be able to manage the economics of the medical office and supervise personnel.

***MED-140 Exam Room Procedures I 3 4 0 5**
Prerequisites: MED-110, MED-116, MED-138 and Enrollment in the Medical Assisting program
Corequisites: None
This course provides instruction in clinical examining room procedures. Topics include asepsis, infection control, assisting with exams and treatment, patient education, preparation and administration of medications, EKG, vital signs, and medical emergencies. Upon completion, students should be able to demonstrate competence in exam room procedures.

***MED-240 Exam Room Procedures II 3 4 0 5**
Prerequisites: MED-140
Corequisites: None
This course is designed to expand and build upon skills presented in MED 140. Emphasis is placed on advanced exam room procedures. Upon completion, students should be able to demonstrate enhanced competence in selected exam room procedures.

***MED-260 MED Clinical Practicum 0 0 15 5**
Prerequisites: MED-240
Corequisites: None
This course provides the opportunity to apply clinical, laboratory, and administrative skills in a medical facility. Emphasis is placed on enhancing competence in clinical and administrative skills necessary for comprehensive patient care and strengthening professional communications and interactions. Upon completion, students should be able to function as an entry-level health care professional.

Mental Health

***MHA 140 Intro to Mental Health 3 0 3**
Prerequisites: None
Corequisites: None
This course provides a comprehensive overview of mental health and wellness and the roles, duties, and ethical aspects of providing mental health services. Topics include the history of mental health services, common mental health challenges, professional qualifications, and current trends. Upon completion, students should be able to discuss the impact of mental health, examine various treatment settings, and analyze the requirements for providing mental health services in public, private, nonprofit, and community environments.

***MHA 150 Mental Health Interventions 3 0 3**
Prerequisites: None
Corequisites: None
This course provides exposure to different mental health treatment and intervention modalities. Topics include professional and self-help forms of intervention. Upon completion, students should be able to apply culturally competent mental health intervention principles to individuals and groups in a variety of treatment settings.

***MHA 238 Psychopathology 3 0 3**
Prerequisites: None
Corequisites: None
This course examines the development and use of DSM/ICD in the mental health setting to establish a common language. Emphasis is placed on history, terminology, and assessment practices associated with the DSM/ICD in the treatment of psychological disorders. Upon completion, students should be able to explain the core vocabulary of treatment approaches and their applications.

***MHA 240 Advocacy 3 0 3**
Prerequisites: None
Corequisites: None
This course covers the roles and duties of the individual and community advocate. Topics include treatment planning, needs assessment, referral procedures, and follow-up and integration of services. Upon completion, students should be able to effectively advocate for the care of the whole person and community.

Marketing and Retailing

MKT-120 Principles of Marketing 3 0 3
Prerequisites: None
Corequisites: None
This course introduces principles and problems of marketing goods and services. Topics include promotion, placement, and pricing strategies for products. Upon completion, students should be able to apply marketing principles in organizational decision making.

MKT-121 Retailing 3 0 3
Prerequisites: None
Corequisites: None
This course examines the role of retailing in the economy. Topics include the development of present retail structure, functions performed, effective operations, and managerial problems resulting from current economic and social trends. Upon completion, students should be able to demonstrate an understanding of the basic principles of retailing.

MKT-122 Visual Merchandising 3 0 3
Prerequisites: None
Corequisites: None
This course introduces basic layout design and commercial display in retail and service organizations. Topics include an analysis of display as a visual merchandising medium and an examination of the principles and applications of display and design. Upon completion, students should be able to plan, build, and evaluate designs and displays.

MKT-123 Fundamentals of Selling 3 0 3
Prerequisites: None
Corequisites: None
This course is designed to emphasize the necessity of selling skills in a modern business environment. Emphasis is placed on sales techniques involved in various types of selling situations. Upon completion, students should be able to demonstrate an understanding of the techniques covered.

MKT-220 Advertising and Sales Promotion 3 0 3
Prerequisites: None
Corequisites: None
This course covers the elements of advertising and sales promotion in the business environment. Topics include advertising and sales promotion appeals, selection of media, use of advertising and sales promotion as a marketing tool, and means of testing effectiveness. Upon completion, students should be able to demonstrate an understanding of the concepts covered through application.

MKT-221 Consumer Behavior 3 0 3
Prerequisites: None
Corequisites: None
This course is designed to describe consumer behavior as applied to the exchange processes involved in acquiring, consuming, and disposing of goods and services. Topics include an analysis of basic and environmental determinants of consumer behavior with emphasis on the decision-making process. Upon completion, students should be able to analyze concepts related to the study of the individual consumer.

MKT-223 Customer Experience 3 0 3
Prerequisites: None
Corequisites: None
This course stresses the importance of customer relations in the business world. Emphasis is placed on learning how to respond to complex customer requirements and to efficiently handle stressful situations. Upon completion, students should be able to demonstrate the ability to handle customer relations.

*The numbers following course titles indicate **class**, **lab**, **clinic/co-op/shop**, and **credit** hours, respectively.*

MKT-225 Marketing Research 3 0 3
Prerequisites: MKT-120
Corequisites: None
This course provides information for decision making by providing guidance in developing, analyzing, and using data. Emphasis is placed on marketing research as a tool in decision making. Upon completion, students should be able to design and conduct a marketing research project and interpret the results.

***MKT-227 Marketing Applications 3 0 3**
Prerequisites: MKT-120 and MKT-123
Corequisites: None
This course extends the study of diverse marketing strategies. Emphasis is placed on case studies and small-group projects involving research or planning. Upon completion, students should be able to effectively participate in the formulation of a marketing strategy.

MKT-232 Social Media Marketing 2 2 3
Prerequisites: None
Corequisites: None
This course is designed to build students' social media marketing skills by utilizing projects that give students hands on experience implementing social media marketing strategies. Topics include integrating different social media technologies into a marketing plan, creating social media marketing campaigns, and applying appropriate social media tools. Upon completion, students should be able to use social media technologies to create and improve marketing efforts for businesses.

MKT 234 Digital Marketing 2 2 3
Prerequisites: None
Corequisites: None
This course covers the fundamentals of digital marketing to implement successful marketing campaigns in the digital environment. Emphasis is placed on the development, production and implementation of digital-marketing delivery methods including, but not limited to, email marketing, web-based marketing, search-engine optimization (SEO), online advertising, and social media. Upon completion, students will have the fundamental digital marketing skills to solve real-world business problems and develop digital business opportunities.

Medical Laboratory Technology

***MLT-110 Intro to MLT 2 3 0 3**
Prerequisites: None
Corequisites: None
This course is designed to introduce all aspects of the medical laboratory profession. Topics include health care/laboratory organization, professional ethics, basic laboratory techniques, safety, quality assurance, and specimen collection. Upon completion, students should be able to demonstrate a basic understanding of laboratory operations and be able to perform basic laboratory skills.

***MLT-111 Urinalysis & Body Fluids 1 3 0 2**
Prerequisites: None
Corequisites: None
This course introduces the laboratory analysis of urine and body fluids. Topics include physical, chemical, and microscopic examination of the urine and body fluids. Upon completion, students should be able to demonstrate theoretical comprehension in performing and interpreting urinalysis and body fluid tests.

***MLT 116 Anatomy & Med Terminology 5 0 0 5**
Prerequisites: None
Corequisites: None
This course provides a basic study of the structure and function of the human body and medical terminology relevant to medical laboratory technology. Emphasis is placed on the structure and function of cells, tissues, human organ systems, and related terminology. Upon completion, students should be able to demonstrate a basic understanding of fundamental anatomy and physiology principles and application of terminology.

***MLT-120 Hematology/Hemostasis I 3 3 0 4**
Prerequisites: MLT 110 and MLT 116
Corequisites: None
This course introduces the theory and technology used in analyzing blood cells and the study of hemostasis. Topics include hematology, hemostasis, and related laboratory testing. Upon completion, students should be able to demonstrate theoretical comprehension of hematology/hemostasis, perform diagnostic techniques, and correlate laboratory findings with disorders.

***MLT-126 Immunology and Serology 1 2 0 2**
Prerequisites: MLT-110
Corequisites:None
This course introduces the immune system and response and basic concepts of antigens, antibodies, and their reactions. Emphasis is placed on basic principles of immunologic and serodiagnostic techniques and concepts of cellular and humoral immunity in health and disease. Upon completion, students should be able to demonstrate theoretical comprehension and application in performing and interpreting routine immunologic and serodiagnostic procedures.

***MLT-127 Transfusion Medicine 2 3 0 3**
Prerequisites: MLT 116 and MLT 126
Corequisites: None
This course introduces the blood group systems and their applications in transfusion medicine. Emphasis is placed on blood bank techniques including blood grouping and typing, pre-transfusion testing, donor selection and processing, and blood component preparation and therapy. Upon completion, students should be able to demonstrate theoretical comprehension and application in performing/interpreting routine blood bank procedures and recognizing/resolving common problems.

***MLT-130 Clinical Chemistry I 3 3 0 4**
Prerequisites: CHM 130, CHM 130A, and MLT 110
Corequisites: None
This course introduces the quantitative analysis of blood and body fluids and their variations in health and disease. Topics include clinical biochemistry, methodologies, instrumentation, and quality control. Upon completion, students should be able to demonstrate theoretical comprehension of clinical chemistry, perform diagnostic techniques, and correlate laboratory findings with disorders.

***MLT-140 Introduction to Microbiology 2 3 0 3**
Prerequisites: None
Corequisites: None
This course is designed to introduce basic techniques and safety procedures in clinical microbiology. Emphasis is placed on the morphology and identification of common pathogenic organisms, aseptic technique, staining techniques, and usage of common media. Upon completion, students should be able to demonstrate theoretical comprehension in performing and interpreting basic clinical microbiology procedures.

***MLT-215 Professional Issues 1 0 0 1**
Prerequisites: None
Corequisites: None
This course surveys professional issues in preparation for career entry. Emphasis is placed on work readiness and theoretical concepts in microbiology, immunohematology, hematology, and clinical chemistry. Upon completion, students should be able to demonstrate competence in career entry-level areas and be prepared for the national certification examination.

***MLT-240 Special Clin Microbiology 2 3 0 3**
Prerequisites: MLT-140
Corequisites: None
This course is designed to introduce special techniques in clinical microbiology. Emphasis is placed on advanced areas in microbiology. Upon completion, students should be able to demonstrate theoretical comprehension in performing and interpreting specialized clinical microbiology procedures.

***MLT-252 MLT Practicum I 0 0 6 2**
Prerequisites: MLT 110 and MLT 116
Corequisites: None
This course provides entry-level clinical laboratory experience. Emphasis is placed on technique, accuracy, and precision. Upon completion, students should be able to demonstrate entry-level competence on final clinical evaluations. Concentration will be in the area of Phlebotomy.

***MLT-254 MLT Practicum I 0 0 12 4**
Prerequisites: MLT 116, MLT 126, and MLT 127
Corequisites: None
This course provides entry-level clinical laboratory experience. Emphasis is placed on technique, accuracy, and precision. Upon completion, students should be able to demonstrate entry-level competence on final clinical evaluations. Concentration will be in the area of blood banking.

***MLT 264 MLT Practicum II 0 0 12 4**
Prerequisites: MLT 116 and MLT 120
Corequisites: None
This course provides entry-level clinical laboratory experience. Emphasis is placed on technique, accuracy, and precision. Upon completion, students should be able to demonstrate entry-level competence on final clinical evaluations.

***MLT 271 MLT Practicum III 0 0 3 1**
Prerequisites: MLT 116, MLT 140, and MLT 240
Corequisites: None
This course provides entry-level clinical laboratory experience. Emphasis is placed on technique, accuracy, and precision. Upon completion, students should be able to demonstrate entry-level competence on final clinical evaluations.

***MLT 273 MLT Practicum III 0 0 9 3**
Prerequisites: MLT 116, MLT 140, and MLT 240
Corequisites: None
This course provides entry-level clinical laboratory experience. Emphasis is placed on technique, accuracy, and precision. Upon completion, students should be able to demonstrate entry-level competence on final clinical evaluations.

***MLT 274 MLT Practicum III 0 0 12 4**
Prerequisites: MLT 116 and MLT 130
Corequisites: None
This course provides entry-level clinical laboratory experience. Emphasis is placed on technique, accuracy, and precision. Upon completion, students should be able to demonstrate entry-level competence on final clinical evaluations.

***MLT 285 MLT Practicum II 0 0 39 13**
Prerequisites MLT 116, MLT 140, MLT 240, MLT 130, MLT 120, MLT 126, MLT 127
Corequisites: None
This course provides entry-level clinical laboratory experience. Emphasis is placed on technique, accuracy, and precision. Upon completion, students should be able to demonstrate entry-level competence of final clinical evaluations.

Music

MUS-110 Music Appreciation 3 0 3
Prerequisites: None
Corequisites: None
This course is a basic survey of the music of the Western world. Emphasis is placed on the elements of music, terminology, composers, form, and style within a historical perspective. Upon completion, students should be able to demonstrate skills in basic listening and understanding of the art of music. This is a Universal General Education Transfer Component (UGETC) course that satisfies Humanities/Fine Arts.

MUS-112 Introduction to Jazz 3 0 3
Prerequisites: None
Corequisites: None
This course introduces the origins and musical components of jazz and the contributions of its major artists. Emphasis is placed on the development of discriminating listening habits, as well as the investigation of the styles and structural forms of the jazz idiom. Upon completion, students should be able to demonstrate skills in listening and understanding this form of American music. This is a Universal General Education Transfer Component (UGETC) course that satisfies Humanities/Fine Arts.

Networking Technology

NET-125 Introduction to Networks 2 3 3
Prerequisites: None
Corequisites: None
This course offers a detailed exploration of the architecture, structure, functions, components, and operating models of the Internet and other computer networks. Topics include the essentials of IP addressing, Ethernet basics, various media types, and network operations. Upon completion, students should be able to build/troubleshoot simple Local Area Networks (LANs), develop effective IP addressing schemes, and configure routers and switches.

NET-126 Switching and Routing 2 3 3
Prerequisites: C or better in NET-125
Corequisites: None
This course covers the architecture, components, and operations of routers and switches in small networks and introduces wireless local area networks (WLAN) and security concepts. Emphasis is placed on configuring and troubleshooting routers and switches for advanced functionality using security best practices and resolving common network issues utilizing both IPv4 and IPv6 protocols. Upon completion, students should be able to configure VLANs and Inter-VLAN routing applying security best practices, troubleshoot inter-VLAN routing on Layer 3 devices, configure redundancy on a switched network using STP and EtherChannel, configure WLANs using a WLC and L2 security best practices and configure IPv4 and IPv6 static routing on routers.

