

### Description of Program

The Bachelor of Science in Industrial Technology (BSIT) is a degree completion curriculum designed for students who hold a **qualifying Associate in Applied Science (AAS) degree** in an industrial or technology related field. Based on the technical content of the AAS program, students may receive up to 37 hours of major course credit toward the BSIT lower level major core and free electives. Degree requirements are summarized below. Credit for general education is granted based on standard agreements between ECU and the community college system.

There are two completion options: transfer to the main campus or complete online. Depending on the concentration you choose and the courses transferring into ECU, this program is offered as an online option and as a main campus option. For online students, these semester-based courses are delivered to allow students flexibility with regard to time and place. The Department of Technology systems has delivered internet-based instruction since 1995 to hundreds of students all over the World. Please note that our online option is designed for part-time enrollment to help professionals pursue a degree while working.

For students who plan to attend on main campus, courses are available in a traditional classroom setting as daytime courses. Students are typically able to complete the upper level major coursework in two years if enrolled full-time.

The Association of Technology, Management, and Applied Engineering accredits this degree program. Additionally, ECU is regionally accredited by the Southern Association of Colleges and Schools.

### Program Requirements

- Completed a qualifying associate of applied science (AAS) degree program prior to enrollment.
- Apply up to 63 semester hours of the 126 required from a regionally accredited community college.
- Minimum 63 semester hours of the 126 required semester hours must be completed at a four-year college or university.
- The 36 semester hours of major coursework must be completed at ECU (main campus or online).
- Only courses with a 'C' or better will transfer.
- Meet ECU admission requirements ([www.ecu.edu/admissions](http://www.ecu.edu/admissions))
  - Cumulative GPA of 2.5 or higher and 30 hours of transferable course work
  - 3 transferable hours in English Composition equivalent to ENGL 1100

### Contact Information

ecuBSIT@ecu.edu  
(252) 328-9301  
[www.ecu.edu/tsys](http://www.ecu.edu/tsys)



### Required Coursework

#### Industrial Technology Core Coursework (15 hours):

- Technical Writing
- Technology Project Management
- Cost and Capital Project Analysis
- Industrial Supervision
- Introduction to SPC



#### Choose one concentration (27 hours):

- **Mechanical Technology** (main campus only)  
Courses such as Rapid Prototyping, Jig & Fixture Design, Geometric Dimensioning and Tolerancing, CNC, CIM, Plant Layout & Materials Handling.
- **Architectural Technology** (main campus only)  
Courses such as Architectural Design & Drafting, Sustainable Design, Planning Techniques, Introduction to GIS in Planning, Urban Form & Design.
- **Health Information Technologies**<sup>1</sup> (main campus and online options)  
Courses such as Medical Terminology, Health Care Delivery Methods, Quality Management, Professional Roles & Environments, Payment Systems, Ethical Codes & Law, Health Information Management.  
<sup>1</sup> Requires a networking or computer related AAS degree plus current professional certification of Cisco CCENT, CCNA, CCNP, or CompTIA Network+ to qualify for this concentration.
- **Information & Computer Technology**<sup>2</sup> (main campus & online options)  
Courses such as Network Security, Network Environment II & III, Web Services Management, Communication Security, Regulations and Policies, Intrusion Detection Technologies, CCNP, & more.  
<sup>2</sup> Requires a networking, computer, or electronics related AAS degree plus current professional certification of Cisco CCENT, CCNA, P, or CompTIA Network+ to qualify for this concentration.
- **Distribution & Logistics** (main campus and online options)  
Courses such as Introduction to Distribution & Logistics, ERP Systems, Transportation Logistics, Purchasing Logistics, Supply Chain Logistics, Global Logistics, Strategic Pricing, & more.
- **Manufacturing Systems** (main campus and online options)  
Courses such as Industrial Safety, Quality, Plant Layout & Materials Handling, Manufacturing System Planning, Advanced Manufacturing Systems, Work Methods & Ergonomic Analysis, & more.
- **Industrial Supervision** (main campus and online options)  
Courses such as Distribution & Logistics, Technical Presentations, Supply Chain Logistics, Industrial Safety, Quality Assurance, Plant Layout & Materials Handling, Lean Manufacturing, & more.
- **Bioprocess Manufacturing**<sup>3</sup> (main campus and online options)  
Courses in Microbiology for Ind Processing, Engineering for Food Safety & Sanitation, Separation Techniques, Waste Treatment, Safety, Quality.  
<sup>3</sup> Requires a biotechnology related AAS degree.

