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 1301 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

ADMISSION, PROGRESSION, AND GRADUATION REQUIREMENTS, if applicable:

Graduation requirements

In addition to the graduation requirements listed in the UTRGV 2018-2019 Undergraduate Catalog, demonstration of proficiency in a language other than English is required at the undergraduate level equivalent to a minimum of six credit hours. Proficiency can be demonstrated by a college credit exam, a placement test approved through the UTRGV Department of Writing and Language Studies, and/or up to six credit hours of college-level language coursework.