### Cluster Overview:
Careers in the Agriculture, Food and Natural Resources cluster involve the planning, implementation, production, management, processing, and/or marketing of agricultural commodities and services.

### Pathway Options:
- Food Products and Processing Systems
- Plant Systems
- Animal Systems
- Power, Structural & Technical Systems
- Natural Resources Systems
- Environmental Service Systems
- Agribusiness Systems

### Occupation Examples:
Agricultural Chemical Dealer, Aquaculturalist, Environmental Compliance-Assurance Manager, Farm Manager, Health and Safety Sanitarian, Meat Cutter-Meat Grader, Park Manager, Produce Buyer, Recycling Technician, Wildlife Manager, Botanist, Agricultural Educator, Ecologist, Environmental Engineer, Fish and Game Officer, Bank Loan Officer, Plant Pathologist, Veterinarian

For a complete listing, go to: [http://online.onetcenter.org/find/career?c=1&g=Go](http://online.onetcenter.org/find/career?c=1&g=Go)

### SUGGESTED HIGH SCHOOL COURSES

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<th>9th</th>
<th>Graduation Requirements</th>
<th>Recommended CTE Cluster Foundation Course(s):</th>
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<td>Workforce/2-Year College Prep</td>
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<td>4-Year MT College/Univ Prep (Rigorous Core)</td>
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<td>10th</td>
<td>Graduation Requirements</td>
<td>Recommended CTE Pathway Courses:</td>
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<td>Graduation Requirements</td>
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<td>12th</td>
<td>Graduation Requirements</td>
<td>Career &amp; Technical Student Organization(s):</td>
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### ADVANCED LEARNING OPPORTUNITIES
High School to College/Career Linkages

CTE START courses:

Advanced Placement or IB courses:

Dual Enrollment courses:

Online courses:

Other: Supervised Agricultural Experience (SAE) and participation in appropriate FFA activities support and reinforce classroom and laboratory learning and should be a requirement for all students

### POSTSECONDARY PROGRAM OF STUDY

<table>
<thead>
<tr>
<th>Math</th>
<th>English</th>
<th>Major</th>
<th>Other</th>
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<td>13—Semester 1</td>
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<td>13—Semester 2</td>
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</tbody>
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## MONTANA POSTSECONDARY OPPORTUNITIES

**Montana University System Degree and Program Inventory:** [http://www.homepage.montana.edu/~mus/drginv/](http://www.homepage.montana.edu/~mus/drginv/)

**Your Guide to Montana’s Certificate and Associate Degree Programs:** [http://mus.edu/twoyear/YourGuide.html](http://mus.edu/twoyear/YourGuide.html)

### Colleges of Technology:
- BLCOT—Billings
- GFCOT—Great Falls
- HCOT—Helena
- TECHCOT—Butte
- UMCOT—Missoula
- GCP—Bozeman

### Community Colleges:
- DCC—Glendive
- FVCC—Kalispell
- MCC—Miles City

### Tribal Colleges:
- BFCC—Browning
- CDKC—Lame Deer
- FBCC—Harlem
- FPCC—Poplar
- LBHC—Crow Agency
- SCC—Box Elder
- SKC—Pablo

### Four Year Colleges/Universities:
- MSU—Bozeman
- MSUB—Billings
- MSUN—Havre
- TECH—Butte
- UM—Missoula
- UMW—Dillon

### MILITARY
- Requires diploma or GED
- 17 with parental consent; 18 without
- Air Force, Air Guard, Army, Coast Guard, Marines, and Navy
  For more information: [http://todaysmilitary.com](http://todaysmilitary.com)

### PROFESSIONAL CERTIFICATE
- Requires diploma or GED
- Less than 30 credits; little/no general ed credits
- Complete in one year or less
- Agri-Mechanics Machinery/Technology — MSUN

### APPRENTICESHIP
- Requires diploma or GED
- Must be at least 18
- Minimum 2,000 hours of supervised experience
- See the MT Dept of Labor website for more information: [http://wsd.dli.mt.gov/apprenticeship/default.asp](http://wsd.dli.mt.gov/apprenticeship/default.asp)

### CERTIFICATE OF APPLIED SCIENCE
- Requires diploma or GED
- 30-45 credits; limited general education credits
- Complete in one year or less
- Agri-Business Technology — MCC
- Agri-Mechanics Machinery/Technology — DCC
- Livestock Technology — DCC
- Natural Resource Management — FVCC

### ASSOCIATE’S OF APPLIED SCIENCE DEGREE
- Requires diploma or GED
- 60-72 credits; includes 15-25 general ed credits
- Complete in two years *(if prepared academically in math and English)*
- Agri-Business Technology — DCC
- Agri-Business Technology—Equitation — DCC
- Agricultural Science/Technology — MSUN
- Agri-Mechanics Machinery/Technology — MSUN, DCC
- Equine Studies — UMW, MCC
- Natural Horsemanship — UMW
- Natural Resource Management — FVCC, BFCC

### BACCALAUREATE DEGREE
- Requires 4-year college prep for admission
- 128 credits (approximately)
- Complete in four years
- Agriculture Business — MSU
- Agriculture Education — MSU
- Animal Science — MSU
- Biotechnology — MSU
- Environmental Horticulture — MSU
- Environmental Sciences — MSU
- Land Rehabilitation — MSU
- Land Resource Sciences — MSU
- Natural Resources & Rangeland Technology — MSU
- Plant Science — MSU
- Sustainable Food & Bio-energy Systems — MSU
- Earth Sciences — MSU
- Biological Sciences — MSU
- Biology — UM
- Environmental Studies — UM
- Forestry — UM
- Resource Conservation — UM
- Wildland Restoration — UM
- Wildlife Biology — UM
- Environmental Engineering — TECH
- Mining Engineering — TECH
- Geological Engineering — TECH
- Environmental Science — UMW, SKC
- Earth Science — UMW
- Environmental Science & Forestry — SKC

*Degree and Program Inventory above may not be all inclusive*