#### General Education and Cognates (84 hours):

<b>AAS Technical courses (37 hrs)</b>	<b>Math (5 hrs)</b>
<b>English (6 hrs)</b>	College Algebra
Composition I	Applied Trigonometry
Composition II	<b>Humanities &amp; Fine Arts (10 hrs)</b>
<b>Natural Science (8 hrs)*</b>	At least one in Humanities
<b>Social Science (12 hrs)</b>	Public Speaking/Business Comm
Principles of Microeconomics	Hum/Fine Arts to total 10 hrs
Introductory Psychology	<b>Health &amp; Exercise (3 hrs)</b>
Personnel & Industrial Psychology	<b>Cognates (3 hrs)</b>
Social Science Elective	Legal Environment of Business

\*contact an ECU BSIT academic advisor for BSIT architectural and BSIT mechanical concentration natural science requirements

## Approved AAS degrees for BSIT

The Department of Technology Systems has done a thorough review of the North Carolina Community College's Associates in Applied Science (AAS) Degrees. We have identified 52 AAS degrees that align with the Bachelor of Science in Industrial Technology. These AAS degrees align with the Department of Technology Systems and its degree programs and will provide excellent educational pathways towards a four year degree that will not only assist their professional development but also the industries they work for.

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Aerostructure Manufacturing and Repair (A50450)  
Applied Engineering Technology (A40130)  
Architectural Technology (A40100)  
Automation Engineering Technology (A40120)  
Automotive Systems Technology (A60160)  
Aviation Systems Technology (A60200)  
Biopharmaceutical Technology (A20180)  
Bioprocess Technology (A50440)  
Biotechnology (A20100)  
Building Construction Technology (A35140)  
Business Administration/Logistics Management (A2512E)  
Business Administration/Operations Management (A2512G)  
Chemical Process Technology (A50110)  
Chemical Technology (A20120)  
Civil Engineering Technology (A40140)  
Computer Engineering Technology (A40160)  
Computer Information Technology (A25260)  
Computer-Integrated Machining (A50210)  
Computer-Aided Drafting Technology (A50150)  
Computer Technology Integration (A25500)  
Construction Management Technology (A35190)  
Cyber Crime Technology (A55210)  
Electronics Engineering Technology (A40200)  
Electrical/Electronics Technology (A35220)  
Electrical Systems Technology (A35130)  
Environment, Health, and Safety Technology (A50160)  
Facility Maintenance Technology (A50190)  
Global Logistics Technology (A25170)  
General Occupational Technology (A55280)  
Healthcare Business Informatics (A25510)  
Industrial Engineering Technology (A40240)  
Industrial Management Technology (A50260)  
Industrial Systems Technology (A50240)  
Information Systems Security (A25270)  
Information Systems Security/Security Hardware (A2527B)  
Interior Design (A30220)  
Machining Technology (A50300)

Machining Technology/Tool, Die, and Mold Making (A5030A)  
Manufacturing Technology (A50320)  
Manufacturing Technology/Integrated Operations (A5032C)  
Manufacturing Technology/Composites (A5032D)  
Manufacturing Technology/Plastics (A5032A)  
Manufacturing Technology/Quality Assurance (A5032B)  
Mechanical Drafting Technology (A50340)  
Mechanical Engineering Technology (A40320)  
Mechatronics Engineering Technology (A40350)  
Networking Technology (A25340)  
Nondestructive Examination Technology (A50350)  
Nuclear Technology (A50460)  
Project Management Technology (A25390)  
Sustainability Technologies (A40370)  
Welding Technology (A50420)

### **Approved AAS degrees for CMGT**

The Department of Construction Management has done a thorough review of the North Carolina Community College's Associates in Applied Science (AAS) Degrees. We have identified two AAS degrees that align with the Bachelor of Science in Construction Management. These AAS degrees align with the Department of Construction Management and its degree program and will provide excellent educational pathways towards a four year degree that will not only assist their professional development but also the industries they work for.

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Architectural Technology (A40100)  
Building Construction Technology (A35140)  
Civil Engineering Technology (A40140)  
Construction Management Technology (A35190)