NET-175 Wireless Technology 2 2 3
Prerequisites: None
Corequisites: None
This course introduces the student to wireless technology and interoperability with different communication protocols. Topics include Wireless Application Protocol (WAP), Wireless Mark-up language (WML), link manager, service discovery protocol, transport layer and frequency band. Upon completion, students should be able to discuss in written and oral form protocols and procedures required for different wireless applications.

NET-225 Enterprise Networking 2 3 3
Prerequisites: : C or better in NET-126
Corequisites: None
This course is designed to cover the architecture, components, operations, and security to scale for large, complex networks, including wide area network (WAN) technologies. Emphasis is placed on configuring, troubleshooting, and securing enterprise network devices and understanding how application programming interfaces (API) and configuration management tools enable network automation. Upon completion, students should be able to configure link state routing protocols, implement ACLs to filter traffic and secure administrative access, configure NAT services on the router to provide address scalability, explain techniques to provide address scalability and secure remote access for WAN, and explain how automation affects evolving networks.

NET-289 Networking Capstone Project 1 4 3
Prerequisites: C or better in CTI-110, CTI-120, and CTS-115
Corequisites: None
This course allows students an opportunity to complete a significant networking project from the planning phase through the implementation phase. Emphasis is placed on project definition, documentation, installation, testing, presentation, and training. Upon completion, students should be able to complete a project from planning through implementation including multiple OS clients, servers, and networking equipment.

Network Operating Systems

NOS-110 Operating Systems Concepts 2 3 3
Prerequisites: None
Corequisites: None
This course introduces students to a broad range of operating system concepts, including installation and maintenance. Emphasis is placed on operating system concepts, management, maintenance, and resources required. Upon completion of this course, students will have an understanding of OS concepts, installation, management, maintenance, using a variety of operating systems. The course will include file management and simple user creation under at least two operating systems.

NOS-120 Linux Single User 2 3 3
Prerequisites: C or better in NOS-110
Corequisites: None
This course provides students with GUI and command line skills for using a Linux machine. Topics include Linux file system and access permissions, desktop or shell environments, command line editors, display servers, expression pattern matching, I/O redirection, and networking. Upon completion, students should be able to demonstrate competency in customizing a Linux system.

NOS-130 Windows Single User 2 2 3
Prerequisites: C or better in NOS-110
Corequisites: None
This course introduces operating system concepts for single-user systems. Topics include hardware management, file and memory management, system configuration/optimization, and utilities. Upon completion, students should be able to perform operating systems functions at the support level in a single-user environment.

NOS-220 Linux Admin I 2 3 3
Prerequisites: C or better in NOS-120
Corequisites: None
This course covers advanced skills needed to successfully administer a Linux system. Topics include installation, file system creation/maintenance, storage, network configuration, user interface configuration, and security. Upon completion, students should be able to perform administrative tasks on a Linux system in a network environment.

NOS-230 Windows Administration I 2 2 3
Prerequisites: C or better in NOS-130
Corequisites: None
This course covers the installation and configuration of a Windows Server operating system. Emphasis is placed on the basic configuration of core network services, Active Directory and group policies. Upon completion, students should be able to install and configure a Windows Server operating system.

Nursing

***NUR 101 Practical Nursing I 7 6 6 11**
Prerequisites: None
Corequisites: None
This course introduces the concepts within the three domains of the individual, healthcare, and nursing. Emphasis is placed on the concepts within each domain including assessment, clinical decision making, professional behaviors, caring interventions, biophysical and psychosocial concepts, communication, collaboration, teaching/learning, safety, ethical principles, legal issues, informatics, and evidence-based practice. Upon completion, students should be able to provide safe nursing care across the lifespan incorporating the concepts identified in this course.

***NUR 102 Practical Nursing II 7 0 9 10**
Prerequisites: NUR 101
Corequisites: None
This course is designed to further develop the concepts within the three domains of the individual, nursing, and healthcare. Emphasis is placed on the concepts within each domain including clinical decision making, caring interventions, biophysical and psychosocial concepts, communication, collaboration, teaching and learning, accountability, safety, informatics, and evidence-based practice. Upon completion, students should be able to provide safe nursing care across the lifespan incorporating the concepts identified in this course.

***NUR 103 Practical Nursing III 6 0 9 9**
Prerequisites: NUR 101
Corequisites: None
This course is designed to assimilate the concepts within the three domains of the individual, healthcare, and nursing. Emphasis is placed on biophysical and psychosocial concepts, professional behaviors, healthcare systems, health policy, and quality improvement. Upon completion, students should be able to demonstrate the knowledge, skills, and attitudes necessary to provide safe, quality, and individualized entry level nursing care.

***NUR-111 Intro to Health Concepts 4 6 6 8**
Prerequisites: Admission into the Associate Degree Nursing Program
Corequisites: NUR 117, ACA 111
This course introduces the concepts within the three domains of the individual, healthcare, and nursing. Emphasis is placed on the concepts within each domain including medication administration, assessment, nutrition, ethics, interdisciplinary teams, informatics, evidence-based practice, individual-centered care, and quality improvement. Upon completion, students should be able to provide safe nursing care incorporating the concepts identified in this course.

***NUR-112 Health-Illness Concepts 3 0 6 5**
Prerequisites: NUR-111, NUR-117
Corequisites: None
This course is designed to further develop the concepts within the three domains of the individual, healthcare, and nursing. Emphasis is placed on the concepts of acid-base, metabolism, cellular regulation, oxygenation, infection, stress/coping, health-wellness-illness, communication, caring interventions, managing care, safety, quality improvement, and informatics. Upon completion, students should be able to provide safe nursing care incorporating the concepts identified in this course.

***NUR-113 Family Health Concepts 3 0 6 5**
Prerequisites: ENG-111, NUR-111, NUR-112, NUR-114, NUR-117, PSY-150 or admission to ADN Advanced Placement Option
Corequisites: None
This course is designed to further develop the concepts within the three domains of the individual, healthcare, and nursing. Emphasis is placed on the concepts of oxygenation, sexuality, reproduction, grief/loss, mood/affect, behaviors, development, family, health-wellness-illness, communication, caring interventions, managing care, safety, and advocacy. Upon completion, students should be able to provide safe nursing care incorporating the concepts identified in this course.

***NUR-114 Holistic Health Concepts 3 0 6 5**
Prerequisites: NUR-111, NUR-117
Corequisites: None
This course is designed to further develop the concepts within the three domains of the individual, healthcare, and nursing. Emphasis is placed on the concepts of cellular regulation, perfusion, inflammation, sensory perception, stress/coping, mood/affect, cognition, self, violence, health-wellness-illness, professional behaviors, caring interventions, and safety. Upon completion, students should be able to provide safe nursing care incorporating the concepts identified in this course.

***NUR-117 Pharmacology 1 3 0 2**
Prerequisites: Admission into the ADN program
Corequisites: NUR-111
This course introduces information concerning sources, effects, legalities, and the safe use of medications as therapeutic agents. Emphasis is placed on nursing responsibility, accountability, and pharmacokinetics, routes of medication administration, contraindications and side effects. Upon completion, students should be able to compute dosages and administer medication safely.

***NUR-211 Health Care Concepts 3 0 6 5**
Prerequisites: NUR-111, NUR-117, NUR-114, NUR-112, ENG-111 or admission to ADN Advanced Placement Option
Corequisites: None
This course is designed to further develop the concepts within the three domains of the individual, healthcare, and nursing. Emphasis is placed on the concepts of cellular regulation, perfusion, infection, immunity, mobility, comfort, behaviors, health-wellness-illness, clinical decision-making, caring interventions, managing care, and safety. Upon completion, students should be able to provide safe nursing care incorporating the concepts identified in this course.

***NUR-212 Health System Concepts 3 0 6 5**
Prerequisites: NUR-111, NUR-112, NUR-114
Corequisites None
This course is designed to further develop the concepts within the three domains of the individual, healthcare, and nursing. Emphasis is placed on the concepts of grief/loss, violence, health-wellness-illness, collaboration, managing care, safety, advocacy, legal issues, policy, healthcare systems, ethics, accountability, and evidence-based practice. Upon completion, students should be able to provide safe nursing care incorporating the concepts identified in this course.

***NUR-213 Complex Health Concepts 4 3 15 10**
Prerequisites: ENG-112 or ENG-114
Prerequisites: BIO-175 or BIO-275
Prerequisites: NUR-111 and PSY-241
Corequisites: NUR-112, NUR-113, NUR-114, NUR-211, NUR-212, and PHI-240
This course is designed to assimilate the concepts within the three domains of the individual, healthcare, and nursing. Emphasis is placed on the concepts of fluid/electrolytes, metabolism, perfusion, mobility, stress/coping, violence, health-wellness-illness, professional behaviors, caring interventions, managing care, healthcare systems, and quality improvement. Upon completion, students should be able to demonstrate the knowledge, skills, and attitudes necessary to provide quality, individualized, entry level nursing care.

***NUR 215 Paramedic/RN Bridge Concepts 3 3 6 6**
Prerequisites: None
Corequisites None
This course is designed to introduce concepts within the three domains of the individual, healthcare, and nursing as the Associate Degree in Emergency Medical Science Paramedic transitions to the nursing role. Emphasis is placed on the concepts within each domain including evidenced-based practice, quality improvement, communication, safety, interdisciplinary team, collaboration, clinical decision-making, professional behaviors, informatics, assessment, perfusion, oxygenation, elimination, and cellular regulation. Upon completion, students should be able to provide safe nursing care incorporating the concepts identified in this course.

Office Systems Technology

***OST-122 Office Computations 2 2 3**
Prerequisites: None
Corequisites: None
This course introduces fundamental mathematical and computational skills necessary for success in an office environment. Emphasis will be placed on practical applications of mathematics in office-related tasks such as payroll calculations, inventory calculations, discounts, and markups, as well as financial calculations. Upon completion, students should be able to solve a wide variety of mathematical problems encountered in an office.

OST-131 Keyboarding 1 2 2
Prerequisites: None
Corequisites: None
This course covers basic keyboarding skills. Emphasis is placed on the touch system, correct techniques, and development of speed and accuracy. Upon completion, students should be able to key at an acceptable speed and accuracy level using the touch system.

***OST-132 Keyboard Skill Building 1 2 2**
Prerequisites: OST-134
Corequisites: None
This course is designed to increase speed and improve accuracy in keyboarding. Emphasis is placed on diagnostic tests to identify accuracy and speed deficiencies followed by corrective drills. Upon completion, students should be able to keyboard rhythmically with greater accuracy and speed.

***OST-134 Text Entry & Formatting 2 2 3**
Prerequisites: None
Corequisites: None
This course is designed to provide skills needed to increase speed, improve accuracy, and format documents. Topics include letters, memos, tables, and business reports. Upon completion, students should be able to produce documents and key timed writings at speeds commensurate with employability.

***OST-136 Word Processing 2 2 3**
Prerequisites: None
Corequisites: None
This course is designed to introduce word processing concepts and applications. Topics include preparation of a variety of documents and mastery of specialized software functions. Upon completion, students should be prepared to take a nationally accredited certification exam.

***OST-137 Office Applications I 2 2 3**
Prerequisites: None
Corequisites: None
This course introduces the concepts and functions of software that meets the changing needs of the office environment through a hands-on approach. Emphasis will be placed on creating professional documents to enhance employability in various offices. Upon completion, students should be prepared to take a nationally accredited certification exam.

***OST 145 Social Media for Office Prof 2 2 3**
Prerequisites: CIS-110 or OST-137
Corequisites: None
This course is designed to introduce the office professional to the concepts of social media. Topics include goal setting and strategies, identifying target audiences, rules of engagement, blogs, podcasts and webinars, sharing videos, pictures, and images, social networks, mobile computing, and social media monitoring. Upon completion, students should be able to create and utilize social media tools in the workplace setting.

***OST-148 Med Ins & Billing 3 0 3**
Prerequisites: None
Corequisites: None
This course introduces fundamentals of medical insurance and billing. Emphasis is placed on the medical billing cycle to include third party payers, coding concepts, and form preparation. Upon completion, students should be able to explain the life cycle of and accurately complete a medical insurance claim.

***OST-149 Medical Legal Issues 3 0 3**
Prerequisites: None
Corequisites: None
This course introduces the complex legal, moral, and ethical issues involved in providing healthcare services. Emphasis is placed on the legal requirements of medical practices; the relationship of physician, patient, and office personnel; professional liabilities; and medical practice liability. Upon completion, students should be able to demonstrate a working knowledge of current medical law and accepted ethical behavior.

***OST-153 Office Finance Solutions 2 2 3**
Prerequisites: CIS 110 or OST 137
Corequisites: None
This course introduces basic bookkeeping concepts. Topics include entering data in accounts payable and receivable, keeping petty cash records, maintaining inventory, reconciling bank statements, running payroll, and generating simple financial reports. Upon completion, students should be able to demonstrate competence in the entry and manipulation of data to provide financial solutions for the office.

***OST-164 Office Editing 3 0 3**
Prerequisites: None
Corequisites: None
This course provides an in-depth exploration of editing skills essential for the office. Emphasis is placed on grammar, punctuation, sentence structure, proofreading, and editing. Upon completion, students should be able to proficiently compose and edit text and documents for the workplace.

***OST 171 Intro to Virtual Office 2 2 3**
Prerequisites: None
Corequisites: None
This course introduces the skills and abilities needed to conduct a variety of office administration activities using the latest technology. Students will learn the proper etiquette of communicating electronically as well as the unique procedures and logistics for conducting business in the virtual office. Upon completion, students will know the vocabulary of the virtual office and will have a basic understanding of modern technical communication tools.

***OST-243 Med Office Simulation 2 2 3**
Prerequisites: OST-148
Corequisites: None
This course introduces medical systems used to process information in the automated office. Topics include traditional and electronic information resources, managing health information, and the billing cycle. Upon completion, students should be able to use the computer accurately to schedule, bill, update, and make corrections.

***OST-247 Procedure Coding 2 2 3**
Prerequisites: MED-121 or OST-141
Corequisites: None
This course provides in-depth coverage of procedural coding. Emphasis is placed on CPT and HCPCS coding systems. Upon completion, students should be able to properly code procedures and services performed in a medical facility.

***OST-248 Diagnostic Coding 2 2 3**
Prerequisites: MED-121 or OST-141
Corequisites: None
This course provides an in-depth study of diagnostic coding. Emphasis is placed on ICD coding system. Upon completion, students should be able to properly code diagnoses in a medical facility.

