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**

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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.

* Pre-requisites noted in course descriptions.