

## Career Cluster: Engineering & Technology


### Career Pathway: Engineering

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

\* 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.

	1-2 Year Certificate	2-Year Associate Degree	4-Year Bachelor's Degree
	<ul style="list-style-type: none"> <li>&gt; Machine Operator</li> <li>&gt; Production Technician</li> </ul>	<ul style="list-style-type: none"> <li>&gt; Electro-Mechanical Technicians</li> <li>&gt; Electronics Equipment Assembler</li> </ul>	<ul style="list-style-type: none"> <li>&gt; Automation Engineer</li> <li>&gt; CTE Teacher</li> <li>&gt; Electrical Engineer</li> <li>&gt; Electronics Drafter</li> </ul>

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.

### Student Testimonial

"I would like a career as a manufacturing engineer and go on to pursue my own business in the manufacturing industry. CTE gave me experience for what my career will be like. CTE allowed me to work on the skills that I need to improve on in that specific area."

Garret Maycock  
 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](http://TSAweb.org) | [UtahTSA.org](http://UtahTSA.org)

[Utah TSA flyer](#)