***OST-286 Professional Development 3 0 3**
Prerequisites: None
Corequisites: None
This course covers the personal competencies and qualities needed to project a professional image in the office. Topics include interpersonal skills, healthy life-styles, appearance, attitude, personal and professional growth, multicultural awareness, and professional etiquette. Upon completion, students should be able to demonstrate these attributes in the classroom, office, and society.

***OST-289 Office Admin Capstone 2 2 3**
Prerequisites: OST-164
Corequisites: None
This course is designed to be a capstone course for the office professional and provides a working knowledge of administrative office procedures. Emphasis is placed on written and oral communication skills, office software applications, office procedures, ethics, and professional development. Upon completion, students should be able to adapt in an office environment.

Occupational Therapy Assistant

***OTA-110 Fundamentals of OT 2 3 0 3**
Prerequisites: None
Corequisites: BIO-165 or BIO-168
This course introduces occupational therapy (OT) theory, practice, philosophy, and principles. Emphasis is placed on providing a basic understanding of the profession as well as beginning to develop interaction and observation skills. Upon completion, students should be able to demonstrate basic understanding of the domain and practice of occupational therapy, practice settings and professional roles, OT terminology, activity analysis, principles, process, philosophies, and frames of reference.

***OTA-120 OT Media I 1 3 0 2**
Prerequisites: None
Corequisites: OTA-110
This course provides training in recognizing the therapeutic value and use of a wide variety of human occupations including basic activities of daily living, instrumental activities of daily living, rest and sleep, education, work, play, leisure, and social participation. Topics include the understanding of different teaching and learning methods and styles, the language of occupational therapy (OT), OT interventions including preparatory methods and tasks, and restorative and compensatory techniques. Upon completion, students should be able to analyze, design, select, and safely perform occupation related activities that would be therapeutic for various populations across the lifespan.

***OTA-130 Assessment Skills 2 3 0 3**
Prerequisites: None
Corequisites: OTA-110
This course provides training in appropriate and accurate assessment skills related to sensation, movement, vision, perception, cognition, emotions, and performance of basic activities of daily living and instrumental activities of daily living. Topics include physical and psychosocial factors affecting performance; and sensory, range of motion, strength, coordination, cognitive, visual-perceptual, self-care, and work-related assessments. Upon completion, students should be able to gather and share data for the purpose of screening and evaluation, administer selected assessments using appropriate procedures and protocols, and articulate the role of the occupational therapy assistant and occupational therapist in the screening and evaluation process.

***OTA-135 Kinesiology 0 3 0 1**
Prerequisites: OTA-110
Corequisites: BIO-168
This course provides training in understanding and using principles of normal human movement. Topics include terminology, structures of the body associated with movement, principles of motion, analysis of movement, joint structure and its impact on motion, and muscle actions. Upon completion, students should be able to demonstrate proficiency in identifying terms associated with movement, motions, structures, normal ranges and directions of motion, and general principles of human movement; and apply biomechanical principles to safe and efficient functional mobility activities.

***OTA-140 Professional Skills I 0 3 0 1**
Prerequisites: None
Corequisites: OTA-110
This course introduces the roles and responsibilities of the occupational therapy assistant (OTA) and the occupational therapist (OT) in occupational therapy practice and facilitates development of professional behaviors and skills. Topics include professional ethics, supervisory roles, responsibilities, and collaborative professional relationships; credentialing, certification, and licensure; documentation, which communicates the need and rationale for occupational therapy services; therapeutic use of self; and professional identity and professional behaviors; and observation skills. Upon completion, students should be able to demonstrate ethical behavior, discriminate between roles and responsibilities of the OTA and OT, and explain acceptable supervision and documentation.

***OTA-150 Peds Concepts & Interventions 2 3 0 3**
Prerequisites: None
Corequisites: OTA-170 and PSY-241
This course provides knowledge and skills needed for working with children from birth through adolescence. Topics include review of normal growth and development, habituation of healthy habits/routines, the role of occupational therapy with caregivers/providers, understanding of common conditions and developmental delays; and the role of occupation in assessment, intervention planning and implementation with pediatric populations. Upon completion, students should be able to plan, implement, and modify appropriate interventions with children in their context and environment to promote engagement in occupation.

***OTA-161 Fieldwork I - Placement 1 0 0 3 1**
Prerequisites: OTA-120 and OTA-140
Corequisites: OTA-130
This course provides introductory-level clinical training opportunities. Emphasis is placed on observational and basic interactional skills in a setting with a culturally diverse client population. Upon completion, students should be able to use observational and interactional skills to relate effectively with clients under the guidance/direction of fieldwork supervisors.

***OTA-162 Fieldwork I - Placement 2 0 0 3 1**
Prerequisites: OTA-120, OTA-140, OTA-161
Corequisites: OTA-130
This course provides introductory-level clinical training opportunities. Emphasis is placed on observational and basic interactional skills in a setting with a culturally diverse client population. Upon completion, students should be able to use observational and interactional skills to relate effectively with clients under the guidance/direction of fieldwork supervisors.

***OTA-163 Fieldwork I - Placement 3 0 0 3 1**
Prerequisites: OTA-120, OTA-140, OTA-162
Corequisites: OTA-130
This course provides introductory-level clinical training opportunities. Emphasis is placed on observational and basic interactional skills in a setting with a culturally diverse client population. Upon completion, students should be able to use observational and interactional skills to relate effectively with clients under the guidance/direction of fieldwork supervisors.

***OTA-170 Physical Conditions 2 3 0 3**
Prerequisites: None
Corequisites: OTA-130
This course is designed to provide knowledge and skills needed for working with individuals experiencing various medical conditions to help them achieve participation in life through engagement in occupation. Topics include medical terminology, common conditions, body functions that change with disease processes, applicable theories and principles, assessment and intervention priorities for commonly treated conditions. Upon completion, students should be able to recognize common symptoms, prioritize mental, neuromusculoskeletal and movement related functional problems, while providing for patient safety within the patient's context and environment.

***OTA-180 Psychosocial Conditions 2 3 0 3**
Prerequisites: PSY-281
Corequisites: OTA-130
This course is designed to provide knowledge and skills needed for working with individuals experiencing various psychosocial conditions to help them achieve participation in life through engagement in occupation. Topics include mental health conditions, applicable theories and principles, symptoms of dysfunction, assessment and treatment of individuals, planning and facilitating therapeutic groups, client safety, therapeutic use of self, and psychosocial aspects of practice. Upon completion, students should be able to effectively plan and conduct individual and group interventions for client conditions related to psychosocial dysfunction while recognizing contexts and environments that may also impact occupational performance.

***OTA-220 OT Media II 1 6 0 3**
Prerequisites: OTA-120 and OTA-130
Corequisites: None
This course provides training in appropriate and accurate assessment and intervention skills related to orthotics, prosthetics, assistive devices, assistive technology, client mobility, and Americans with Disabilities Act (ADA) issues. Topics include ergonomics seating and positioning, community mobility, use of physical agent modalities, and technology in occupational therapy intervention. Upon completion, students should be able to demonstrate competency fabricating and utilizing orthotic and assistive devices, understanding ADA guidelines, and using technology for engagement in occupation.

***OTA-240 Professional Skills II 0 3 0 1**
Prerequisites: OTA-140
Corequisites: None
This course covers professional development, supervisory relationships, involvement in the profession, and clinic management skills. Topics include clarification of roles and responsibilities, detailed examination of the supervisory process, participation in professional organizations, and the mechanics of assisting in clinic operations. Upon completion, students should be able to work effectively with a supervisor, plan and implement a professional activity, and perform routine clinic management tasks.

***OTA-245 Professional Skills III 0 3 0 1**
Prerequisites: OTA-240
Corequisites: None
This course provides preparation for Fieldwork II experiences using skills/knowledge gained in OTA 140 and OTA 240 to promote integration into the professional community. Topics include interview skills, resume production, conflict resolution, professional presentations, participation in research activities, and completion of all forms required for Fieldwork II. Upon completion, students should be able to independently complete employment-seeking activities and provide in-service training.

***OTA-250 Adult Concepts & Interventions 2 3 0 3**
Prerequisites: None
Corequisites: OTA-170, OTA-180, and PSY-241
This course provides knowledge and skills needed for working with adults through the lifespan. Emphasis is placed on identification and discussion of common changes associated with aging, disabilities and chronic diseases affecting this population, assessments and intervention, including developing healthy habits and routines, and the impact on participation in occupation in various settings. Upon completion, students should be able to plan, implement, and modify appropriate interventions with adults in their context and environment to promote engagement in occupations.

***OTA-260 Level II Fieldwork Placement 1 0 0 18 6**
Prerequisites: None
Corequisites: None
This course provides clinical experience under the direct supervision of experienced occupational therapists or occupational therapy assistant practitioners working in various practice settings. Emphasis is placed on final clinical preparation for entry-level practice in the profession. Upon completion, students should be able to meet all critical competencies for entry-level practice established by the curriculum, AOTA guidelines, and regulatory bodies.

***OTA-261 Level II Fieldwork Placement 2 0 0 18 6**
Prerequisites: None
Corequisites: None
This course provides the final clinical experience under the direct supervision of experienced occupational therapists or occupational therapy assistant practitioners working in various practice settings. Emphasis is placed on final clinical preparation for entry-level practice in the profession. Upon completion, students should be able to meet all critical competencies for entry-level practice established by the curriculum, AOTA guidelines, and regulatory bodies.

***OTA-280 Professional Transitions 0 2 0 1**
Prerequisites: None
Corequisites: OTA-260 or OTA-261
This course provides closure to the educational program in conjunction with clinical experience. Emphasis is placed on portfolio development and presentation, program evaluation, analysis and synthesis of clinical experiences, and final preparation for the certification examination. Upon completion, students should be able to enter the occupational therapy (OT) workforce with an understanding of themselves as OT professionals, and with supportive documentation demonstrating progress toward meeting competencies set forth by the profession and regulatory bodies.

Physical Education

PED-110 Fit and Well for Life 1 2 2
Prerequisites: None
Corequisites: None
This course is designed to investigate and apply the basic concepts and principles of lifetime physical fitness and other health-related factors. Emphasis is placed on wellness through the study of nutrition, weight control, stress management, and consumer facts on exercise and fitness. Upon completion, students should be able to plan a personal, lifelong fitness program based on individual needs, abilities, and interests. This course has been approved for the transfer under the CAA as a premajor and/or elective course requirement.

PED-117 Weight Training I 0 3 1
Prerequisites: None
Corequisites: None
This course introduces the basics of weight training. Emphasis is placed on developing muscular strength, muscular endurance, and muscle tone. Upon completion, students should be able to establish and implement a personal weight training program. This course has been approved for the transfer under the CAA as a premajor and/or elective course requirement.

PED-118 Weight Training II 0 3 1
Prerequisites: C or better in PED-117
Corequisites: None
This course covers advanced levels of weight training. Emphasis is placed on meeting individual training goals and addressing weight training needs and interests. Upon completion, students should be able to establish and implement an individualized advanced weight training program. This course has been approved for the transfer under the CAA as a premajor and/or elective course requirement.

*The numbers following course titles indicate **class**, **lab**, **clinic/co-op/shop**, and **credit** hours, respectively.*

PED-119 Circuit Training 0 3 1
Prerequisites: None
Corequisites: None
This course covers the skills necessary to participate in a developmental fitness program. Emphasis is placed on the circuit training method which involves a series of conditioning timed stations arranged for maximum benefit and variety. Upon completion, students should be able to understand and appreciate the role of circuit training as a means to develop fitness.

PED-122 Yoga I 0 2 1
Prerequisites: None
Corequisites: None
This course introduces the basic discipline of yoga. Topics include proper breathing, relaxation techniques, and correct body positions. Upon completion, students should be able to demonstrate the procedures of yoga. This course has been approved for the transfer under the CAA as a premajor and/or elective course requirement.

PED-123 Yoga II 0 2 1
Prerequisites: C or better in PED-122
Corequisites: None
This course introduces more detailed aspects of the discipline of yoga. Topics include breathing and physical postures, relaxation, and mental concentration. Upon completion, students should be able to demonstrate advanced procedures of yoga. This course has been approved for the transfer under the CAA as a premajor and/or elective course requirement.

PED-211 New Games 0 2 1
Prerequisites: None
Corequisites: None
This course includes explanation, demonstration, and participation in games that provide an alternative to traditional sports. Emphasis is placed on playing for pleasure rather than for competitive purposes. Upon completion, students should be able to participate and lead others in participating in non-competitive games. This course has been approved for the transfer under the CAA as a premajor and/or elective course requirement.

PED-217 Pilates I 0 2 1
Prerequisites: None
Corequisites: None
This course provides an introduction to the Pilates method of body conditioning exercise. Topics include instruction in beginning and intermediate Pilates exercises using a mat or equipment, history of the Pilates method, and relevant anatomy and physiology. Upon completion, students should be able to perform beginning and intermediate exercises, and possess an understanding of the benefits of conditioning the body's core muscles. This course has been approved for the transfer under the CAA as a premajor and/or elective course requirement.

Philosophy

PHI-215 Philosophical Issues 3 0 3
Prerequisites: C or better in ENG-111
Corequisites: None
This course introduces fundamental issues in philosophy considering the views of classical and contemporary philosophers. Emphasis is placed on knowledge and belief, appearance and reality, determinism and free will, faith and reason, and justice and inequality. Upon completion, students should be able to identify, analyze, and critically evaluate the philosophical components of an issue. This is a Universal General Education Transfer Component (UGETC) course that satisfies Humanities/Fine Arts.

PHI-240 Introduction to Ethics 3 0 3
Prerequisites: C or better in ENG-111
Corequisites: None
This course introduces theories about the nature and foundations of moral judgments and applications to contemporary moral issues. Emphasis is placed on moral theories such as consequentialism, deontology, virtue ethics etc. Upon completion, students should be able to apply various ethical theories to moral issues such as, abortion, capital punishment, poverty, war, terrorism, the treatment of animals, and issues arising from new technologies. This is a Universal General Education Transfer Component (UGETC) course that satisfies Humanities/Fine Arts.

Physics

PHY-110 Conceptual Physics 3 0 3
Prerequisites: Take DRE 097, DRE 098, ENG 002 Tier 2, ENG 025, and ENG 045, or C or better in ENG 110 or ENG 111
Corequisites: PHY-110A
This course provides a conceptually-based exposure to the fundamental principles and processes of the physical world. Topics include basic concepts of motion, forces, energy, heat, electricity, magnetism, and the structure of matter and the universe. Upon completion, students should be able to describe examples and applications of the principles studied. Nonmathematical discussions of concepts and practical applications will be stressed. This is a Universal General Education Transfer Component (UGETC) course that satisfies Natural Sciences.

