
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 1314 College Algebra

030 - Life and Physical Sciences – 6 hours

PHYS 1401 General Physics I three-hour lecture

CHEM 1311 General Chemistry I

090 - Integrative and Experiential Learning – 5 hours

PHYS 1401 General Physics I one-hour lab

CHEM 1111 General Chemistry I Lab

CSCI 1380 Computer Science I

B – MAJOR REQUIREMENTS – 67 HOURS (45 advanced)

1 – Engineering Technology Core – 59 hours (37 advanced)

ENGT 1101 Introduction to Engineering Technology
ENGT 1310 Design Graphics I
ENGT 1320 Design Graphics II
ENGT 1321 Basic Architectural CAD
ENGT 2307 Engineering Materials I for Engineering Technology
ENGT 2310 Introduction to Manufacturing Processes
ENGT 2321 Basic Electronics
ENGT 2350 Residential Architectural CAD
ENGT 3310 Fundamentals of Product Design
ENGT 3311 Statics and Strength of Materials
ENGT 3312 Renewable Energy Technology
ENGT 3320 Computer Integrated Manufacturing
ENGT 3321 Solar Energy Systems
ENGT 3330 Green Building Design I
ENGT 3333 Quality Control
ENGT 3350 Commercial Architectural CAD
ENGT 4210 Senior Project I
ENGT 4220 Senior Project II
ENGT 4311 Wind Energy Systems
ENGT 4312 Production Planning and Control
ENGT 4322 Machine Design

2 – Advanced Engineering Technology Electives – 8 hours (8 advanced)

Choose 8 hours of advanced Engineering Technology or courses approved by faculty advisor.

C – SUPPORT COURSES – 11 HOURS

MATH 2412 Precalculus

MATH 2413 Calculus I (or MATH 2487 Honors)

MATH 1342 Elementary Statistical Methods (or MATH 1387 Honors)

TOTAL CREDIT HOURS FOR GRADUATION – 120 HOURS

TOTAL ADVANCED HOURS – 45 HOURS

ADMISSION, PROGRESSION, AND GRADUATION REQUIREMENTS, if applicable:

Graduation requirements

In addition to the graduation requirements listed in the UTRGV 2015-2017 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.