

## MONTANA CAREER PATHWAYS

### **Career and Technical Education**



Area of Study: Agriculture Education

<b>Career Pathway: Agricultural Mechanics</b>	and Construction
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#### Get the Facts

Students interested in improving farming technology and enjoy problem solving should pursue the Montana Career Pathway in Agricultural Mechanics.

Workforce Trends According to the U.S. Bureau of Labor Statistics (BLS) agricultural engineers could expect a slowerthan-average increase in job opportunities - only 4% - between 2014 and 2024. Their mean annual salary, however, was \$78,490 in May 2015.

# CAREER AND TECHNICAL EDUCATION

#### **Recommended Pathway Courses**

Courses listed below provide a suggested sequence of courses for career and curriculum planning. Schools may offer additional courses than those listed within local Pathways.

#### CLASS AVAILABILITY MAY VARY AT YOUR SCHOOL Course # Foundation Courses (required)

Course #	Foundation Courses (required)	Cicuit	
18001	Introduction to Agriculture and Natural Resources (Ag I)	.5/1.0	$\Box$
18401	Agriculture Mechanics/Equipment/Structures	.50/1.0	] }
18307	Agriculture and Society	.50/1.0	
	Elective Courses		1

18402	Agricultural Mechanics and Equipment	.50/1.0
18403	Agriculture Structures	0.5/1.0
18404	Agricultural Metal Fabrication Technology	0.5/1.0
18405	Particular Topics in Agricultural Mechanics and Construction	0.5/1.0
18203	Agricultural Leadership	0.5/1.0
18202	Agricultural Entrepreneurship	0.5/1.0
13201	Metalwork Occupations	.50/1.0
13202	Metalworking	.50/1.0
18448	Agricultural Mechanics and Construction—Workplace	.50/1.0

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

### Careers in Agriculture are:

• High Skill; High Wage; In-Demand

#### Career Examples

- Agricultural Engineer
- Agriculture Equipment Sales & Service
- Contractor/Builder
- Diesel Technician
- Farm Equipment Technician/Mechanic
- GIS Specialist
- Land Surveyor
- Service Technician
- Welding

According to the Montana Department of Labor & Industry, the median hourly wage for occupations within the Agricultural Mechanic Pathway is \$17.01.

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State Graduation Requirements		Suggested High School Plan of Study				
High School Administrative Rules of Montana 10.55.905		9th Grade Suggested	10th Grade Suggested	11th Grade Suggested	12th Grade Suggested	
English/Language Arts	4.0	English 9 1.0	English 10 1.0	English 11 1.0	English 12 1.0	
Mathematics	2.0	Math* 1.0	Math* 1.0	Math* 1.0	Math* 1.0	
Social Studies	2.0	Social Studies* .50/1.0	Social Studies* .50/1.0	U.S History 1.0	U.S. Government 1.0	
Science	2.0	Earth Science 1.0	Biology 1.0	Science Elective*		
Health Enhancement	1.0	P.E./Health* .50	P.E./Health* .50	P.E./Health Electives*		
Arts	1.0	Arts Courses* 1.0				
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				
Career and Technical Student Organization		National FFA Organization				
*Talk to your school counselor about requirements in the core requirements vary district to district.	curriculum. C		Dual enrollment course offerings v		oward a two- and four-year degree	

Experience (SAE)

- 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.

# 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
- Professional degree
- On-the-iob training
- Apprenticeship
- Military training

For more information on salary projections, labor market demand, and training options, visit lmi.mt.gov.

www.mus.edu/mcp Revised June 2020

Credit

-1.0 credit

1.0 credit

2.0 credits for completion