PHY-110A Conceptual Physics Lab 0 2 1
Prerequisites: None
Corequisites: PHY-110
This course is a laboratory for PHY 110. Emphasis is placed on laboratory experiences that enhance materials presented in PHY 110. Upon completion, students should be able to apply the laboratory experiences to the concepts presented in PHY 110. This is a Universal General Education Transfer Component (UGETC) course that satisfies Natural Sciences.

PHY-121 Applied Physics I 3 2 4
Prerequisites: None
Corequisites: None
This algebra-based course introduces fundamental physical concepts as applied to industrial and service technology fields. Topics include systems of units, problem-solving methods, graphical analyses, vectors, motion, forces, Newton's laws of motion, work, energy, power, momentum, and properties of matter. Upon completion, students should be able to demonstrate an understanding of the principles studied as applied in industrial and service fields.

PHY-125 Health Sciences Physics 3 2 4
Prerequisites: Take DRE 097, DRE 098, ENG 002 Tier 2, ENG 025, and ENG 045, or C or better in ENG 110 or ENG 111
Corequisites: None
This course introduces fundamental physical principles as they apply to health technologies. Topics include motion, force, work, power, simple machines, and other topics as required by the student's area of study. Upon completion, students should be able to demonstrate an understanding of the fundamental principles covered as they relate to practical applications in the health sciences.

PHY-151 College Physics I 3 2 4
Prerequisites: DRE 097, DRE 098, ENG 002 Tier 2, ENG 025, and ENG 045, or C or better in ENG 110 or ENG 111; C or better in MAT 171, MAT 175, or MAT 271
Corequisites: None
This course uses algebra/trigonometry-based mathematical models to introduce the fundamental concepts that describe the physical world. Topics include units and measurement, vectors, linear kinematics and dynamics, energy, power, momentum, fluid mechanics, and heat. Upon completion, students should be able to demonstrate an understanding of the principles involved and display analytical problem-solving ability for the topics covered. This is a Universal General Education Transfer Component (UGETC) course that satisfies Natural Sciences for the Associates in Science Degree.

PHY-152 College Physics II 3 2 4
Prerequisites: C or better in PHY-151
Corequisites: None
This course uses algebra/trigonometry-based mathematical models to introduce the fundamental concepts that describe the physical world. Topics include electrostatic forces, electric fields, electric potentials, direct-current circuits, magnetostatic forces, magnetic fields, electromagnetic induction, alternating-current circuits, and light. Upon completion, students should be able to demonstrate an understanding of the principles involved and display analytical problem-solving ability for the topics covered. This is a Universal General Education Transfer Component (UGETC) course that satisfies Natural Sciences for the Associates in Science Degree.

***PHY-251 General Physics I 3 3 4**
Prerequisites: DRE 098, ENG 002 Tier 2, ENG 025, and ENG 045, or C or better in ENG 110 or ENG 111; C or better in MAT 271
Corequisites: C or better in MAT 272
This course uses calculus-based mathematical models to introduce the fundamental concepts that describe the physical world. Topics include units and measurement, vector operations, linear kinematics and dynamics, energy, power, momentum, rotational mechanics, periodic motion, fluid mechanics, and heat. Upon completion, students should be able to demonstrate an understanding of the principles involved and display analytical problem-solving ability for the topics covered. This is a Universal General Education Transfer Component (UGETC) course that satisfies Natural Sciences for the Associates in Science Degree.

***PHY-252 General Physics II 3 3 4**
Prerequisites: C or better in MAT-272 and PHY-251
Corequisites: None
This course uses calculus-based mathematical models to introduce the fundamental concepts that describe the physical world. Topics include electrostatic forces, electric fields, electric potentials, direct-current circuits, magnetostatic forces, magnetic fields, electromagnetic induction, alternating-current circuits, and light. Upon completion, students should be able to demonstrate an understanding of the principles involved and display analytical problem-solving ability for the topics covered. This is a Universal General Education Transfer Component (UGETC) course that satisfies Natural Sciences for the Associates in Science Degree.

Political Science

POL-120 American Government 3 0 3
Prerequisites: Take DRE 097, DRE 098, ENG 002 Tier 1, ENG 025, or C or better in ENG 110 or ENG 111
Corequisites: None
This course is a study of the origins, development, structure, and functions of American government. Topics include the constitutional framework, federalism, the three branches of government including the bureaucracy, civil rights and liberties, political participation and behavior, and policy process. Upon completion, students should be able to demonstrate an understanding of the basic concepts and participatory processes of the American political system. This is a Universal General Education Transfer Component (UGETC) course that satisfies Social/Behavioral Sciences.

Psychology

PSY-150 General Psychology 3 0 3
Prerequisites: None
Corequisites: None
This course provides an overview of the scientific study of human behavior. Topics include history, methodology, biopsychology, sensation, perception, learning, motivation, cognition, abnormal behavior, personality theory, social psychology, and other relevant topics. Upon completion, students should be able to demonstrate a basic knowledge of the science of psychology. This is a Universal General Education Transfer Component (UGETC) course that satisfies Social/Behavioral Sciences.

PSY-237 Social Psychology 3 0 3
Prerequisites: C or better in PSY-150 or SOC-210
Corequisites: None
This course introduces the study of individual behavior within social contexts. Topics include affiliation, attitude formation and change, conformity, altruism, aggression, attribution, interpersonal attraction, and group behavior. Upon completion, students should be able to demonstrate an understanding of the basic principles of social influences on behavior. This course has been approved for transfer under the CAA as a general education course in Social/Behavioral Sciences.

PSY-241 Developmental Psychology 3 0 3
Prerequisites: C or better in PSY-150
Corequisites: None
This course is a study of human growth and development. Emphasis is placed on major theories and perspectives as they relate to the physical, cognitive, and psychosocial aspects of development from conception to death. Upon completion, students should be able to demonstrate knowledge of development across the life span. This course has been approved for transfer under the CAA as a general education course in Social/Behavioral Sciences.

PSY-281 Abnormal Psychology 3 0 3
Prerequisites: C or better in PSY-150
Corequisites: None
This course provides an examination of the various psychological disorders, as well as theoretical, clinical, and experimental perspectives of the study of psychopathology. Emphasis is placed on terminology, classification, etiology, assessment, and treatment of the major disorders. Upon completion, students should be able to distinguish between normal and abnormal behavior patterns as well as demonstrate knowledge of etiology, symptoms, and therapeutic techniques. This course has been approved for transfer under the CAA as a general education course in Social/Behavioral Sciences.

Radiography

***RAD 110 Rad Intro & Patient Care 2 3 0 3**
Prerequisites: None
Corequisites: RAD 111
This course provides an overview of the radiography profession and student responsibilities. Emphasis is placed on basic principles of patient care, radiation protection, technical factors, and medical terminology. Upon completion, students should be able to demonstrate basic skills in these areas.

***RAD 111 RAD Procedures I 3 3 0 4**
Prerequisites: None
Corequisites: RAD 110
This course provides the knowledge and skills necessary to perform standard radiographic procedures. Emphasis is placed on radiography of the chest, abdomen, extremities, bony thorax and pelvis. Upon completion, students should be able to demonstrate competence in these areas.

***RAD 112 RAD Procedures II 3 3 0 4**
Prerequisites: RAD-111
Corequisites: None
This course provides the knowledge and skills necessary to perform standard radiographic procedures. Emphasis is placed on radiography of the skull, spine, and gastrointestinal, biliary, and urinary systems. Upon completion, students should be able to demonstrate competence in these areas.

***RAD 113 RAD Elective Lab 0 3 0 1**
Prerequisites: None
Corequisites: None
This course provides additional laboratory opportunities in radiologic technology. Emphasis is placed on radiographic procedures and manipulation of equipment. Upon completion, students should be able to demonstrate competence in radiographic procedures through laboratory evaluations.

***RAD 121 Image Production I 2 3 0 3**
Prerequisites: RAD 111
Corequisites: None
This course provides the basic principles of radiographic image production. Emphasis is placed on image production, x-ray equipment, receptor exposure, and basic imaging quality factors. Upon completion, students should be able to demonstrate an understanding of basic principles of radiographic image production.

***RAD 122 Image Production II 1 3 0 2**
Prerequisites: RAD 121
Corequisites: None
This course is designed to continue to develop the concepts and principles in the field of radiologic technology. Emphasis is placed on advanced digital principles and production. Upon completion, students should be able to demonstrate an understanding of advanced principles of digital imaging production.

*RAD 141 Radiation Safety 2 0 0 2

Prerequisites: RAD 121
Corequisites: None

This course covers the principles of radiation protection and radiobiology. Topics include the effects of ionizing radiation on body tissues, protective measures for limiting exposure to the patient and personnel, and radiation monitoring devices. Upon completion, students should be able to demonstrate an understanding of the effects and uses of radiation in diagnostic radiology.

*RAD 151 RAD Clinical Ed I 0 0 6 2

Prerequisites: None
Corequisites: None

This course introduces patient management and basic radiographic procedures in the clinical setting. Emphasis is placed on mastering positioning of the chest and extremities, manipulating equipment, and applying principles of ALARA. Upon completion, students should be able to demonstrate successful completion of clinical objectives.

*RAD 161 RAD Clinical Ed II 0 0 15 5

Prerequisites: RAD 151
Corequisites: None

This course provides additional experience in patient management and in more complex radiographic procedures. Emphasis is placed on mastering positioning of the spine, pelvis, head and neck, and thorax and adapting procedures to meet patient variations. Upon completion, students should be able to demonstrate successful completion of clinical objectives.

*RAD 171 RAD Clinical Ed III 0 0 9 3

Prerequisites: RAD 161
Corequisites: None

This course provides experience in patient management specific to advanced radiographic procedures. Emphasis is placed on applying appropriate technical factors to all studies and transitioning to mastering positioning of advanced studies. Upon completion, students should be able to demonstrate successful completion of clinical objectives.

*RAD 181 RAD Clinical Elective 0 0 3 1

Prerequisites: RAD 161
Corequisites: None

This course provides advanced knowledge of clinical applications. Emphasis is placed on enhancing clinical skills. Upon completion, students should be able to successfully complete the clinical course objectives.

*RAD 211 RAD Procedures III 2 3 0 3

Prerequisites: RAD 122 and RAD 141
Corequisites: None

This course provides the knowledge and skills necessary to perform standard and specialty radiographic procedures. Emphasis is placed on radiographic specialty procedures, advanced imaging, radiographic pathology and image analysis. Upon completion, students should be able to demonstrate an understanding of these areas.

*RAD 231 Image Production III 1 3 0 2

Prerequisites: RAD 122 and RAD 141
Corequisites: None

This course is designed to continue to develop the concepts and principles in the field of radiologic technology. Emphasis is placed on complex imaging production and principles, quality control and quality assurance in the imaging sciences. Upon completion, students should be able to demonstrate an understanding of advanced radiographic equipment and quality control programs.

*RAD 251 RAD Clinical Ed IV 0 0 21 7

Prerequisites: RAD 171 and RAD 181
Corequisites: None

This course provides the opportunity to continue mastering all basic radiographic procedures and to attain experience in advanced areas. Emphasis is placed on equipment operation, pathological recognition, pediatric and geriatric variations, and further awareness of radiation protection requirements. Upon completion, students should be able to demonstrate successful completion of clinical objectives.

*RAD 261 RAD Clinical Ed V 0 0 21 7

Prerequisites: RAD 251
Corequisites: None

This course is designed to enhance expertise in all radiographic procedures, patient management, radiation protection, and image production and evaluation. Emphasis is placed on developing an autonomous approach to the diversity of clinical situations and successfully adapting to those procedures. Upon completion, students should be able to demonstrate successful completion of clinical objectives.

*RAD 271 Radiography Capstone 2 3 0 3

Prerequisites: RAD 211, RAD 231, RAD 251
Corequisites: None

This course provides an opportunity to exhibit problem-solving skills required for certification. Emphasis is placed on critical thinking and integration of didactic and clinical components. Upon completion, students should be able to demonstrate the knowledge required of an entry-level radiographer.

Substance Abuse

*SAB 110 Intro to Addiction & Recovery 3 0 0 3

Prerequisites: None
Corequisites: None

This course provides an overview of the core concepts in addiction and recovery. Topics include the history of substance use, effects on society members, treatment of addiction, and preventive measures. Upon completion, students should be able to demonstrate knowledge of the origins of substance use, addiction, prevention, treatment, and recovery.

*SAB 120 Intake and Assessment 3 0 0 3

Prerequisites: None
Corequisites: None

This course covers processes for rapport building and procedures used to identify and evaluate individuals' strengths and weaknesses. Topics include diagnostic evaluation and placement, effective interviewing and communication techniques, and use of assessment tools. Upon completion, students should be able to establish rapport with individuals, recognize disorders, and obtain information for referrals and placement.

*SAB-135 Addictive Process 3 0 0 3

Prerequisites: None
Corequisites: None

This course covers the physical, emotional, psychological, and cultural aspects of the addictive process. Emphasis is placed on disorders related to addictions to alcohol, drugs, food, sex, work, gambling, internet, and relationships. Upon completion, students should be able to identify the effects, prevention strategies, and treatment methods associated with addictive disorders.

*The numbers following course titles indicate **class**, **lab**, **clinic/co-op/shop**, and **credit** hours, respectively.*

*SAB-210 Addiction and Recovery Counsel 2 2 0 3

Prerequisites: None
Corequisites: None

This course provides theory and skills acquisition by utilizing intervention strategies designed to obtain therapeutic information, support recovery, and prevent relapse. Topics include counseling individuals and dysfunctional families, screening instruments, counseling techniques and approaches, recovery and relapse, and special populations. Upon completion, students should be able to discuss issues critical to recovery, identify intervention models, and initiate a procedure culminating in cognitive/behavioral change.

*SAB 240 Diversity, Ethics, & Trends 3 0 0 3

Prerequisites: None
Corequisites: None

This course introduces systems of diversity, ethics, and trends in addiction and recovery. Topics include confidentiality, assessment of personal values, professional responsibilities, competencies, and ethics relative to multicultural service provision. Upon completion, students should be able to apply and discuss multiple diversity and ethical scenarios applicable to addiction and recovery services.

Information Systems Security

SEC-110 Security Concepts 2 3 3

Prerequisites: C or better in CTI-120
Corequisites: None

This course introduces the concepts and issues related to securing information systems and the development of policies to implement information security controls. Topics include the historical view of networking and security, security issues, trends, security resources, and the role of policy, people, and processes in information security. Upon completion, students should be able to identify information security risks, create an information security policy, and identify processes to implement and enforce policy. This course has been certified by the National Security Agency, National Information Assurance Education and Training Program as meeting NSTISSI No. 4011, National Training Standard for Information Systems Security (INFOSEC) Professionals and CNSSI No. 4013 Entry Level System Administrators (SA).

