

Bachelor of Science in Engineering Technology

Degree Requirements

Candidates for the Bachelor of Science must meet the following requirements.

- 1. Hours Required for the Degree:** Completion of a minimum of 131 total semester hours; 42 must be advanced.
- 2. General University Requirements:** See “General Degree Requirements” in the Academics section of this catalog.
- 3. College of Arts and Sciences Core Curriculum:** Minimum 61 hours (includes requirements of University Core Curriculum). See “Arts and Sciences Core Curriculum” in the College of Arts and Sciences section of this catalog for specific core requirements and list of approved courses. See four-year plan for exact hours and modifications.
- 4. Major Requirements:** 63-69 hours from one of five concentrations chosen with the advice of an academic adviser within the department.
- 5. Minor Requirements:** The above major integrates the traditional major and minor requirements. No additional hours required for a minor.
- 6. Electives:** Elective courses within each concentration must be approved by the student’s academic adviser.
- 7. Other Course Requirements:** MATH 1650, 1710 and 1720. Students registering for fall or spring semester must register for mathematics until the requirement has been satisfied, unless approved by the department chair.
- 8. Other Requirements:** PHYS 1710/1730 and 2220/2240 and CHEM 1420/1440 (with departmental approval) must be taken to satisfy the laboratory science requirement of the Arts and Sciences Core.
The English requirement is met by the following courses: ENGL 1310, 2700, 2210 and 2220.
A 2.5 GPA is required for engineering technology courses in the area of concentration.
DRED (Traffic Safety) courses may not be used to satisfy any portion of a degree in the College of Arts and Sciences.

Manufacturing Technology (MFET)

The manufacturing concentration prepares students for professional careers in the manufacturing environment. Manufacturing technologists apply scientific and engineering knowledge and methods in support of engineering activities. While manufacturing technologists share much of the mathematics and science background of engineers, their academic preparation tends to emphasize technical skills and applications resulting in a practical orientation. The major thrust of the manufacturing curriculum is that of factory automation. Graduates commonly take positions in research and development, process specification and design, reliability/quality assurance and tool design.

BS in Engineering Technology

Following is **one** suggested four-year degree plan. Students are encouraged to see their adviser each semester for help with program decisions and enrollment.

BS in Engineering Technology Concentration in Manufacturing Technology

FRESHMAN YEAR

FALL	HOURS
CHEM 1420, General Chemistry	3
CHEM 1440, General Chemistry Laboratory	1
CSCI 1110, Program Development	3
ENGL 1310, College Writing I	3
MATH 1650, Pre-Calculus ⁴	5
MFET 1220, Manufacturing Processes and Materials ³⁵	<u>3</u>
Total	18

SOPHOMORE YEAR

FALL	HOURS
ENGL 2220, World Literature II	3
HIST 2610, United States History to 1865 ¹²	3
MATH 1720, Calculus II	3
MFET 2360, Welding and Adhesive Bond	3
PHYS 1710, Mechanics	3
PHYS 1730, Laboratory in Mechanics	<u>1</u>
Total	16

JUNIOR YEAR

FALL	HOURS
ELET 3960, Network Analysis	3
MATH 1780, Introduction to Statistical Analysis	3
MEET 3330, Computer-Aided Design I	4
MFET 2110, Machining Principles and Processes	4
MFET 3220, Strength of Materials	<u>3</u>
Total	17

SENIOR YEAR

FALL	HOURS
GNET 1030, Technological Systems ¹⁴	3
MFET 3940, Fluid Mechanics Applications	3
MFET 4230, CNC Programs and Operation	4
MGMT 3830, Operations Management	3
Wellness ¹¹	<u>2-3</u>
Total	15-16

FRESHMAN YEAR

SPRING	HOURS
ECON 1110, Principles of Macroeconomics	3
ENGL 2210, World Literature I	3
MATH 1710, Calculus I	4
MEET 1280, Engineering Graphics	3
PSCI 1040, American Government	<u>3</u>
Total	16

SOPHOMORE YEAR

SPRING	HOURS
COMM 2040, Public Speaking	3
CNET 2220, Statics	3
ENGL 2700, Technical Writing	3
HIST 2620, United States History Since 1865 ¹²	3
PHYS 2220, Electricity and Magnetism	3
PHYS 2240, Laboratory in Wave Motion, Electricity, Magnetism and Optics	<u>1</u>
Total	16

JUNIOR YEAR

SPRING	HOURS
ELET 3970, Electronic Devices and Controls	4
MFET 3250, Plastic Materials and Processes	4
MFET 4190, Quality Assurance	3
MFET 4210, CAD/CAM System Operations	4
Visual and Performing Arts ^{7,16}	<u>3</u>
Total	18

SENIOR YEAR

SPRING	HOURS
CNET 3410, Occupational Safety and Liability	3
MEET 3950, Thermodynamics and Heat Transfer	3
MFET 4200, Engineering Cost Analysis	2
MFET 4250, Senior Manufacturing Design	2
Understanding of Ideas and Values ¹⁹	3
PSCI 1050, American Government	<u>3</u>
Total	16

*Note: Some courses may require prerequisites not listed.
See Arts and Sciences footnotes.*