


## Career Cluster: Engineering & Technology

### Career Pathway: Mechanical Design (CAD)

JUNIOR HIGH / MIDDLE SCHOOL		
<a href="#">College and Career Awareness</a>		
<a href="#">Exploring Technology</a>		
HIGH SCHOOL		
<b>SUPPORTING COURSES:</b> Suggested high school courses that support the Career Pathway (Courses DO NOT count towards the Pathway)		
Secondary Math 2		
<b>EXPLORER COURSES:</b> Choose one or more of the following courses.		
<a href="#">CAD Mechanical Design 1</a> * +	<a href="#">Engineering Technology</a>	<a href="#">Plastics 1</a>
<a href="#">CAM Automated Manufacturing</a>	<a href="#">Machining 1</a> *	<a href="#">Welding Technician, Entry Level</a> *
<a href="#">Composites 1</a>	<a href="#">Metalworking 1</a>	<a href="#">Woods 1</a>
<b>CONCENTRATOR COURSES:</b> To be a concentrator you must pass the following course AND one explorer course.		
<a href="#">CAD Mechanical Design 2</a> *		
<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.		
<a href="#">CAD Mechanical Design 3</a> *		
CTE Internship		<a href="#">Credentials of Value</a>
POSTSECONDARY:		
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
N/A		<ul style="list-style-type: none"> <li>&gt; Engineering Technician</li> <li>&gt; Mechanical Drafter</li> <li>&gt; Mechanical Engineering Technician</li> </ul>	<ul style="list-style-type: none"> <li>&gt; Aerospace Engineer</li> <li>&gt; CTE Teacher</li> <li>&gt; Civil Engineer</li> <li>&gt; Industrial Designer</li> </ul>

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

### Student Testimonial

**“My training, in CTE courses in high school, prepared me for** life after high school by helping me discover my love of drafting. I discovered the need for drafters in the world of engineering. I focused my CTE Pathway toward this career goal and have taken some advanced drafting classes to improve both my knowledge of the field and my employability in the field.”

Calvin Hill  
 Intech Collegiate High School

### 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 Mechanical Design (CAD) Career Pathway.

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

[Utah TSA flyer](#)

