

Career Pathway: Design and Construction

<p>Get the Facts A Design & Construction professional will learn and practice designing, planning, managing, building and maintaining structures. Courses in the pathway include drafting, architecture, construction, electricity, sheet metal, HVAC and painting.</p> <p>Workforce Trends With the continuous need of skilled and knowledgeable employees in the design and construction industry, this pathway will help provide employees that are trained and work ready.</p> <p>With a current annual growth rate of 10.1%, the demand for individuals with design and construction skills continues to increase in Montana.</p>		CAREER AND TECHNICAL EDUCATION Recommended Pathway Courses			<p>1.0 credit</p> <p>1.0 credit</p> <p>2.0 credits for completion</p>	<p>Careers in Design & Construction are:</p> <ul style="list-style-type: none">• High Skill; High Wage; In-Demand <p>Career Examples</p> <ul style="list-style-type: none">• Builder• CAD Draftsperson• Carpenter• Cost Estimator• Dry Waller• Electrician• Interior Designer• Landscape Architect• Plumber• Stonemason• Tile Setter <p>According to the Montana Department of Labor & Industry, the median hourly wage for occupations within the Design & Construction Career Pathway is \$30.68.</p>
		Courses listed below provide a suggested sequence of courses for career and curriculum planning. Schools may offer additional courses beyond those listed within local Pathways.				
		CLASS AVAILABILITY MAY VARY AT YOUR SCHOOL				
		Course #	Foundation Courses (required)	Credit		
		21102	Drafting—General	.50/1.0		
		21103	Drafting—Architectural	.50/1.0		
		21107	CAD Design & Software	.50/1.0		
		17006	Woodworking	.50/1.0		
		17003	Carpentry	.50/1.0		
		17002	Construction—Comprehensive	.50/1.0		
		17001	Construction Careers Exploration	.50/1.0		
		Elective Courses				
		17004	Framing Carpentry	.50		
		17011	Wall Finishing	.50		
		17010	Home Maintenance	.50		
		21007	Engineering Design & Development	.50		
		21108	Blueprint Reading	.50		
		21101	Drafting Careers Exploration	.50		
		21104	Drafting—Civil/Structural	.50		
21148	Drafting—Workplace Experience	.50				
17998	Architecture and Construction—Workplace Experience	.50				
Foundation courses taken beyond the required credits can be used as elective credit						
Any High School CTE course(s) required for graduation may count towards Pathway completion						
Additional CTE Credits are recommended for Pathway completion						
State Graduation Requirements		Suggested High School Plan of Study				College and Career
High School Administrative Rules of Montana 10.55.905		9th Grade Suggested	10th Grade Suggested	11th Grade Suggested	12th Grade Suggested	Beyond High School
English/Language Arts	4.0	English 9 1.0	English 10 1.0	English 11 1.0	English 12 1.0	There are many options for education and training beyond high school, depending on your career goals.
Mathematics	2.0	Math* 1.0	Math* 1.0	Math* 1.0	Math* 1.0	• Certificate
Social Studies	2.0	Social Studies* .50/1.0	Social Studies* .50/1.0	U.S History 1.0	U.S. Government 1.0	• Associate degree
Science	2.0	Earth Science 1.0	Biology 1.0	Science Elective*		• Bachelor’s degree
Health Enhancement	1.0	P.E./Health* .50	P.E./Health* .50	P.E./Health Electives*		• On-the-job training
Arts	1.0	Arts Courses* 1.0				• Apprenticeship
Career and Technical Education	1.0	Pathway Foundation Course .50/1.0	Pathway Foundation Course .50/1.0	Pathway Elective Course .50/1.0	Pathway Elective Course .50/1.0	
Work-Based Learning		Participation in a Pathway-related work-based learning experience				For more information on salary projections, labor market demand, and training options, visit lmi.mt.gov .
Career and Technical Student Organization		SkillsUSA				
• *Talk to your school counselor about requirements in the core curriculum. Core curriculum and elective requirements vary district to district.		• Dual enrollment course offerings vary by school and district.				
• Many CTE courses may qualify for dual enrollment credit, which in some cases may earn up to 1.0 credit toward Pathway completion. Talk to your school counselor about availability.		• Many Montana post-secondary programs accept high school courses toward a two- and four-year degree through dual enrollment. Check with post-secondary campuses for details.				