



Description

The Pre-Engineering Program offers students a broad overview of the various fields of engineering including: chemical, civil, petroleum, environmental, electrical, mechanical, computer, and industrial. It also provides a dynamic, activity-based, interactive learning environment that inspires ingenuity and creativity. Students who plan to pursue an engineering degree or take advanced math and science courses in college will benefit from the curriculum taught in this program. Due to the accelerated pace and increased rigor of the advanced math and science courses, students entering the Pre-Engineering Program should be hard-working and highly motivated to be successful.

Application

Applicants must complete a Southern Tech Application for Admission. Additional information and applications are available at the Southern Tech campus and online at www.sotech.edu. Enrollment for this career major is open to partnering High Schools (juniors/seniors) and Adults.

Tuition

High School Student: Free. Adult Student (in-district): \$2.50 per hour; Adult Student (Out-of-District): \$5 per hour; and Adult Student (Out-of-State): \$7.50 per hour. Additional costs may include books, supplies, and miscellaneous fees.

Financial Aid and Scholarships

Financial aid and scholarships are available for qualifying students.

Student Organization

SkillsUSA

Schedule

Adults (Half Time) 8:00-11:00 AM or 12:45-3:45 PM
Adults (Full Time) 8:00-11:00 AM and 12:45-3:45 PM
High School Students: 8:00-11:00 AM or 12:45-3:45 PM

Program Details

Southern Tech is an equal opportunity institution in accordance with civil rights legislation and does not discriminate based on race, color, religion, national origin, sex/gender, age, marital or veteran status, or disability in the operation of its educational programs, activities, recruitment, and admission practices. Concerns regarding this policy should be addressed to the Human Resources Director, 2610 Sam Noble Parkway, Ardmore, OK 73401.

Pre-Engineering

Course	Hours
PLTW Introduction to Engineering Design	120
PLTW Principles of Engineering	120
Geometry (option course)	120
Trigonometry / Pre-Calculus (option course)	120
Algebra II (option course)	120
Pre-AP Calculus (option course)	120
AP Calculus AB (option course)	120
AP Calculus BC (option course)	120
Pre-AP Chemistry (option course)	120
AP Chemistry (option course)	120
Pre-AP Physics (option course)	120
AP Physics B (option course)	120
AP Physics C – Electricity & Magnetism (option course)	120
AP Physics C – Mechanics (option course)	120
PLTW Digital Electronics (option course)	120
PLTW Computer Science and Software Engineering (option course)	120
PLTW Computer Integrated Manufacturing (option course)	120
PLTW Civil Engineering and Architecture (option course)	120
PLTW Biotechnical Engineering (option course)	120
PLTW Aerospace Engineering	120
PLTW Engineering Design and Development (option course)	120
Pre-Engineering Capstone I	45
Pre-Engineering Capstone II	45
Total	1050
<i>Estimated time to complete (Half Time)</i>	<i>2 years</i>
<i>--Option courses based on prior learning and transcripts--</i>	

Targeted Certifications and/or Credentials

- Autodesk Inventor Certified User
- Autodesk Fusion Certified User

Certifications may vary by Program and are subject to change without notice.

Targeted Advanced Placement (AP) Exams

- AP Chemistry
- AP Calculus
- AP Physics

Employment Options

The following list is associated with the approved SOC (Standard Occupational Classification) for this program and does not necessarily represent immediate opportunities; additional training may be required for some options listed.

This program is designed for students who plan to attend college and pursue a degree in engineering, math, science, or pre-med.