SEC-160 Security Administration I 2 2 3

Prerequisites: C or better in SEC-110
Corequisites: None

This course provides an overview of security administration with an emphasis on designing secure network architectures. Topics include networking technologies, TCP/IP fundamentals, network protocols, traffic analysis, monitoring strategies, and established security best practices. Upon completion, students should be able to use advanced network analysis tools to monitor network traffic and develop security measures to safeguard against various threats.

SEC-210 Intrusion Detection 2 2 3

Prerequisites: C or better in SEC-160
Corequisites: None

This course introduces the student to intrusion detection methods in use today. Topics include the types of intrusion detection products, traffic analysis, and planning and placement of intrusion detection solutions. Upon completion, students should be able to plan and implement intrusion detection solution for networks and host based systems.

*SEC-285 Systems Security Project 1 4 3

Prerequisites: C or better in CTI-110, CTI-120, and CTS-115
Corequisites: None

This course provides students with the opportunity to apply their knowledge and skills from the systems security program. Topics include crafting and implementing effective security policies, planning processes, defining procedures, ensuring business continuity, achieving compliance, conducting audits, performing security tests, and designing secure system architectures. Upon completion, students should be able to design and implement comprehensive security solutions.

Sociology

SOC-210 Introduction to Sociology 3 0 3

Prerequisites: None
Corequisites: None

This course introduces the scientific study of human society, culture, and social interactions. Topics include socialization, research methods, diversity and inequality, cooperation and conflict, social change, social institutions, and organizations. Upon completion, students should be able to demonstrate knowledge of sociological concepts as they apply to the interplay among individuals, groups, and societies. This is a Universal General Education Transfer Component (UGETC) course that satisfies Social/Behavioral Sciences.

SOC-213 Sociology of the Family 3 0 3

Prerequisites: None
Corequisites: None

This course covers the institution of the family and other intimate relationships. Emphasis is placed on mate selection, gender roles, sexuality, communication, power and conflict, parenthood, diverse life-styles, divorce and remarriage, and economic issues. Upon completion, students should be able to analyze the family as a social institution and the social forces which influence its development and change. This course has been approved for transfer under the CAA as a general education course in Social/Behavioral Sciences.

SOC-220 Social Problems 3 0 3

Prerequisites: None
Corequisites: None

This course provides an in-depth study of current social problems. Emphasis is placed on causes, consequences, and possible solutions to problems associated with families, schools, workplaces, communities, and the environment. Upon completion, students should be able to recognize, define, analyze, and propose solutions to these problems. This course has been approved for transfer under the CAA as a general education course in Social/Behavioral Sciences.

SOC-225 Social Diversity 3 0 3

Prerequisites: None
Corequisites: None

This course provides a comparison of diverse roles, interests, opportunities, contributions, and experiences in social life. Topics include race, ethnicity, gender, sexual orientation, class, and religion. Upon completion, students should be able to analyze how cultural and ethnic differences evolve and how they affect personality development, values, and tolerance. This course has been approved for transfer under the CAA as a general education course in Social/Behavioral Sciences.

Medical Sonography

*SON-110 Intro to Sonography 1 3 3 3

Prerequisites: Enrollment in Sonography Program
Corequisites: SON 130

This course provides an introduction to medical sonography. Topics include applications, sonographic terminology, history, patient care, ethics, and basic skills. Upon completion, students should be able to define professionalism and sonographic applications and perform basic patient care skills and preliminary scanning techniques.

*SON-111 Sonographic Physics 3 3 0 4

Prerequisites: None
Corequisites: None

This course introduces ultrasound physical principles, bioeffects, and sonographic instrumentation. Topics include sound wave mechanics, transducers, sonographic equipment, Doppler physics, bioeffects, and safety. Upon completion, students should be able to demonstrate knowledge of sound wave mechanics, transducers, sonography equipment, the Doppler effect, bioeffects, and safety.

*SON-120 SON Clinical Ed I 0 0 15 5

Prerequisites: SON-110
Corequisites: None

This course provides active participation in clinical sonography. Emphasis is placed on imaging, processing, and technically evaluating sonographic examinations. Upon completion, students should be able to image, process, and evaluate sonographic examinations.

*SON-121 SON Clinical Ed II 0 0 15 5

Prerequisites: SON-120
Corequisites: None

This course provides continued active participation in clinical sonography. Emphasis is placed on imaging, processing, and technically evaluating sonographic examinations. Upon completion, students should be able to image, process, and evaluate sonographic examinations.

*SON-130 Abdominal Sonography I 2 3 0 3

Prerequisites: Enrollment in Sonography Program
Corequisites: SON-110

This course introduces abdominal and small parts sonography. Emphasis is placed on the sonographic anatomy of the abdomen and small parts with correlated laboratory exercises. Upon completion, students should be able to recognize and acquire basic abdominal and small parts images.

*SON-131 Abdominal Sonography II 1 3 0 2

Prerequisites: SON-130
Corequisites: None

This course covers abdominal and small parts pathology recognizable on sonograms. Emphasis is placed on abnormal sonograms of the abdomen and small parts with correlated sonographic cases. Upon completion, students should be able to recognize abnormal pathological processes in the abdomen and on small parts sonographic examinations.

*SON-140 Gynecological Sonography 2 0 0 2

Prerequisites: SON-110
Corequisites: None

This course is designed to relate gynecological anatomy and pathology to sonography. Emphasis is placed on gynecological relational anatomy, endovaginal anatomy, and gynecological pathology. Upon completion, students should be able to recognize normal and abnormal gynecological sonograms.

*SON-220 SON Clinical Ed III 0 0 24 8

Prerequisites: SON-121
Corequisites: None

This course provides continued active participation in clinical sonography. Emphasis is placed on imaging, processing, and technically evaluating sonographic examinations. Upon completion, students should be able to image, process, and evaluate sonographic examinations.

*SON-221 SON Clinical Ed IV 0 0 24 8

Prerequisites: SON-220
Corequisites: None

This course provides continued active participation off campus in clinical sonography. Emphasis is placed on imaging, processing, and technically evaluating sonographic examinations. Upon completion, students should be able to image, process, and evaluate sonographic examinations.

*SON-225 Case Studies 0 3 0 1

Prerequisites: SON-110
Corequisites: None

This course offers the opportunity to present interesting cases found during clinical education. Emphasis is placed on presentation methods which integrate patient history, laboratory results, and sonographic findings with reference to current literature. Upon completion, students should be able to correlate information necessary for complete presentation of case studies.

*SON-241 Obstetrical Sonography I 2 0 0 2

Prerequisites: SON-110
Corequisites: None

This course covers normal obstetrical sonography techniques, the normal fetal environment, and abnormal first trimester pregnancy states. Topics include gestational dating, fetal anatomy, uterine environment, and first trimester complications. Upon completion, students should be able to produce gestational sonograms which document age, evaluate the uterine environment, and recognize first trimester complications.

*SON-242 Obstetrical Sonography II 2 0 0 2

Prerequisites: SON-241
Corequisites: None

This course covers second and third trimester obstetrical complications and fetal anomalies. Topics include abnormal fetal anatomy and physiology and complications in the uterine environment. Upon completion, students should be able to identify fetal anomalies, fetal distress states, and uterine pathologies.

*SON-250 Vascular Sonography 1 3 0 2

Prerequisites: None
Corequisites: None

This course provides an in-depth study of the anatomy and pathology of the vascular system. Topics include peripheral arterial, peripheral venous, and cerebrovascular disease testing. Upon completion, students should be able to identify normal vascular anatomy and recognize pathology of the vascular system.

*SON 272 Advanced Pathology 0 3 0 1

Prerequisites: SON-110
Corequisites: None

This course is designed to concentrate on complex pathological states seen on sonograms. Emphasis is placed on systemic diseases and multi-organ disease states as seen on sonograms. Upon completion, students should be able to research, present, and discuss system diseases presented on sonograms.

***SON-289 Sonographic Topics 2 0 0 2**
Prerequisites: SON-110
Corequisites: None
This course provides an overview of sonographic topics in preparation for certification examinations. Emphasis is placed on registry preparation. Upon completion, students should be able to demonstrate a comprehensive knowledge of sonography and be prepared for the registry examinations.

Spanish

SPA-111 Elementary Spanish I 3 0 3
Prerequisites: DRE 097, DRE 098, ENG 002 Tier 1, ENG 025, or C or better in ENG 110 or ENG 111
Corequisites: None
This course introduces the fundamental elements of the Spanish language within a cultural context. Emphasis is placed on the development of basic listening, speaking, reading, and writing skills. Upon completion, students should be able to comprehend and respond with grammatical accuracy to spoken and written Spanish and demonstrate cultural awareness. Lab practice is expected of students. This course has been approved for transfer under the CAA as a general education course in Humanities/Fine Arts.

SPA-112 Elementary Spanish II 3 0 3
Prerequisites: C or better in SPA-111
Corequisites: None
This course is a continuation of SPA 111 focusing on the fundamental elements of the Spanish language within a cultural context. Emphasis is placed on the progressive development of listening, speaking, reading, and writing skills. Upon completion, students should be able to comprehend and respond with increasing proficiency to spoken and written Spanish and demonstrate further cultural awareness. This course has been approved for transfer under the CAA as a general education course in Humanities/Fine Arts.

SPA-120 Spanish for the Workplace 3 0 3
Prerequisites: None
Corequisites: None
This course offers applied Spanish for the workplace to facilitate basic communication with people whose native language is Spanish. Emphasis is placed on oral communication and career-specific vocabulary that targets health, business, and/or public service professions. Upon completion, students should be able to communicate at a functional level with native speakers and demonstrate cultural sensitivity.

SPA-211 Intermediate Spanish I 3 0 3
Prerequisites: C or better in SPA-112
Corequisites: None
This course provides a review and expansion of the essential skills of the Spanish language. Emphasis is placed on the study of authentic and representative literary and cultural texts. Upon completion, students should be able to communicate effectively, accurately, and creatively about the past, present, and future. This course has been approved for transfer under the CAA as a general education course in Humanities/Fine Arts.

SPA-212 Intermediate Spanish II 3 0 3
Prerequisites: C or better in SPA-211
Corequisites: None
This course provides a continuation of SPA 211. Emphasis is placed on the continuing study of authentic and representative literary and cultural texts. Upon completion, students should be able to communicate spontaneously and accurately with increasing complexity and sophistication. This course has been approved for transfer under the CAA as a general education course in Humanities/Fine Arts.

Surveying

SRV 110 Surveying I 2 6 4
Prerequisites: Take One Set
Set 1: MAT-121
Set 2: MAT-171
Set 3: MAT-003
Corequisites: None
This course introduces the theory and practice of plane surveying. Topics include the precise measurement of distances, angles, and elevations; bearing, azimuth and traverse computations; topography and mapping. Upon completion, students should be able to use/care for surveying equipment, collect field survey data, perform traverse computations and create a contour map.

SRV 111 Surveying II 2 6 4
Prerequisites: SRV 110
Corequisites: None
This course introduces route surveying and roadway planning and layout. Topics include simple, compound, reverse, spiral, and vertical curves; geometric design and layout; planning of cross-section and grade line; drainage; earthwork calculations; and mass diagrams. Upon completion, students should be able to calculate and lay out highway curves; prepare roadway plans, profiles, and sections; and perform slope staking.

SRV 210 Surveying III 2 6 4
Prerequisites: SRV 110
Corequisites: None
This course introduces boundary surveying, land partitioning, and calculations of areas. Topics include advanced traverses and adjustments, preparation of survey documents, and other related topics. Upon completion, students should be able to research, survey, and map a boundary.

SRV 220 Surveying Law 2 2 3
Prerequisites: SRV 110
Corequisites: None
This course introduces the law as related to the practice of surveying. Topics include surveyors' responsibilities, deed descriptions, title searches, eminent domain, easements, weight of evidence, riparian rights, and other related topics. Upon completion, students should be able to identify and apply the basic legal aspects associated with the practice of land surveying.

SRV 240 Topo/Site Surveying 2 6 4
Prerequisites: SRV 110
Corequisites: SRV 210
This course covers topographic, site, and construction surveying. Topics include topographic mapping, earthwork, site planning, construction staking, and other related topics. Upon completion, students should be able to prepare topographic maps and site plans and locate and stake out construction projects.

SRV 250 Advanced Surveying 2 6 4
Prerequisites: SRV 111
Corequisites: None
This course covers advanced topics in surveying. Topics include photogrammetry, astronomical observations, coordinate systems, error theory, GPS, GIS, Public Land System, and other related topics. Upon completion, students should be able to apply advanced techniques to the solution of complex surveying problems.

Sustainability Technologies

SST-110 Intro to Sustainability 3 0 3
Prerequisites: None
Corequisites: None
This course introduces sustainability issues and individual contributions toward environmental sustainability. Topics include management processes needed to maximize renewable/non-renewable energy resources, economics of sustainability, and reduction of environmental impacts. Upon completion, students should be able to discuss sustainability practices and demonstrate an understanding of their effectiveness and impacts.

SST-120 Energy Use Analysis 2 2 3
Prerequisites: DMA 050 or placement
Corequisites: None
This course introduces the principles of analyzing energy use, energy auditing tools and techniques, conservation techniques, and calculating energy savings. Topics include building system control theory, calibrating digital controls, energy loss calculations, and applicable conservation techniques. Upon completion, students should be able to demonstrate an understanding of energy use, audits, and controls in the analysis of energy consumption.

SST-140 Green Bldg & Design Concepts 1 3 3
Prerequisites: None
Corequisites: None
This course is designed to introduce the student to sustainable building design and construction principles and practices. Topics include sustainable building rating systems and certifications, energy efficiency, indoor environmental quality, sustainable building materials and water use. Upon completion, students should be able to identify the principles and practices of sustainable building design and construction.

***SST-210 Issues in Sustainability 3 0 3**
Prerequisites: SST 110
Corequisites: None
This course introduces the long-term impacts and difficulties of applying sustainability concepts in an organization, business, or society. Topics include the application of sustainable technologies and the analysis of affordability, efficiencies, recycling, and small and large-scale design. Upon completion, students should be able to recognize the possible limitations of sustainable technologies and be prepared to reconcile such conflicts.

Surgery

***SUR-110 Intro to Surg Technology 3 0 0 3**
Prerequisites: BIO-168
Corequisites: BIO-169, SUR-111
This course provides a comprehensive study of peri-operative care, patient care concepts, and professional practice concepts within the profession of surgical technology. Topics include: introductory concepts, organizational structure and relationships, legal, ethical and moral issues, medical terminology, pharmacology, anesthesia, wound healing management concepts, and technological sciences. Upon completion, students should be able to apply theoretical knowledge of the course topics to the practice of surgical technology.

