



Career Cluster: Engineering & Technology

Career Pathway: Engineering

| JUNIOR HIGH / MIDDLE SCHOOL | | | |
|---|--|--|-----------------------------|
| College and Career Awareness | | | |
| Exploring Technology | | | |
| SUPPORTING COURSES: Suggested high school courses that support the Career Pathway (Courses DO NOT count towards the Pathway) | | | |
| Chemistry | Physics | Secondary Math 2 | |
| EXPLORER COURSES: Choose one or more of the following courses. | | | |
| Architectural Design 1 * | Electronics 1 * + | Manufacturing Principles 1 + | Robotics Technology |
| Mechanical Design and Engineering 1 * | Engineering Principles 1 + | Metalworking 1 | Unmanned Aerial Systems |
| CAM Automated Manufacturing | Engineering Technology | Plastics 1 | Welding Technician, Entry * |
| Composites 1 | Machining 1 * | Robotics 1 + | Woods 1 |
| CONCENTRATOR COURSES: To be a concentrator you must pass one of the following courses AND one explorer course. | | | |
| Aerospace Engineering | Electronics 2 * | Materials Science | |
| Mechanical Design and Engineering 2 * | Engineering Principles 2 * | Robotics 2_* | |
| COMPLETER COURSES: To be a completer you must pass a concentrator course and enough courses to equal 3.0 credits in this Pathway. | | | |
| Mechanical Design and Engineering 3 * | Electronics 3 * | Engineering Capstone | |
| Industrial Maintenance Technician | Unmanned Aerial Systems Lab: Design, Build, Maintain | | |
| CTE Internship | Apprenticeship | | |
| POSTSECONDARY: There are many options for education and training beyond high school. | | | |
| Utah System of Higher Education: ushe.edu (Utah's public colleges and universities) | | UtahMajors.org: Majors Guide | |

* concurrent enrollment course + recommended explorer course

| HIGH SCHOOL TO POSTSECONDARY EDUCATION AND TRAINING | | | |
|--|---|---|--|
| There are several options for education and training beyond high school, depending on your career goals. | | | |
| | Certificate | 2-Year Associate Degree | 4-Year Bachelor's Degree |
| | > Machine Operator > Production Technician | > Electro-Mechanical Technicians > Electronics Equipment Assembler | > Automation Engineer > CTE Teacher > Electrical Engineer > Electronics Drafter |

Career and Technical Education provides all students access to high-quality, rigorous career-focused programs that result in attainment of credentials with labor market value. [Credentials of Value](#)

Utah CTE classes are open to all qualified students without regard to race, color, national origin, sex, disability, or age.

Advice to Students

"Taking a CTE course is not for the faint of heart. It is difficult and time consuming. However, through the courses you will fall in love with the subject you are studying. My advice is to never give up no matter how hard it gets. Ten years down the road you will not regret the choice of enrolling in a CTE class."

Ashley Zolnik
 Future Manufacturing Engineer

LEARN MORE ABOUT OCCUPATIONS AND WAGES

Engineering & Technology

UtahCTE.org: [Fact Sheet](#)

Department of Workforce Services
[Utah Occupational Explorer](#)

TSA

is the Career and Technical Student Organization (CTSO) for students in the Engineering Career Pathway.

[TSAweb.org](#) | [UtahTSA.org](#)
[Utah TSA flyer](#)

