Mechanical Design Tech Concentration

Bachelor of Science in Industrial Technology

AAS Degree Completion Program

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 degree** (AAS) in an industrial or technology related field. The BSIT Mechanical Design Technology concentration is offered only on main campus during the daytime (not an online option).

The ***BSIT Mechanical Design Technology Concentration*** emphasizes application of state-of-the-art software, digitizing, and product realization/ development equipment. Graduates have the opportunity to work as design professionals or as members of a design team. Many graduates progress to supervise a design team or manage a design project. Graduates meet nationally recognized standards in demonstrating knowledge and skills in applying design practices and drafting concepts to solve a broad and varied range of design problems. Professional opportunities upon graduation are found in a range of engineering and architecture related disciplines.

This option prepares individuals to apply basic engineering principles and technical skills in support of engineers engaged in the design and development phases of a wide variety of projects involving mechanical systems. It 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, and report preparation.

Program requirements

- Completed a qualifying associate of applied science degree program.
- Apply up to 60 semester hours of the 120 required from a regional accredited community college or technical institute.
- At least 60 semester hours of the 120 required semester hours must be completed at four-year regional accredited colleges or universities.
- At least 33 semester hours of major coursework must be completed at ECU.
- Only courses with a 'C-' or better will transfer.
- Total 120 hours required for this degree.

ACCREDITED BY ATMAE
The Association of Technology, Management, and Applied Engineering

Industrial Technology Degree Requirements

Industrial Technology Major Coursework (42 hours)

- Technical Writing
- Technology Project Management
- Cost and Capital Analysis
- Industrial Supervision
- Introduction to Statistical Process Control
- Engineering Graphics II with Lab
- Rapid Prototyping with Lab
- Jig and Fixture Design with Lab
- Geometric Dimensioning & Tolerancing with Lab
- Machine and Tool Design with Lab
- Computer Numerical Control with Lab
- Robotics in Computer Integrated Manufacturing with Lab
- Plant Layout and Materials Handling
- Approve Technical Elective

Courses to transfer or taken at ECU (84 hours)

AAS Technical courses (38 hrs)

English (6 hours)
Composition I
Composition II

Health & Exercise (2, 1 hours)

General Ed Elective (3 hours)

Natural Science (7 hours)
* College Physics 1 with lab
Natural Science elective
*highly recommended as one of the natural sciences electives.

Math (3 hrs)
College Algebra

Humanities & Fine Arts (9 hrs)
At least one in Humanities
At least one in Fine Art
Humanities/Fine Art to total 9 hrs

Social Science (9 hours)
Principles of Microeconomics
Introductory Psychology
Personnel & Industrial Psychology

Contact Information

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This program is accredited by the Association of Technology, Management, and Applied Engineering (ATMAE) and the Southern Association of Colleges and Schools (SACS).

For more information about admission, tuition, financial aid, housing, and more, please visit ECU's website at www.ecu.edu.

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