***SUR-111 Periop Patient Care 5 6 0 7**
Prerequisites: None
Corequisites: BIO-169 and SUR-110
This course provides the surgical technology student the theoretical knowledge required to function in the pre-operative, intra-operative, and post-operative role. Topics include asepsis, disinfection and sterilization, physical environment, instrumentation, equipment, peri-operative patient care, and peri-operative case management. Upon completion, students should be able to apply the principles and practice of the per-operative team member to the operative environment.

***SUR-122 Surgical Procedures I 5 3 0 6**
Prerequisites: BIO-169, SUR-110 and SUR-111
Corequisites: SUR-123
This course provides an introduction to selected basic and intermediate surgical specialties that students are exposed to the first clinical rotation. Emphasis is placed on related surgical anatomy, pathology, and procedures that enhance theoretical knowledge of patient care, instrumentation, supplies, and equipment. Upon completion, students should be able to correlate, integrate, and apply theoretical knowledge of the course topics to the clinical operative environment.

***SUR-123 Sur Clinical Practice I 0 0 21 7**
Prerequisites: SUR-110 and SUR-111
Corequisites: SUR-122
This course provides clinical experience with a variety of perioperative assignments to build upon skills learned in SUR-111. Emphasis is placed on the scrub and circulating roles of the surgical technologist including aseptic technique and basic case preparation for selected surgical procedures. Upon completion, students should be able to prepare, assist with, and dismantle basic surgical cases in both the scrub and circulating roles.

***SUR-134 Surgical Procedures II 5 0 0 5**
Prerequisites: SUR-123
Corequisites: SUR-135
This course provides a comprehensive study of intermediate and advanced surgical specialties that students are exposed to in the second clinical rotation. Emphasis is placed on related surgical anatomy, pathology, and procedures that enhance theoretical knowledge of patient care, instrumentation, supplies, and equipment. Upon completion, students should be able to correlate, integrate, and apply theoretical knowledge of the course topics to the clinical operative environment.

***SUR-135 SUR Clinical Practice II 0 0 12 4**
Prerequisites: SUR-122 and SUR-123
Corequisites: SUR-134
This course provides clinical experience with a variety of perioperative assignments to build skills required for complex perioperative patient care. Emphasis is placed on greater technical skills, critical thinking, speed, efficiency, and autonomy in the operative setting. Upon completion, students should be able to function in the role of an entry-level surgical technologist.

***SUR-137 Prof Success Prep 1 0 0 1**
Prerequisites: SUR-123
Corequisites: SUR-134 and SUR-135
This course provides employability skills and an overview of theoretical knowledge in preparation for certification. Topics include test-taking strategies, resume preparation, interviewing strategies, communication skills, and teamwork concepts. Upon completion, students should be able to prepare a resume, demonstrate appropriate interview techniques, and identify strengths and weaknesses in preparation for certification.

*SUR-210 Adv SUR Clinical Practice 0 0 6 2

Prerequisites: None
Corequisites: None

This course is designed to provide individualized experience in advanced practice, education, circulating, and managerial skills. Emphasis is placed on developing and demonstrating proficiency in skills necessary for advanced practice. Upon completion, students should be able to assume leadership roles in a chosen specialty area.

*SUR-211 Adv Theoretical Concepts 2 0 0 2

Prerequisites: None
Corequisites: None

This course covers theoretical knowledge required for extension of the surgical technologist role. Emphasis is placed on advanced practice in complex surgical specialties, educational methodologies, and managerial skills. Upon completion, students should be able to assume leadership roles in a chosen specialty area.

*SUR-212 SUR Clinical Supplement 0 0 12 4

Prerequisites: SUR-135
Corequisites: None

This course provides the opportunity to continue mastering the continuity of care in the peri-operative assignment. Emphasis is placed on maintaining and enhancing acquired clinical skills in the peri-operative setting. Upon completion, students should be able to demonstrate mastery of surgical techniques in the role of the entry level surgical technologist.

Social Work

*SWK 110 Intro to Social Work 3 0 0 3

Prerequisites: None
Corequisites: None

This course examines the historical development, values, orientation, and professional standards of social work and focuses on the terminology and broader systems of social welfare. Emphasis is placed on the various fields of practice including those agencies whose primary function is financial assistance, corrections, mental and behavioral health, and protective services. Upon completion, students should be able to demonstrate an understanding of the knowledge, values, and skills of the social work professional

Three Dimensional Printing

TDP 110 Introduction to 3D Printing 2 3 3

Prerequisites: None
Corequisites: None

This course covers the historical, social and ethical issues, as well as the basic techniques surrounding 3D Printing. Topics include current and historical events, social impact of the technology and basic model creation and manipulation techniques. Upon completion, students should be able to demonstrate an understanding of the major advantages and disadvantages of 3D Printing technology as well as demonstrate an ability to create and print a simple project.

*The numbers following course titles indicate **class**, **lab**, **clinic/co-op/shop**, and **credit** hours, respectively.*

Transportation Technology

*TRN-110 Intro to Transport Tech 1 2 2

Prerequisites: None
Corequisites: None

This course covers workplace safety, hazardous materials, environmental regulations, hand tools, service information, basic concepts, vehicle systems, and common transportation industry terminology. Topics include familiarization with major vehicle systems, proper use of various hand and power tools, material safety data sheets, and personal protective equipment. Upon completion, students should be able to demonstrate appropriate safety procedures, identify and use basic shop tools, and describe government regulations regarding transportation repair facilities.

*TRN-120 Basic Transp Electricity 4 3 5

Prerequisites: None
Corequisites: None

This course covers basic electrical theory, wiring diagrams, test equipment, and diagnosis, repair and replacement of batteries, starters, and alternators. Topics include Ohm's Law, circuit construction, wiring diagrams, circuit testing, and basic troubleshooting. Upon completion, students should be able to properly use wiring diagrams, diagnose, test, and repair basic wiring, battery, starting, charging, and electrical concerns.

*TRN-120A Basic Transp Electrical Lab 0 3 1

Prerequisites: None
Corequisites: TRN 120

This course provides a lab that allows students to enhance their understanding of electrical components and circuits used in the transportation industry. Topics include inspection, diagnosis, and repair of electrical components and circuits using appropriate service information for specific transportation systems. Upon completion, students should be able to diagnose and service electrical components and circuits used in transportation systems.

*TRN-130 Intro to Sustainable Transp 2 2 3

Prerequisites: None
Corequisites: None

This course provides an overview of alternative fuels and alternative fuel vehicles. Topics include composition and use of alternative fuels including compressed natural gas, biodiesel, ethanol, hydrogen, and synthetic fuels, hybrid/electric, and vehicles using alternative fuels. Upon completion, students should be able to identify alternative fuel vehicles, explain how each alternative fuel delivery system operates, and perform minor repairs.

*TRN-140 Transp Climate Control 1 2 2

Prerequisites: None
Corequisites: None

This course covers the theory of refrigeration and heating, electrical/electronic/pneumatic controls, and diagnosis and repair of climate control systems. Topics include diagnosis and repair of climate control components and systems, recovery/recycling of refrigerants, and safety and environmental regulations. Upon completion, students should be able to diagnose and repair vehicle climate control systems.

*TRN-140A Transp Climate Cont Lab 1 2 2

Prerequisites: None
Corequisites: TRN-140

This course provides experiences for enhancing student skills in the diagnosis and repair of transportation climate control systems. Emphasis is placed on reclaiming, recovery, recharging, leak detection, climate control components, diagnosis, air conditioning equipment, tools and safety. Upon completion, students should be able to describe the operation, diagnose, and safely service climate control systems using appropriate tools, equipment, and service information.

***TRN-145 Adv Transp Electronics 2 3 3**
Prerequisites: TRN-120
Corequisites: None

This course covers advanced transportation electronic systems including programmable logic controllers, on-board data networks, telematics, high voltage systems, navigation, collision avoidance systems and electronic accessories. Topics include interpretation of wiring schematics, reprogramming PLC's, diagnosing and testing data networks and other electronic concerns. Upon completion, students should be able to reprogram PLC's, diagnose and test data networks and other electronic concerns, and work safely with high voltage systems.

***TRN 170 PC Skills for Transp 1 2 2**
Prerequisites: None
Corequisites: None

This course introduces students to personal computer literacy and Internet literacy with an emphasis on the transportation service industry. Topics include service information systems, management systems, computer-based systems, and PC-based diagnostic equipment. Upon completion, students should be able to access information pertaining to transportation technology and perform word processing.

Veterinary Medicine

VET-110 Animal Breeds and Husbandry 2 2 0 3
Prerequisites: None
Corequisites: None

This course provides a study of the individual breed characteristics and management techniques of the canine, feline, equine, bovine, porcine, ovine, caprine, and laboratory animals. Topics include physiological data, animal health management, and basic care and handling of animals. Upon completion, students should be able to identify breeds of domestic and laboratory animals, list physiological data, and outline basic care, handling, and management techniques.

VET-120 Vet Anatomy and Physiology 3 3 0 4
Prerequisites: None
Corequisites: VET-121

This course covers the structure and function of the animal body with emphasis on the similarities and differences among domestic animals. Emphasis is placed on the structure and function of the major physiological systems of domestic, laboratory, and zoo animals. Upon completion, students should be able to identify relevant anatomical structure and describe basic physiological processes for the major body systems.

VET-121 Veterinary Medical Terminology 3 0 0 3
Prerequisites: None
Corequisites: VET-120

This course covers the basic medical terminology required for veterinary technicians. Topics include the pronunciation, spelling and definition of word parts and vocabulary terms unique to the anatomy, clinical pathology, and treatment of animals. Upon completion, students should be able to demonstrate knowledge and understanding of basic medical terms as they relate to veterinary medicine. It is highly recommended that this course be taken in the first semester of the Veterinary Technology program.

VET-123 Veterinary Parasitology 2 3 0 3
Prerequisites: VET-120 and VET-121
Corequisites: VET-110

This course covers the common internal and external parasites of companion animals, livestock, selected zoo animals, and wild animals. Emphasis is placed on laboratory diagnosis of the most common forms of the parasite through fecal, urine, skin and blood exams. Upon completion, students should be able to identify common parasites and discuss life-cycles, treatment and prevention strategies, and public health aspects of veterinary parasitology.

VET-125 Veterinary Diseases I 2 0 0 2
Prerequisites: VET-120 and VET-121
Corequisites: VET-110

This course introduces basic immunology, fundamentals of disease processes including inflammation, and common infectious diseases of animals and their prevention through immunization. Topics include fundamental disease processes, principles of medical therapy, immunologic processes, infections and zoonotic diseases of domestic animals, and prevention of disease. Upon completion, students should be able to describe basic disease and immunological processes, recognize infections and zoonotic diseases, and discuss prevention strategies.

VET-126 Veterinary Diseases II 1 3 0 2
Prerequisites: VET-125
Corequisites: None

This course includes the study of basic disease processes, fundamentals of pathology and other selected topics of veterinary medicine. Topics include histopathology, pathologic changes associated with common diseases of animals, necropsy procedures, specimen handling, and other selected material. Upon completion, students should be able to describe basic pathological changes associated with disease, recognize histopathologic changes, and properly perform collection and submission of necropsy specimens.

VET-131 Vet Lab Techniques I 2 3 0 3
Prerequisites: VET-123 and VET-125
Corequisites: VET-133

This course includes the fundamental study of hematology, hemostasis, and urinalysis. Emphasis is placed on basic hematology and urinalysis techniques, manual skill development, instrumentation, quality control, and applications to veterinary science. Upon completion, students should be able to perform manual and automated CBCs, hemostatic assays, and complete urinalyses and maintain laboratory equipment and quality control.

VET-133 Vet Clinical Practices I 2 3 0 3
Prerequisites: VET-123 and VET-125
Corequisites: VET-120 and VET-131

This course introduces basic practices and techniques of the veterinary clinic and biomedical research fields for dogs, cats, and laboratory animals. Topics include physical exam, husbandry, housing, sanitation, restraint and handling, administration of medications, anesthesia and euthanasia techniques, grooming and dentistry. Upon completion, students should be able to properly restrain, medicate, examine, groom, and maintain each of the species studied.

VET-137 Vet Office Practices 1 2 0 2
Prerequisites: None
Corequisites: VET-110, VET-120, and VET-121
This course is designed to teach basic administrative techniques, client communication skills, and regulations pertaining to veterinary medicine. Topics include record keeping, telephone techniques, professional liability, office procedures, state and national regulatory laws, human relations, and animal welfare. Upon completion, students should be able to demonstrate effective communication techniques, office procedures, and knowledge of regulatory laws and issues relating to animal welfare.

VET-211 Vet Lab Techniques II 2 3 0 3
Prerequisites: VET-131, VET-133
Corequisites: VET-213, VET-215, and VET-126
This course covers advanced hematology, serology, immunology, and clinical chemistry. Topics include advanced hematologic, serologic, and immunologic test procedures, manual and automated clinical chemistry procedures, laboratory safety, and quality control. Upon completion, students should be able to collect, prepare, and analyze serum and plasma samples and outline quality control and safety procedures.

VET-212 Vet Lab Techniques III 2 3 0 3
Prerequisites: VET-211, VET-213, and VET-126
Corequisites: VET-214, VET-215, and VET-217
This course introduces the basic principles of microbiology, histology and cytology. Emphasis is placed on collection of microbiological samples for culture and sensitivity and collection and preparation of samples for histological and cytological examination. Upon completion, students should be able to perform microbiological culture and sensitivity and evaluate cytology and histology specimens.

VET-213 Vet Clinical Practice II 1 9 0 4
Prerequisites: VET-133, VET-131
Corequisites: VET-126, VET-211, and VET-215
This course covers basic radiography, anesthesia techniques, dentistry, sample collection and handling, surgical assistance and instrumentation, sterile techniques, and patient record keeping. Topics include basic radiology, injectable and gas anesthesia, dentistry, instrument identification and care, sterile surgical technique, specimen collection and processing, and maintenance of patient records. Upon completion, students should be able to take and process radiographs, administer and monitor anesthesia, assist in surgical procedures, collect specimens, and maintain surgical records.

VET-214 Vet Clinical Practice III 1 9 0 4
Prerequisites: VET-211, VET-213 and VET-215
Corequisites: VET-212, VET-217
The course covers advanced anesthetic techniques, special radiographic techniques, advanced dentistry, sample collection and processing, bandaging, and emergency and critical care procedures. Topics include induction and maintenance of anesthesia, radiographic contrast studies, advanced dentistry, external coaptation, intensive care procedures, and advanced sample collection techniques. Upon completion, students should be able to demonstrate proficiency in sample collection, radiology, anesthesia, critical care and emergency procedures, and dentistry.

