

Science, Technology, Engineering, and Mathematics (STEM)

Introduction to Career Cluster

STEM is targeted for academically oriented, college prep students. The goal is to prepare students to succeed in college majors of science, technology, engineering, mathematics, and research and development services.

Engineering and Technology Pathway:

This pathway includes all of the many different kinds of engineers who work in both government and the private sector. Jobs include systems engineer, safety engineer, chemical engineer, transportation engineer, optical engineer, nuclear engineer, mechanical engineer, industrial engineer, electrical engineer, civil engineer, biotechnology engineer, and agricultural engineer.

Science and Math:

This pathway includes a variety of occupations, from research scientists and mathematicians, to technicians, such as hazardous materials technicians or nuclear technicians. This pathway also includes scientific specialists, such as herpetologists, physicists, medical doctors, botanists, biologists, toxicologists, paleontologists, ornithologists, chemists, linguists, geologists, astronomers, and archaeologists.

Possible Occupations

Biotechnology Engineer
Chemical Engineer
Civil Engineer
Computer Engineer

Computer Programmer
Medical Doctors
Nuclear Engineers
Research Scientists

Possible Courses

Introduction to Engineering Design
Biology
Chemistry
Principles of Engineering

Analytical Chemistry
Information Technology Applications
Engineering Innovation
Anatomy/Physiology

Possible Partnerships

- Project Lead the Way – college credits available through Project Lead the Way are: Principles of Engineering, Introduction to Engineering Design, Computer Integrated Manufacturing, and Biotechnical Engineering
- Higher Education
- Local Community Based Businesses
- Tri-State Area Businesses

Student Internships