

High School to College and Career Pathway: Secondary

Career and Technical Education: Preparing Students for College and Career!



Area of Study: Skilled and Technical Sciences Education

Pathway: Precision Production Trades – Design Technology (formerly Drafting/CAD)

Get the Facts

In today's technologically advanced business world, drafters must have excellent drawing and graphic skills along with a high level of computer skills.

In Utah, an architect and a landscape architect must be licensed.

Workforce Trends

Industrial growth and increasingly complex designs will spur growth in drafting services. As technology advances, opportunities will be best for drafters with at least 2 years of post-secondary training, and computer-aided design systems experience.



CAREER AND TECHNICAL EDUCATION Recommended Pathway Courses

(Students may select individual courses for exploration, or a complete Pathway for an in-depth focus.)

CLASS AVAILABILITY MAY VARY AT YOUR HIGH SCHOOL

Course #	Foundation Courses: (required)	Credit
15.1301	Technical Design 1	.50
15.1302	Architectural Design 1	.50
15.1303	Architectural Design 2	1.00
15.1306	Technical Design 2	1.00
Elective Courses:		
46.0201	Carpentry 1	1.00
48.0503	Machine Tool	1.00
48.0508	Welding Technician, Entry Level	.50
48.0701	Woodworking	.50
48.0702	Furniture Design & Manufacturing	1.00
32.0199	Student Internship (Critical Workplace Skills)	.50

1.00 credit

1.50 credits

2.50 credits for completion

Foundation courses taken beyond the required credits can be used as elective credit.

Design Technology is:

- > High skill
- > High wage
- > High demand
- > Nontraditional for females

Sample Career Occupations

- > Architectural Drafter
- > Civil Engineer
- > Computer-Aided Drafter
- > Drafting/CAD Teacher
- > Interior Designer
- > Landscape Designer
- > Mechanical Drafter
- > Surveyor
- > Urban Planner

This is a nontraditional occupation for women. In 2007, 20.6 percent of the people employed in this occupation were women.

Middle School		State Requirements		High School Suggested Education Plan				College and Career
7th Grade	8th Grade	Middle School	High School	9th Grade Suggested	10th Grade Suggested	11th Grade Suggested	12th Grade Suggested	Beyond High School
Language Arts 7 1.00	Language Arts 8 1.00	2.00	Language Arts 4.00	Language Arts 9 1.00	Language Arts 10 1.00	Language Arts 11 1.00	Language Arts 12 1.00	There are a number of options for education and training beyond high school, depending on your career goals. <ul style="list-style-type: none"> > Certificate > Associate degree > Bachelor's degree > Professional degree > On-the-job training > Apprenticeship > Military training For more information on salary projections, labor market demand, and training options, visit www.utahfutures.org .
Math * 1.00	Math * 1.00	2.00	Math 3.00	Math * 1.00	Math * 1.00	Math * 1.00		
Science .50	Science 1.00	1.50	Science 3.00	Earth Systems 1.00	Physics 1.00 or Physics with Technology 1.00	Additional Credit 1.00		
Utah Studies .50	U.S. History I 1.00	1.50	Social Studies 3.00	Geography for Life .50	World Civilizations .50	U.S. History II 1.00	U.S. Government and Citizenship .50	
P.E. 1.00	Health .50	1.50	P.E./Health 2.00	Participation Skills and Techniques .50	Fitness for Life .50 / Health Education .50 Lifetime Activities or Sport .50			
The Arts .50	The Arts .50	1.00	Fine Arts 1.50	Fine Arts Courses 1.50				
Keyboarding .50			Computer Tech. .50	Computer Technology .50				
CTE Intro 1.00		1.00	CTE 1.00	Refer to Career and Technical Education box above.				

* Talk to your school counselor about math requirements in the new common core curriculum. Core curriculum and elective requirements may vary district to district.

Concurrent enrollment course offerings vary by school and district. Many Utah postsecondary programs accept high school courses toward a two- or four-year degree through concurrent enrollment. Check regional postsecondary Pathways for details.