VET-215 Veterinary Pharmacology 3 0 0 3
Prerequisites: CHM-130/CHM-130A and MAT-110
Corequisites: VET-213, VET-211, and VET-126
This course introduces drugs and other substances utilized in veterinary medicine. Emphasis is placed on drug classification and methods of action, administration, effects and side effects, storing and handling of drugs and dosage calculations. Upon completion, students should be able to properly calculate and administer medications, recognize adverse reactions, and maintain pharmaceutical inventory and administration records.

VET-217 Large Animal Clin Practice 2 3 0 3
Prerequisites: VET-120, and VET-125
Corequisites: VET-212, VET-213, VET-214, and VET-215
This course covers the topics relevant to the medical and surgical techniques for the common domestic large animal species. Topics include physical exam, restraint, sample collection, bandaging, emergency treatment, surgical and obstetrical procedures and instruments, herd health, and lameness topics. Upon completion, students should be able to safely perform restraint, examination, and sample collection; assist surgical, obstetrical, and emergency procedures; and discuss herd health.

VET-237 Animal Nutrition 3 0 0 3
Prerequisites: CHM-130 and CHM-130A
Corequisites: None
This course covers the principles of nutrition and their application to feeding practices of domestic, farm, and companion animals. Topics include basic nutrients and nutritional needs of individual species, proximate analysis, interpretation of food and feed labels, types of animal foods, and ration formulation. Upon completion, students should be able to select appropriate diets for animals in various stages of health and disease, analyze nutrition labels, and identify foods.

Work-Based Learning

***WBL-110 World of Work 1 0 1**
Prerequisite: None
Corequisites: None
This course covers basic knowledge necessary for gaining and maintaining employment. Topics include job search skills, work ethic, meeting employer expectations, workplace safety, and human relations. Upon completion, students should be able to successfully make the transition from school to work.

***WBL-111 Work-Based Learning I 0 10 1**
Prerequisite: See Department Chair for prerequisites
Corequisites: None
This course provides a work-based learning experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

***WBL-112 Work-Based Learning I 0 20 2**
Prerequisite: See Department Chair for prerequisites
Corequisites: None
This course provides a work-based learning experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

***WBL-122 Work-Based Learning II 0 20 2**
Prerequisite: See Department Chair for prerequisites
Corequisites: None
This course provides a work-based learning experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

***WBL-212 Work-Based Learning IV 0 20 2**
Prerequisite: See Department Chair for prerequisites
Corequisites: None
This course provides a work-based learning experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

***WBL-215 Work-Based Learning Seminar IV 1 0 1**
Prerequisite: See Department Chair for prerequisites
Corequisites: WBL 212
The working student will discuss issues and challenges of the workplace as it relates to his/her program of study. Problems encountered in the workplace will be discussed as well as solutions.

Web Technologies

WEB-111 Intro to Web Graphics 2 2 3
Prerequisite: None
Corequisites: None
This course introduces the creation of web graphics, and addressing problems peculiar to WWW display using appropriate software. Topics include web graphics file types, optimization, RGB color, web typography, elementary special effects, transparency, animation, slicing, basic photo manipulation, and other related topics. Upon completion, students should be able to create graphics, such as animated banners, buttons, backgrounds, logos, and manipulate photographic images for Web delivery. Emphasis is placed on graphic design principles and industry standard Adobe software.

WEB-115 Web Markup and Scripting 2 3 3
Prerequisite: None
Corequisites: None
This course introduces Worldwide Web Consortium (W3C) Internet programming using JavaScript. Topics include basic syntax, object-oriented programming, functions, variables, events, arrays, validation, accessibility, and web standards. Upon completion, students should be able to write, debug, maintain well-formed and well documented interactive web content using JavaScript code.

WEB-125 Mobile Web Design 2 2 3
Prerequisites: C or better in WEB 111 and WEB 210
Corequisites: None
This course introduces students to web design for mobile devices. Topics include planning an effective mobile Web site, industry standard Mobile Markup Language, CSS3, multimedia, m-commerce, social media, testing and publishing. Upon completion, students should be able to plan, develop, test, and publish Web content designed for mobile devices.

WEB-140 Web Development Tools 2 2 3
Prerequisites: None
Corequisites: None
This course provides an introduction to web development software suites. Topics include the creation of web sites and applets using web development software. Upon completion, students should be able to create entire web sites and supporting applets.

WEB-182 PHP Programming 2 3 3
Prerequisite: C or better in CIS-115 and WEB-115
Corequisites: None
This course introduces students to the server-side, HTML-embedded scripting language PHP. Emphasis is placed on programming techniques required to create dynamic web pages using PHP scripting language features. Upon completion, students should be able to design, code, test, debug, and create a dynamic web site using the PHP scripting language.

WEB-210 Web Design 2 2 3
Prerequisite: C or better in WEB-115
Corequisites: None
This course introduces intermediate to advanced web design techniques. Topics include customer expectations, advanced markup language, multimedia technologies, usability and accessibility practices, and techniques for the evaluation of web design. Upon completion, students should be able to employ advanced design techniques to create high impact and highly functional web sites. Emphasis is placed on CSS layout techniques.

WEB-213 Internet Mkt & Analytics 2 2 3
Prerequisite: C or better in WEB 210
Corequisites: None
This course introduces students to Search Engine Optimization (SEO), Search Engine Marketing (SEM) and web analytics. Topics include Search Engine Optimization (SEO), Pay Per Click advertising (PPC), Search Engine Marketing (SEM), web analytics, eye-tracking software and email marketing. Upon completion, students should be able to set up, monitor and maintain SEO optimized websites; and develop strategies for online marketing and advertising plans. This course provides introduction to social media marketing and programming.

WEB 215 Adv Markup and Scripting 2 3 3
Prerequisite: Prerequisite: C or better in WEB 115 and WEB 210
Corequisites: None
This course covers the advanced programming skills required to design Internet applications and interactive web content. Emphasis is placed on the programming techniques required to develop Internet applications, interactive web content, frameworks, and using libraries. Upon completion, students should be able to design, code, debug, and document Internet-based programming solutions to various real-world problems.

WEB-225 Content Management Sys 2 2 3
Prerequisites: C or better in DBA 210, WEB 182, and WEB 210
Corequisites: None
This course introduces students to Content Management Systems (CMS) designed for the publication of Web content to Web sites. Topics include individual user accounts, administration menus, RSS-feeds, customizable layout, flexible account privileges, logging, blogging systems, creating online forums, and modules. Upon completion, students should be able to register and maintain individual user accounts and create a business website and/or an interactive community website.

WEB-250 Database Driven Websites 2 2 3
Prerequisites: C or better in DBA-210 and WEB-182
Corequisites: None

This course introduces dynamic (database-driven) website development. Topics include the use of basic database CRUD statements (create, read, update and delete) incorporated into web applications, as well as in software architecture principles. Upon completion, students should be able to design and develop database driven web applications according to industry standards.

***WEB-289 Web Dev Capstone Project 1 4 3**
Prerequisites: C or better in CTS 115, WEB 215, and WEB 250
Corequisites: None

This course provides an opportunity to complete a significant Web technologies project from the design phase through implementation with minimal instructor support. Emphasis is placed on project definition, documentation, installation, testing, presentation, and training. Upon completion, students should be able to complete an Internet project from the definition phase through implementation.

Welding

WLD-110 Cutting Processes 1 3 2
Prerequisites: None
Corequisites: None

This course introduces oxy-fuel and plasma-arc cutting systems. Topics include safety, proper equipment setup, and operation of oxy-fuel and plasma-arc cutting equipment with emphasis on straight line, curve, and bevel cutting. Upon completion, students should be able to oxy-fuel and plasma-arc cut metals of varying thicknesses.

WLD-112 Basic Welding Processes 1 3 2
Prerequisites: None
Corequisites: None

This course introduces basic welding and cutting. Emphasis is placed on beads applied with gases, mild steel fillers, and electrodes and the capillary action of solder. Upon completion, students should be able to set up welding and oxy-fuel equipment and perform welding, brazing, and soldering processes.

WLD-113 Soldering and Brazing 1 2 2
Prerequisites: None
Corequisites: None

This course covers procedures for cutting, soldering and brazing of pipe and tubing. Topics include safety, proper equipment setup, and operation of soldering and brazing equipment. Upon completion, students should be able to solder and braze pipe, tubing, and fittings in various positions.

WLD-115 SMAW (Stick) Plate 2 9 5
Prerequisites: None
Corequisites: None

This course introduces the shielded metal arc (stick) welding process. Emphasis is placed on padding, fillet, and groove welds in various positions with SMAW electrodes. Upon completion, students should be able to perform SMAW fillet and groove welds on carbon plate with prescribed electrodes.

***WLD-116 SMAW (Stick) Plate/Pipe 1 9 4**
Prerequisites: WLD 115
Corequisites: None

This course is designed to enhance skills with the shielded metal arc (stick) welding process. Emphasis is placed on advancing manipulative skills with SMAW electrodes on varying joint geometry. Upon completion, students should be able to perform groove welds on carbon steel with prescribed electrodes in the flat, horizontal, vertical, and overhead positions.

WLD-121 GMAW (MIG) FCAW/Plate 2 6 4
Prerequisites: None
Corequisites: None

This course introduces metal arc welding and flux core arc welding processes. Topics include equipment set up and fillet and groove welds with emphasis on the application of proper GMAW and FCAW consumables on carbon steel plate. Upon completion, students should be able to perform fillet welds on carbon steel with prescribed filler materials in the flat, horizontal, and overhead positions.

WLD-131 GTAW (TIG) Plate 2 6 4
Prerequisites: None
Corequisites: None

This course introduces the gas tungsten arc (TIG) welding process. Topics include correct selection of tungsten, polarity, gas, and proper filler rod with emphasis placed on safety, equipment setup, and welding techniques. Upon completion, students should be able to perform GTAW fillet and groove welds with various electrodes and filler materials.

***WLD-132 GTAW (TIG) Plate/Pipe 1 6 3**
Prerequisites: WLD-131
Corequisites: None

This course is designed to enhance skills with the gas tungsten arc (TIG) welding process. Topics include setup, joint preparation, and electrode selection with emphasis on manipulative skills in all welding positions on plate and pipe. Upon completion, students should be able to perform GTAW welds with prescribed electrodes and filler materials on various joint geometry.

WLD-141 Symbols & Specifications 2 2 3
Prerequisites: None
Corequisites: None

This course introduces the basic symbols and specifications used in welding. Emphasis is placed on interpretation of lines, notes, welding symbols, and specifications. Upon completion, students should be able to read and interpret symbols and specifications commonly used in welding.

WLD 143 Welding Metallurgy 1 2 2
Prerequisites: None
Corequisites: None

This course introduces the concepts of welding metallurgy. Emphasis is placed on basic metallurgy, effects of welding on various metals, and metal classification and identification. Upon completion, students should be able to understand basic metallurgy, materials designation, and classification systems used in welding.

***WLD-151 Fabrication I** **2 6 4**
Prerequisites: WLD-110, WLD-115, WLD-121 and WLD-131
Corequisites: None
This course introduces the basic principles of fabrication. Emphasis is placed on safety, measurement, layout techniques, and the use of fabrication tools and equipment. Upon completion, students should be able to perform layout activities and operate various fabrication and material handling equipment.

***WLD-215 SMAW (Stick) Pipe** **1 9 4**
Prerequisites: WLD-115 or WLD-116
Corequisites: None
This course covers the knowledge and skills that apply to welding pipe. Topics include pipe positions, joint geometry, and preparation with emphasis placed on bead application, profile, and discontinuities. Upon completion, students should be able to perform SMAW welds to applicable codes on carbon steel pipe with prescribed electrodes in various positions.

***WLD-231 GTAW (TIG) Pipe** **1 6 3**
Prerequisites: WLD-116, WLD-122, and WLD-132
Corequisites: None
This course covers gas tungsten arc welding on pipe. Topics include joint preparation and fit up with emphasis placed on safety, GTAW welding technique, bead application, and joint geometry. Upon completion, students should be able to perform GTAW welds to applicable codes on pipe with prescribed electrodes and filler materials in various pipe positions.

***WLD-261 Certification Practices** **1 3 2**
Prerequisites: WLD-115, WLD-121, and WLD-131
Corequisites: None
This course covers certification requirements for industrial welding processes. Topics include techniques and certification requirements for pre-qualified joint geometry. Upon completion, students should be able to perform welds on carbon steel plate and/or pipe according to applicable codes.

WLD-262 Inspection & Testing **2 2 3**
Prerequisites: None
Corequisites: None
This course introduces destructive and nondestructive testing methods. Emphasis is placed on safety, types and methods of testing, and the use of testing equipment and materials. Upon completion, students should be able to understand and/or perform a variety of destructive and nondestructive testing processes.

WLD 268 Robotic Gas Metal Arc Welding **2 6 4**
Prerequisites: None
Corequisites: None
This course provides a comprehensive overview of the tasks and responsibilities required of the robotic welding technician. Topics include robotic and welding safety, proper equipment usage and care, robotic welding programming, various automated welding applications, automated Gas Metal Arc Welding (GMAW) processes, equipment controls and settings, and weld quality. Upon completion, students should be able to set up, program, operate, and successfully run robotic gas welding equipment for various welding applications.

