PRE-ENGINEERING AT CAPE TECH

ABOUT THE PROGRAM

Pre-Engineering teaches students to effectively know how to design products and develop processes that revolve around different types of problems. Within this three year program, students use portions of the nationally recognized engineering curriculum from Project Lead the Way. The curriculum includes information on various engineering pathways, use of 3D printers, laser cutters, a wind tunnel, Autodesk: Inventor & Revit, CNC Router, Vex Robots and other hands-on tools. Computer Aided Design (CAD) software is often used and helps develop experience using tools that allow for students to be competitive in a national and worldwide workforce. Due to the technical nature of the course and subject material, a strong background and aptitude in mathematics, science, and basic computer technical skills are highly suggested.

STUDENTS WILL

- Have the opportunity to earn dual credit or articulated credit for multiple courses from post-secondary institutions.
- Be exposed to a variety of engineering-related fields and topics in a project based learning environment.
- Utilize hands-on opportunities to include not only theory but also practical application and laboratory work.
- Explore a wide range of job opportunities through internships, guest speakers, field trips, and other interactions with industry professionals.
- Participate in various engineering design competitions with SkillsUSA, SteamTank challenge and others.

CAREER PATHWAYS

CIVIL ENGINEER // MECHANICAL ENGINEER // ARCHITECTURAL & ENGINEERING MANAGER // ENVIRONMENTAL ENGINEER // SOLAR ENERGY SYSTEMS ENGINEER