

Focusing Education on the Future!



CAREER PATHWAY ENGINEERING & TECHNOLOGY

Dual or Tech/Career Seal

For a future in Engineering and Technology, students should study and apply principles from advanced mathematics, life sciences, physical science, earth and space science, and technology. In addition, future engineers and technologists should learn certain processes in mathematics, science, and technology.

Major Courses

Students must take **THREE** pathway concentration courses and **ONE** additional pathway elective course.

Pathway Concentration Courses (3):

- Engineering Applications
- Engineering Concepts (formerly Pre-Engineering Technology)
- Engineering Concepts and Drawings
- Foundations of Engineering and Technology (formerly Introduction to Technology I)
- Introduction to Engineering Drawing (Required)
- Introduction to Manufacturing/Engineering Sciences
- Solid Modeling and Design

Pathway Elective Courses (1):

- Apprenticeship/Internship
- Civil Engineering Drawing
- Drafting Technology: Introduction
- Electrical Systems I*
- Mechanical Electrical Systems I*
- Occupational Safety & Fundamentals (formerly Fundamentals of Construction)
- Structural Detailing*
- Technical Manufacturing Concepts and Drawings
- Other Pathway Concentration Course

Other Recommended Courses

- AP or IB Chemistry
- AP Environmental Science
- AP Calculus
- AP or IB Physics
- IB Environmental Systems
- Trigonometry

Post-Secondary Degrees, Diplomas, & Certificates

Technical Colleges

- Computer Service & Electronics Technician
- Cysco Technician
- Drafting
- Electronics Fundamentals/Basic
- Electronics Technology
- Industrial Technology
- Information Systems/Technology

Colleges/Universities

- Aerospace Engineering
- Civil Engineering
- Computer Science/Technology
- Computer Information Systems
- Engineering
- Engineering Science
- Mechanical Engineering



Aerospace Engineer
Automotive Engineer
Computer Programmer
Network Technician
Packaging Engineer
Petroleum Engineer

Computer Hardware Engineer
Biomedical Engineer
Marine Engineer
Nuclear Engineer
Packaging Technician
Structural Engineer

Civil Engineer
Naval Engineer
Electrician
Ocean Engineer
Textile Engineer
Researcher

Computer Software Engineer
Architectural Engineer
Computer Science Technician
Operations Research Engineer
Pharmaceutical Engineer
Survey Technician

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EMPLOYMENT OUTLOOK

The job outlook for engineers and technologists continues to look promising because competitive pressures and advancing technology will force companies to improve and update product designs and to optimize their manufacturing processes. Also, additional engineers and technologists will be needed to improve or build new roads, bridges, water and pollution control systems, as well as other public facilities.