



**MCP** Montana Career  
Pathways

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**Dual Enrollment & Montana Career  
Pathways**

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**Career Technical & Adult Education**

# Updating Montana's Career Pathways System

## **MCP Website**

The joint development of a new public-facing pathways website with information targeted at students, parents, educators, and the public.  
[www.mus.edu/MCP](http://www.mus.edu/MCP)

## **Strengthening Montana Career Pathways Grants**

Reprioritization of campus activities using Perkins Rural Reserve funds to support and strengthen MCP.

## **Montana Career Pathways Programs of Study**

OPI's creation of a new set of guidance documents and a new MCP program of study verification program to access Perkins Secondary Local Application funds.

# Health Professions Career Pathway

Associate's Degree/  
Certificate (1-2 years)

Bachelor's  
Degree (4 years)

Master's/Doctoral  
Degree (6+ years)



## Get Involved

- [HOSA—Future Health Professionals](#)
- Service Learning
- Student Government
- Student Council
- Student Athletic Training
- 4-H
- Career Planning in Montana Career Information System ([MCIS](#)) or [Career Lab](#)

## Try Your Hand at Work

- CPR/First Aid Certification
- [Registered Apprenticeships - Certified Nursing Assistant, CT Tech, Medication Aide, Health Administration, Pharmacy Tech, Medical Claims](#)
- [Job Shadow](#) at a [Medical Facility](#)
- Mentorship
- Regional Area Health Education Centers offer:
  - \* [R.E.A.C.H./Med Start Camp](#)
  - \* [AHEC](#)

## College Major Options

- Biomedical Sciences
- Nursing
- Pharmacy
- Clinical Laboratory Science
- Medical Assistant
- Health Administration
- Dental Hygiene
- Medical Claims Specialist
- Surgical Technology
- Health Information Technology
- Medical Reception

## Career Options

- Medical Doctor
- Nurse
- Physical Therapist
- Health Information Technologist
- Medical Coder
- Dentist
- Healthcare Administration
- Athletic Trainer
- Radiologist
- Psychiatrist
- Surgical Tech

## Industry Recognized Credentials

- Certified Nursing Assistant (CNA)
- Emergency Medical Technician (EMT)
- Behavioral Health Aide
- [HealthCARE MT Apprenticeships](#) to Certifications and Degrees
- Community Health Worker
- Phlebotomist
- Pharmacy Assistant/Technician
- First Aid/CPR

# Advanced Manufacturing Career Pathway

Certificate of Applied  
Science (1 year)

Associate of Applied  
Science Degree (2 years)

Bachelor's  
Degree (4 years)



## Get Involved

- [SkillsUSA](#)
- Robotics Club ([First](#), [VEX](#))
- [F1 Challenge Club](#)
- Makerspace Club
- [Code Montana](#)/Kids Who Code/[Girls Who Code](#)
- Career Plan Montana Career Information System ([MCIS](#)) or [Career Lab](#)

## Try Your Hand at Work

- Job Shadow
- Pre-Apprenticeship
- Summer/Part-time Job
- Tour a CNC manufacturing facility or manufacturing business.
- Attend College-Industry Events (i.e. TekNoExpo at MSU Northern, Manufacturing Day at Gallatin College, Women in Gear at Helena College, Industrial Expo at Missoula College)

## College Major Options

- Photonics
- Process Plant Technology
- Computer Aided Manufacturing
- CNC Machining Technology
- Industrial Maintenance Technician
- Engineering Technology

## Career Options

- Automated Manufacturing Technologies
- Machine Operator
- CNC Machinist
- Design Engineer
- Manufacturing Technician
- Precision Measurement Inspector
- Electronics Technician
- Manufacturing Quality Control

## Industry Recognized Credentials

- [American Welding Society \(AWS\)](#)
- [Canadian Welding Bureau](#)
- [OSHA 10 and/or OSHA 30 Safety Training](#)
- OSHA Welding Certification

# Health Professions Career Pathway

Complete all High School Graduation Requirements — Click [Here](#) for a Fillable Course Planner

High School

## Recommended High School Courses

### Health Science Courses:

- Exploration of Health Careers
- Nursing Assistant
- Care of Athletes
- Health Care Occupations (also available on MT Digital Academy)
- EMT
- Healthcare Work Experience
- Project Lead the Way— Principles of Biomedical Science

### Other Valuable Courses:

- Senior Year Math
- Psychology
- Chemistry
- Career Planning
- Biology
- Computer Tech Skills

Look for online high school courses here:  
<http://montanadigitalacademy.org/>

## Recommended Dual Enrollment

### Health Science Courses:

- Medical Terminology (AHMS144)
- Health Professions (HTH101)
- EMT Training (ECP131)
- Emergency Medical Responder (ECP120)
- Electronic Health Records (varies)
- Basic Human Biology (BIOH104/105)
- Basic Anatomy (BIOH108)
- Human Form & Function (BIOH113)
- Medical Customer Care (varies)

### Other Valuable Courses:

- Math: Math for Health Professions (M120), College Algebra (M121), Pre-Calculus (M151), Statistics (STAT 216)
- College Writing (WRIT101)
- Intro to Communication (COMX111 or COMX115)
- Introduction to Sociology (SOC101)

Look for online dual enrollment courses here:  
<http://www.mus.edu/dualenroll/portal/index.html>

