

Texas Southmost College
Division of Business, Engineering, Architecture, and Technology

The Associate of Science in Engineering degree plan is designed for students who seek to further their educational and professional career goals in the field of engineering. Graduates from the program can choose to pursue a bachelor's degree in any of the engineering specializations including civil, electrical and electronics, mechanical, or telecommunications engineering. This degree is Field of Study (FOS) curriculum complete for civil engineering. It includes the first two years of a four-year baccalaureate engineering program and may transfer to all Texas public institutions of higher education.

Recommended Course Sequence

| FIRST YEAR – FALL SEMESTER | Credits | Core/ Program |
|---|-----------|------------------|
| CHEM 1309 General Chemistry for Engineering Majors | 3 | Program |
| CHEM 1109 General Chemistry for Engineering Majors Lab | 1 | Program |
| ENGR 1201* Introduction to Engineering | 2 | Program |
| ENGL 1301* Composition I | 3 | Core |
| HIST 1301 United States History I | 3 | Core |
| MATH 2413* Calculus I | 4 | Core |
| FIRST YEAR – SPRING SEMESTER | Credits | Core/ Program |
| ENGR 1304* Engineering Graphics I | 3 | Program |
| MATH 2414 Calculus II | 4 | Program |
| HIST 1302 United States History II | 3 | Core |
| PHYS 2325 University Physics I | 3 | Core |
| PHYS 2125 University Physics I Lab | 1 | Core |
| SECOND YEAR – FALL SEMESTER | Credits | Core/ Program |
| ENGR 2301* Engineering Mechanics: Statics | 3 | Program |
| MATH 2415 Calculus III | 4 | Program |
| GOVT 2305 Federal Government | 3 | Core |
| PHYS 2326 University Physics II | 3 | Core |
| PHYS 2126 University Physics II Lab | 1 | Core |
| SECOND YEAR – SPRING SEMESTER | Credits | Core/ Program |
| ENGR 2302* Engineering Mechanics: Dynamics | 3 | Program |
| ENGR 2332* Mechanics of Materials | 3 | Program |
| MATH 2420 Differential Equations | 4 | Program |
| GOVT 2306 Texas Government | 3 | Core |
| XXXX X3XX [†] Language, Philosophy, and Culture/Creative Arts Elective | 3 | Core |
| Total Credit Hours for Graduation | 60 | |



Program Student Learning Outcomes

Program Student Learning Outcomes (PSLO) are statements that specify what students will know, be able to do or be able to demonstrate when they have completed the program.

Graduate from the program will be able to:

1. Understand and comply with the professional responsibilities and the ethical canons vital to the practice of engineering.
2. Conduct experiments and communicate effectively scientific results, mathematical solutions, and engineering principles.
3. Work in teams and demonstrate proper and safe use of instrumentation and software in performing laboratory experiments.

Check course core designation at the [Class Availability website](#).

This information is provided as an example only. You will develop a personalized plan with your Success Coach and faculty advisor/mentor that reflects your goals and interests. You are required to meet with an advisor each semester to ensure you are on track for graduation. This document does not contain all the information you need to stay on track for graduation.

[†]Grade of "C" or better is required for graduation.

[‡]Students may take any course within this category of the TSC General Education Core Curriculum.

[‡]This degree is not Core Complete.