



# MONTANA CAREER PATHWAYS

## Career and Technical Education



**Area of Study: Agriculture Education**

### Career Pathway: Agriculture, Food and Natural Resources

**Get the Facts**

Students completing a program of study in AFNR will gain skills necessary for analysis of current and historical issues and trends; application of technologies; safety, health and environmental practices; stewardship of natural resources; and exploration of career opportunities.

**Workforce Trends**

According to the U.S. Department of Labor, employment one in seven Americans work in the agricultural related jobs.

**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)	Credit
18001	Introduction to Agriculture and Natural Resources (Ag I)	.5/1.0
18002	Agriculture—Comprehensive (Ag II)	.50/1.0
18307	Agriculture and Society	.50/1.0
<b>Elective Courses</b>		
18003	Agriculture and Natural Resources Comprehensive (Ag III)	.50/1.0
18004	Biological Applications in Agriculture	.50/1.0
18052	Horticultural Sciences	.50/1.0
18101	Animal Production/Science	.50/1.0
18201	Agribusiness Management	.50/1.0
18203	Agricultural Leadership	.50/1.0
18401	Agriculture Mechanics/Equipment/Structures	.50/1.0
18504	Natural Resources Management	.50/1.0
18202	Agricultural Entrepreneurship	.50/1.0
18998	Agriculture, Food, and Natural Resource—Workplace Experience (SAE)	.50/1.0

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1.0 credit

}

1.0 credit

**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**

**2.0 credits for completion**

**Careers in Agriculture are:**

- High Skill; High Wage; In-Demand

**Career Examples**

- Agricultural Sales & Services
- Agriculture/Food Scientist
- Agriculture Inspector
- Agriculture Educator
- Brand Inspector
- Entrepreneur
- Extension Agent
- Forest & Conservation Worker
- Greenhouse Worker
- Livestock Broker
- Natural Resource Management
- Ranch Hand
- Water Treatment Plant Worker

According to the Montana Department of Labor and Industry, the median hourly wage for occupations within Business and Finance Operations is \$17.80.

State Graduation Requirements	Suggested High School Plan of Study				College and Career	
High School <i>Administrative Rules of Montana 10.55.905</i>	9th Grade Suggested	10th Grade Suggested	11th Grade Suggested	12th Grade Suggested	<b>Beyond High School</b> There are many options for education and training beyond high school, depending on your career goals. <ul style="list-style-type: none"> <li>• Certificate</li> <li>• Associate degree</li> <li>• Bachelor's degree</li> <li>• Professional degree</li> <li>• On-the-job training</li> <li>• Apprenticeship</li> <li>• Military training</li> </ul> For more information on salary projections, labor market demand, and training options, visit <a href="http://lmi.mt.gov">lmi.mt.gov</a> .	
<b>English/Language Arts</b>	<b>4.0</b>	English 9 1.0	English 10 1.0	English 11 1.0		English 12 1.0
<b>Mathematics</b>	<b>2.0</b>	Math* 1.0	Math* 1.0	Math* 1.0		Math* 1.0
<b>Social Studies</b>	<b>2.0</b>	Social Studies* .50/1.0	Social Studies* .50/1.0	U.S History 1.0		U.S. Government 1.0
<b>Science</b>	<b>2.0</b>	Earth Science 1.0	Biology 1.0	Science Elective*		
<b>Health Enhancement</b>	<b>1.0</b>	P.E./Health* .50	P.E./Health* .50	P.E./Health Electives*		
<b>Arts</b>	<b>1.0</b>	Arts Courses* 1.0				
<b>Career and Technical Education</b>	<b>1.0</b>	Pathway Foundation Course .50/1.0	Pathway Foundation Course .50/1.0	Pathway Elective Course .50/1.0		Pathway Elective Course .50/1.0
<b>Work-Based Learning</b>		Participation in a Pathway-related work-based learning experience				
<b>Career and Technical Student Organization</b>		National FFA Organization				

• \*Talk to your school counselor about requirements in the core curriculum. Core curriculum and elective requirements vary district to 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.

• Dual enrollment course offerings vary by school and district.  
 • 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.