

Career and Technical Education  
Area of Study: Industrial Trades & Technology  
Career Pathway: Design & Construction

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.

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. With a current annual growth rate of 10.1%, the demand for individuals with design and construction skills continues to increase in Montana.

Careers in Design & Construction are:

- High demand, high skill, and high wage

Career Examples:

- CAD Draftsperson
- Carpenter
- Electrician
- Cost Estimator
- Interior Designer
- Plumber
- Dry Waller
- Tile Setter
- Landscape Architect
- Builder
- Stonemason

According to the Montana Department of Labor and Industry the median hourly wage for occupations within the Design & Construction Career Pathway is \$30.68

Recommended Pathway Courses:

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

- Foundation Courses (required)
- Building Trades 1-Beginning Construction & Tool Safety .50 credit

- Building Trades 2-Framing 1.0 credit
- Elective Courses
- Building Trades 3-Intermediate Construction 1.0 credit
- Building Trades-Independent Study .50/1.0 credit

#### College and Career Beyond High School

There are many options for education and training beyond high school, depending on your career goals.

- Certificate
- Associate degree Bachelor's degree
- On-the-job training
- Apprenticeship

#### MCPS Graduation Requirements-High School

- English/Language Arts 4.0 credits
- Mathematics 3.0 credits
- Social Studies 2.0 credits
- Science 2.0 credits
- Health Enhancement 2.0 credits
- Art 1.0 credit
- Career and Technical Education 1.0 credit
- Suggested High School Plan of Study

#### 9th Grade

- English 9 1.0 credit
- Math 1.0 credit
- Social Studies .50/1.0 credit
- Earth Science 1.0 credit
- P.E/Health 1.0 credit
- Art Courses 1.0 credit
- Art
- Building Trades 1

#### 10th Grade

- English 10 1.0 credit
- Math 1.0 credit
- Social Studies .50/1.0 credit
- Biology 1.0 credit

- P.E./Health 1.0 credit
- Art
- Building Trades 2

#### 11th Grade

- English 11 1.0 credit
- Math 1.0 credit
- U.S. History 1.0 Credit
- Science Elective
- P.E./Health Electives
- Art
- Building Trades 3

#### 12<sup>th</sup> Grade

- English 12 1.0 credit
- Math 1.0 credit
- U.S. Government 1.0 credit
- Science Elective
- P.E./Health Electives
- Art
- Pathway Elective .50

Work-Based Learning- Participation in a Pathway-related work-based learning experience  
 Career and Technical Student Organization- Skills USA