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: 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 Engineering Technology (MFET)

The manufacturing engineering technology concentration prepares students for professional careers in the manufacturing environment. Manufacturing engineering technologists apply scientific and engineering knowledge and methods in support of engineering activities. While manufacturing engineering 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 engineering technology curriculum is that of factory automation. Graduates commonly take positions in research and development, process specification and design, reliability/quality assurance and tool design. The manufacturing engineering technology concentration is accredited by the Technology Accreditation Commission of the Accreditation Board for Engineering and Technology.

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 Engineering Technology

FRESHMAN YEAR

FALL	HOURS
CHEM 1420, General Chemistry	3
CHEM 1440, General Chemistry Laboratory	1
CSCI 1110, Program Development	4
ENGL 1310, College Writing I	3
MATH 1650, Pre-Calculus[4]	5
MFET 1220, Manufacturing Processes and Materials[35]	3
Total	19

FRESHMAN YEAR

SPRING	HOURS
ECON 1110, Principles of Macroecronomics	3
ENGL 2210, World Literature I	3
MATH 1710, Calculus I	4
MEET 1280, Engineering Graphics	3
PHYS 1710, Mechanics	3
PHYS 1730, Laboratory in Mechanics	1
Total	17

SOPHOMORE YEAR

FALL	HOURS
ENGL 2220, World Literature II	3
HIST 2610, United States History to 1865[12]	3
MATH 1720, Calculus II	3
MEET 2330, Computer-Aided Design	4
MFET 2450, Engineering Materials	3
Total	16

SOPHOMORE YEAR

SPRING	HOURS
ELET 3960, Network Analysis	3
ENGL 2700, Technical Writing	3
MEET 2940, Fluid Power Applications	2
MFET 2360, Materials Joining	3
PHYS 2220, Electricity and Magnetism	3
PHYS 2240, Laboratory in Wave Motion, Electricity, Magnetism and Optics	1
Total	15

JUNIOR YEAR

FALL	HOURS
COMM 2040, Public Speaking	3
GNET 1030, Technological Systems[14]	3
MFET 3240, Statics and Strength of Materials	4
MFET 3940, Fluid Mechanics Applications	3
MSCI 3700, Statistical Analysis I	3
Total	16

JUNIOR YEAR

SPRING	HOURS
ELET 3970, Electronic Devices and Controls	4
MEET 3650, Design of Mechanical Components	3
MFET 2110, Machining Principles and Processes	4
MFET 4190, Quality Assurance	3
MFET 4210, CAD/CAM System Operations	4
Total	18

SENIOR YEAR

FALL	HOURS
MEET 4350, Heat Transfer Applications	3
MFET 4200, Engineering Cost Analysis	2
MFET 4230, CNC Programs and Operation	4
MGMT 3830, Operations Management	3
PSCI 1040, American Government	3
Wellness[11]	2-3
Total	17-18

SENIOR YEAR

SPRING	HOURS
HIST 2620, United Statees History Since 1865[12]	3
MFET 4250, Senior Manufacturing Design	2
PSCI 1050, American Government	3
Technical Option[16]	3
Understanding of Ideas and Values[19]	3
Visual and Performing Arts[7]	3
Total	17

Actual degree plans may vary depending on availability of courses in a given semester.
Some courses may require prerequisites not listed.
See Arts and Sciences folding key (#2) for footnotes.