



Career Cluster: Manufacturing

Career Pathway: Manufacturing & Production

JUNIOR HIGH / MIDDLE SCHOOL		
College and Career Awareness		
Exploring Technology		
HIGH SCHOOL		
SUPPORTING COURSES: Suggested high school course that supports the Career Pathway (Course DOES NOT count towards the Pathway)		
Secondary Math 2		
EXPLORER COURSES: Choose one or more of the following courses.		
Biomanufacturing 1	Composites 1 +	Plastics 1 +
CAD Mechanical Design 1 *	Manufacturing Principles 1	Woods 1 +
CAM Automated Manufacturing	Manufacturing Technology	
CONCENTRATOR COURSES: To be a concentrator you must pass one of the following courses AND one explorer course.		
Biomanufacturing 2	Manufacturing Principles 2	Woods 2
Composites 2	Plastics 2	
COMPLETER COURSES: To be a completer you must pass a concentrator course and enough courses to equal 3.0 credits in this Pathway.		
Woods 3		
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.			
	1-2 Year Certificate > Production Technician	2-Year Associate Degree N/A	4-Year Bachelor's Degree > CTE Teacher > Manufacturing Engineer

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 also [allowed me] to be able 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

Manufacturing

UtahCTE.org: [Fact Sheet](#)

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

SkillsUSA | TSA

is the Career and Technical Student Organization (CTSO) for students in the Manufacturing & Production Career Pathway.

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





Career Cluster: Manufacturing

Career Pathway: Welding & Machining

JUNIOR HIGH / MIDDLE SCHOOL	
College and Career Awareness	
Exploring Technology	
HIGH SCHOOL	
EXPLORER COURSES: Choose one or more of the following courses.	
Machining 1 *	Sheet Metal
Metal Working 1	Welding Technician, Entry Level *
CONCENTRATOR COURSES: To be a concentrator you must pass one of the following courses AND one explorer course.	
Machining 2 *	
Welding Technician, Intermediate Level *	
COMPLETER COURSES: To be a completer you must pass a concentrator course and enough courses to equal 3.0 credits in this Pathway.	
Non-Destructive Testing *	Welding-Pipe Fitting
Welding-Structural Fitting	Welding Technician, Advanced Level *
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.			
	1-2 Year Certificate	2-Year Associate Degree	4-Year Bachelor's Degree
	> Tool and Die Maker > Tool Maker > Welder	> Machine Tool Technician > Welding Technician	> CTE Teacher > Machine Tool Engineer > Welding Engineer

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 found a love for a career in my welding courses. These courses have shown me that I need to study heavily, work with my team, and be prepared for my future. CTE courses not only teach you skills that are highly useful but introduces you to industries that are in high demand for workers."

Marcus Duran
 Future Welder

LEARN MORE ABOUT OCCUPATIONS AND WAGES

Manufacturing

UtahCTE.org: [Fact Sheet](#)

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

FFA | SkillsUSA

is the Career and Technical Student Organization (CTSO) for students in the Welding & Machining Career Pathway.

[FFA.org](#) | [SkillsUSA.org](#)

[UtahFFA.org](#) | [UtahSkillsUSA.org](#)

[Utah FFA flyer](#) | [SkillsUSA flyer](#)