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Index

A

A-B Tech Enka....1
A-B Tech ID Cards....29
A-B Tech Madison....1
A-B Tech Online....10
A-B Tech Police....90
A-B Tech Police:....1
A-B Tech Police Department....88
A-B Tech's Assessment of Student Achievement....94
A-B Tech Student Retention and Completion Data....96
A-B Tech Woodfin....1
Academic Advising....85
Academic and Student Support Services....85
Academic Fresh Start....83
Academic Procedures....77
Accelerated AA Pathway....101
Access to Achievement....90
Accounting and Finance....129
Accreditation....1
Additional Costs....32
Administration....20
Administrative Offices....272
Admissions Policy....24
Admissions Procedure....25
Air Conditioning, Heating & Refrigeration Technology .. 130
Animals on Campus....72
Architecture Pathway....114
Asheville-Buncombe Technical Community College Foundation....21
Asheville Campus....1
Associate in Arts (AA) Degree....99
Associate in Arts (AA) Pathways....100
Associate in Arts in Teacher Preparation....121
Associate in Arts In Teacher Preparation (AATP) Degree....120
Associate in Engineering (AE) Degree....110
Associate in Engineering - Chemical Engineering Pathway....112
Associate in Engineering - Civil Engineering Pathway.... 112
Associate in Engineering - General Pathway....111
Associate in Fine Arts in Visual Arts (AFA) Degree....107
Associate in Fine Arts in Visual Arts - Film Pathway....109
Associate in Fine Arts in Visual Arts - Graphic Design Pathway....109
Associate in Fine Arts in Visual Arts - Interior Design Pathway....109
Associate in Fine Arts in Visual Arts - Studio Art Pathway....110
Associate in General Education Degree....124
Associate in General Occupational Technology Degree. 132
Associate in Science (AS) Degree....112
Associate in Science in Teacher Preparation (ASTP)123
Associate in Science In Teacher Preparation (ASTP) Degree....122
Associate of Applied Science Degrees, Diplomas, and Certificates....127
Automotive Systems Technology....133
Aviation Management & Career Pilot Technology....134

B

BankMobile....34
Basic Law Enforcement Training....136
Biology Pathway - Appalachian State University, Mars Hill University, and Western Carolina University....114
Biology Pathway - UNC Asheville....115
Biomedical Equipment Technology....137
BioNetwork....22
Board of Trustees....270
Bookstore....90
Brewing, Distillation and Fermentation....138
Business, Accounting, and Finance Pathway - Appalachian State University....101
Business, Accounting, and Finance Pathway- UNC Asheville, Western Carolina University, and Mars Hill University....101
Business Administration....141

C

Campus Facilities....21
Campus Maps....18
CAPS Fee....32
Cardiovascular Sonography....144
Center for Academic Achievement....86, 90
Chemistry Pathway....115
Child Care....90
Class Attendance....77
Classification of Students....77
Code of Classroom Conduct....50
Code of Student Conduct....51
College Calendar 2025–2026....15
College Closing or Delayed Opening....90
College Events....90
College Services....90
College Vision, Mission and Values....21
Communicable Disease and Occupational Exposure to Blood-borne Pathogens....74
Communication Pathway....102
Community Enrichment Programs....22
Computer Engineering Technology....145
Computer-Integrated Machining....146
Computer Science - Appalachian State University Western Carolina University and Mars Hill University....116
Computer Science: Computer Systems Concentration Pathway - UNC Asheville....115
Computer Use and Technology Fee....32
Construction Management Pathway - Appalachian State University....102
Construction Management Pathway - Western Carolina University....102
Construction Management Technology....148
Consumable Supply Fee....32
Cosmetology....150
Cosmetology Instructor....152
Costs....22
Counseling Services and Career Services....85
Course Descriptions....205
Course Repetition....79
Course Substitutions....78

Creative Arts Pathway....103
Culinary Arts....90, 153
Current Status....21
Curricula....20
Curriculum Programs....8, 97

D

Dental Assisting....156
Dental Clinic....90
Dental Hygiene....157
Developmental Studies....86
Diesel and Heavy Equipment Technology....158
Directory of College Services and Offices....11
Don C. Locke Library....91
Drug and Alcohol Policy....68
Dual High School Enrollment....27
E
Early Childhood Education....159
Economic & Workforce Development....22
Economic & Workforce Development/
Continuing Education....22
Education Tax Credits....37
Electrical Systems Technology....162
Electronics Engineering Technology....164
Emergency Medical Science....164
Emergency Services Programs....23
English Pathway....103
Environmental Science Pathway - Appalachian State University....116
Environmental Science Pathway - UNC Asheville....116
Esthetics Instructor....166
Esthetics Technology....167

F

FASAP Status....35
Final Examinations....79
Financial Aid....33
Financial Aid Satisfactory Academic Progress (FASAP) Policy....34
Food Options on Campus....90
Foreign Language Pathway....104
Free Speech, Distribution of Materials and Assembly 74

G

General AA Pathway....100
General Admission for Curriculum Students....24
General AS Pathway....114
General Education for the
Associate of Applied Science....126
Geomatics Technology (Surveying)....167
Grading System....80

H

Health and Fitness Science....168
Health Clinic....90
History....20
History Pathway....104
Honorary Societies....90
Honors and Achievements....83
Hospitality Management....169

I

Independent Study....82
Information Systems Pathway - Appalachian State University....104
Information Technology: Artificial Intelligence....170
Information Technology: Information Systems....171
Information Technology: Network Management....173
Information Technology: Software and Web Development....174
Information Technology: Systems Security....176
Intellectual Property....77
International Applicants....31
Internet and Campus Network
Acceptable Use Policy....75
Intramurals....90
Introduction to College Courses for Degree-Seeking Students....78

J

K

L

Location....21

M

Main College Contact Information....1
Manicuring Instructor....178
Manicuring/Nail Technology....178
Math Pathway....117
Matriculation Fee....32
Maximum Course Load....82
Mechanical Engineering Technology....179
Mechatronics Engineering Technology....180
Medical Assisting....180
Medical Laboratory Technology....181
Medical Office Administration....182
Medical Sonography....184
Mission....21
Mountain Tech Spa....91

N

NCSARA....4
NCWorks Career Center Asheville....23
New Student Orientation....27
Non-Discrimination and Harassment Policy....39
Non-Discrimination and Harassment Procedure....39
North Carolina Residency....31
Nursing....185
Nutrition Pathway - Appalachian State University and Western Carolina University....105

O

Occupational Therapy Assistant....191
Office Management....192
Organization....20
Other College Services and Information....90
Overview of Placement and Assessment of College Readiness....28

P

Parking Locations ... 91
Parking Regulations ... 88
Philosophy Pathway ... 105
Physics Pathway ... 117
Placement Service ... 91
Political Science Pathway ... 105
Pre-Dental Pathway ... 117
Pre-Engineering Pathway ... 118
Pre-Health Pathway ... 106
Pre-Med Pathway ... 118
Pre-Pharmacy Pathway ... 118
Pre-Physical Therapy Pathway ... 119
Pre-Physician's Assistant Pathway ... 119
Prerequisites and Co-requisites ... 78
Pre-Veterinarian Pathway ... 119
Printing Fees ... 32
Privacy of Student Records ... 44
Programs & Services ... 22
Psychology Pathway ... 106

Q

QEP: PEAK Performance A-B TECH Success Coaching ... 91
Quality Points ... 81

R

Radiography ... 194
Requirements ... 84

S

Schedule Adjustments ... 78
Scheduling an Assessment ... 29
Scholarships ... 38
Scholarships and Other Financial Aid Information ... 37
Selective and Limited Admission Programs ... 28
Services to Students with Disabilities ... 85
Sexual Misconduct Policy (Title IX) ... 57
Sexual Misconduct Procedure ... 58
Skills Training Employment Program (STEP) ... 23
Small Business Center. ... 92
Small Business Center & Business Incubation ... 23
Social and Human Services ... 195
Social Work Pathway ... 106
Sociology Pathway ... 107
Specific Program Accreditation/Certification ... 1
Standards for Academic Progress ... 82
Student Accident Claims. ... 92
Student Accident Insurance ... 32
Student Activity Fees ... 32
Student Business Incubation ... 92
Student Clubs and Societies ... 92
Student Complaints ... 46
Student Housing ... 92
Student Lounge ... 92
Student Rights and Responsibilities ... 39
Student Rights of Due Process ... 54
Student Services for Distance Learners ... 87
Students with Disabilities ... 72
Study Abroad Program ... 92
Surgical Technology ... 199
Surgical Technology Bridge Program ... 200

T

The RESET room. ... 92
Threat Assessment ... 55
Title IX Sexual Harassment ... 62
Transcript Codes ... 81
Transcript Fee ... 32
Transfer Credit, Credit-by-Exam, Articulated Credit, CLEP and Advanced Placement Credit, Continuing Education and Licensure Credit ... 29
Transfer of Credit to Other Institutions ... 84
Transfer Pathways ... 99
Transitional Studies Program ... 86
Tuition ... 31
Tuition and Expenses ... 31
Tuition and Fee Refunds ... 32
Tuition Refund Process ... 33

U

UNIVERSAL GENERAL EDUCATION TRANSFER (UGETC) COMPONENT ... 107
University Transfer Degrees ... 98
Use of Artificial Intelligence ... 79

V

Values ... 21
Vaping, E-cigarettes, and Tobacco Free Campus ... 72
Vet Café ... 92
Veterans' Educational Benefits ... 38
Veterinary Medical Technology ... 201
Vision ... 21

W

Weapons On Campus Policy ... 72
Welding Technology ... 202
Work-Based Learning ... 82
Workforce Continuing Education Programs ... 24
Workplace Violence Prevention Policy and Procedures ... 72

X

Y

Z

Numbers

2024 Performance Measures Summary Report ... 95

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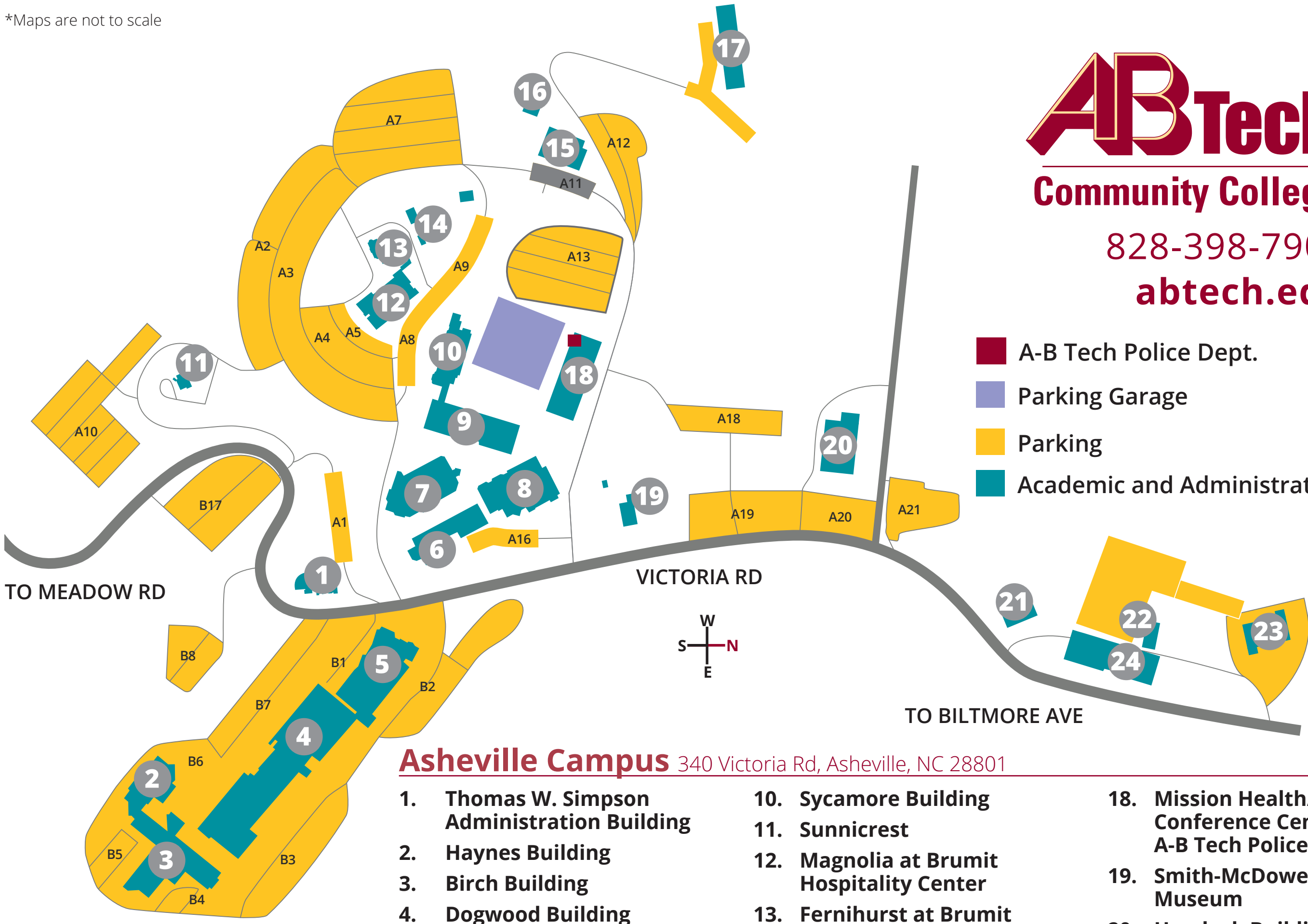
🟨 Parking

🟦 Academic and Administrative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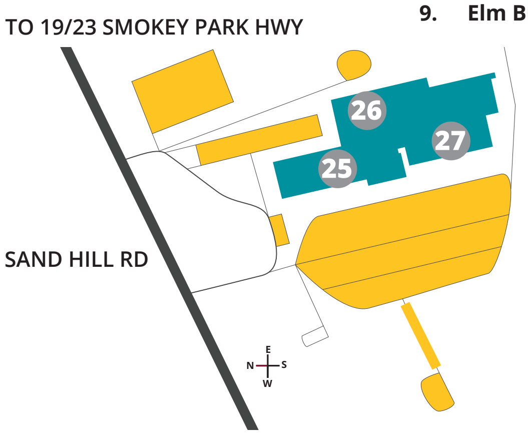
4. Dogwood Building
5. K. Ray Bailey Student Services Building
6. Don C. Locke Library
7. Ferguson Building
8. J. Herbert Coman Student Activity Center
9. Elm Building
10. Sycamore Building
11. Sunnicrest
12. Magnolia at Brumit Hospitality Center
13. Fernihurst at Brumit Hospitality Center
14. Fernihurst Annex A & B
15. Advanced Manufacturing Ctr./Maple Building
16. Maple Building Annex
17. Chestnut Building
18. Mission Health/A-B Tech Conference Center/ A-B Tech Police Dept
19. Smith-McDowell House Museum
20. Hemlock Building
21. Poplar Building
22. Ivy Building
23. Roberson Building (93 Victoria Road)
24. Ferguson Center for Allied Health and Workforce Development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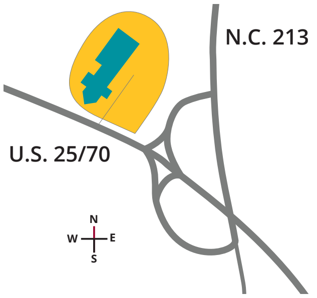
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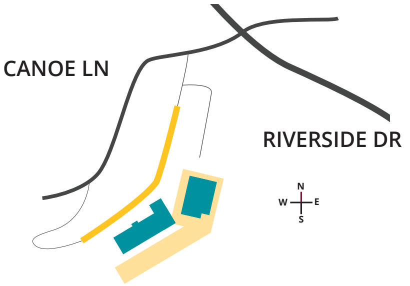
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