
Engineering Technology is the profession in which knowledge of mathematics and natural science, gained by higher education, experience, and practice, is devoted primarily to the implementation and extension of existing technology for the benefit of humanity. Engineering Technology education focuses primarily on the applied aspects of science and that portion of the technological spectrum closest to product improvement, industrial practices, and engineering operational functions.

A – GENERAL EDUCATION CORE – 42 HOURS

Students must fulfill the General Education Core requirements. The courses listed below satisfy both degree requirements and General Education core requirements.

Required

020 - Mathematics – 3 hours

MATH 2413 Calculus I (or MATH 2487 Honors) three-hour lecture

030 - Life and Physical Sciences – 6 hours

PHYS 2425 Physics for Scientists and Engineers I three-hour lecture

PHYS 2426 Physics for Scientists and Engineers II three-hour lecture

040 – Language, Philosophy, and Culture – 3 hours

PHIL 2326 Ethics, Technology, and Society

090 - Integrative and Experiential Learning – 6 hours

ENGL 23XX English Literature

CHEM 1111 General Chemistry I Lab

PHYS 2425 Physics for Scientists and Engineers I one-hour lab

PHYS 2426 Physics for Scientists and Engineers II one-hour lab

B – MAJOR REQUIREMENTS – 55 HOURS (40 advanced)

1 – Engineering Technology Core – 40 hours (25 advanced)

ENGT 1105 Machine Shop Lab

ENGT 1201 Foundations of Engineering Technology

ENGT 1310 Design Graphics I

ENGT 1320 Design Graphics II

ENGT 2307 Engineering Materials

ENGT 2310 Manufacturing Processes

ENGT 3301 Computer Numerical Control

ENGT 3303 Programmable Logic Controllers

ENGT 3318 Instruments and Transducers

ENGT 3324 Metrology

ENGT 4201 Technical Project I

ENGT 4202 Technical Project II

ENGT 4315 Robotics

ENGT 4326 Lean Six Sigma

ENGT 4335 Project Management

2 – Advanced Engineering Technology Electives – 15 hours (15 advanced)

ENGT 3300 Topics in Engineering Technology (repeated for additional credit if topics vary)

C – SUPPORT COURSES – 23 HOURS

INFS 2300 Data Modeling Management Tools

MANE 2332 Engineering Statistics

MANE 3337 Engineering Economics

ELEE 2317 Electrical & Electronic Systems

CHEM 1311 General Chemistry I

MATH 2413 Calculus I (or MATH 2487 Honors) one-hour lab

MATH 2414 Calculus II

COMM 1311 Introduction to Communication

TOTAL CREDIT HOURS FOR GRADUATION – 120 HOURS

TOTAL ADVANCED HOURS – 43 HOURS