Postsecondary Programs in Montana



MontanaTech



GALLATIN COLLEGE



SALISH KOOTENAI COLLEGE



GREAT FALLS COLLEGE  
MONTANA STATE UNIVERSITY



# Strengthening Montana Career Pathways Grants

**Grants competitively awarded to campuses to help increase access to activities that support a high-quality career pathway.**

- Development of dual enrollment supporting an MCP
- Skill-building technical trainings for teachers
  - Manufacturing, culinary, education, automotive, health care, construction, and agriculture
  - Offered by campuses to develop connections, enhance teacher technical proficiency particularly for dual enrollment and IRCs.
- Career exposure events like TekNoExpo, Women in Gear, Manufacturing Day, L.I.F.E. and Industrial Expo

**Career Pathway: Finance**

**Get the Facts**  
The Finance Career Pathway prepares students for careers in accounting, financial and investment planning, banking, insurance and business financial management. Finance career opportunities are available in every sector of the economy, providing endless opportunities to work in a variety of areas

**Workforce Trends**  
Financial activities are Montana's largest sector in terms of GDP. The finance industry is a critical sector employing millions of people. The Finance Career Pathway includes the five career paths of Securities Investments, Business Finance, Accounting, Insurance, and Banking Services.

Montana continues to experience employment growth and job openings throughout careers within the Finance Career Pathway with 583 job openings per year from 2015-2025.

| CAREER AND TECHNICAL EDUCATION<br>Recommended Pathway Courses                                      |   |         |
|--|---|---------|
| Students may select individual courses for exploration or a complete Pathway for an in-depth focus |   |         |
| <b>CLASS AVAILABILITY MAY VARY AT YOUR SCHOOL</b>  |   |         |
| Course #   | Foundation Courses (required)               | Credit  |
| 10004  | Computer Applications                       | .50/1.0 |
| 10005  | Business Computer Applications              | .50/1.0 |
| 12104  | Accounting                                  | .50/1.0 |
| 12104  | Advanced Accounting/Computerized Accounting | .50/1.0 |
| <b>Elective Courses</b>  |   |         |
| 02154  | Business Math                               | .50     |
| 04201  | Economics                                   | .50     |
| 12001  | Business/Office Career Exploration          | .50     |
| 12009  | Business Communications                     | .50     |
| 12052  | Business Management                         | .50     |
| 12053  | Entrepreneurship                            | .50     |
| 12054  | Business Law                                | .50     |
| 12055  | Business Principles and Management          | .50     |
| 12101  | Banking and Finance                         | .50     |
| 12998  | Workplace Experience (Business & Marketing) | .50     |
| 22210  | Consumer Economics/Personal Finance         | .50     |

Foundation courses taken beyond the required credits can be used as elective credit. Additional CTE Credits are recommended for Pathway completion

**Careers in Finance are:**

- High demand/High skill/High wage

**Career Examples**

- Accountant/Nonprofit Accountant
- Auditor
- Bookkeeper
- Budget Analyst
- Certified Public Accountant
- Financial Analyst
- Financial Examiner
- Personal Financial Advisor
- Treasurer/Controller

According to the Montana Department of Labor and Industry, the median hourly wage for occupations within Business and Finance Operations is \$26.30.

| State Graduation Requirements   |            | Suggested High School Plan of Study  |                                   |                                 |                                 | College and Career  |
|---|------------|--|-----------------------------------|---------------------------------|---------------------------------|---|
| High School   |            | 9th Grade Suggested  | 10th Grade Suggested              | 11th Grade Suggested            | 12th Grade Suggested            | Beyond High School  |
| <a href="#">Administrative Rules of Montana 10.55.905</a>   |            |  |                                   |                                 |                                 | There are many options for education and training beyond high school, depending on your career goals.   |
| <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                  | <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> |
| <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>  |            | Business Professionals of America/DECA   |                                   |                                 |                                 |   |
| <ul style="list-style-type: none"> <li>• *Talk to your school counselor about requirements in the core curriculum. Core curriculum and elective requirements vary district to district.</li> <li>• 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.</li> </ul> |            | <ul style="list-style-type: none"> <li>• Dual enrollment course offerings vary by school and district.</li> <li>• 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.</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> .   |

# Montana High School CTE Pathways

2017-2018

## Agriculture

Plant Systems

Animal Systems

## Graphic Arts

Commercial Art

Graphics/Printing

TV Broadcast Technician

## Information Technology

Digital Media

Programming/Software Development

© www.123rf.com





## Montana Statewide Pathways: Connecting High School to College and Career

### FREQUENTLY ASKED QUESTIONS

#### What Is a CTE Pathway?

A Pathway is a sequence of courses within a student's area of interest. A Pathway connects from high school to college for a certificate, a degree and/or career.

#### How Are Pathways Beneficial to Students?

Many Pathways offer Dual Enrollment credit. A Pathway will save students time and money towards training and/or a college degree.

#### Why Should Students Participate in CTE Career Pathways?

1. To acquire technical skills training.
2. To participate in hands-on learning.
3. To jump-start their future career.
4. To earn college credit while in high school.
5. To save time and money!

#### How Do CTE Pathways Connect to Postsecondary Education?

CTE Pathways help match education and workplace needs through partnerships with postsecondary institutions, the school districts, business, and industry.

CTE Career Pathways are the maps that can help guide students to:

- High school courses.
- Postsecondary options most relevant to their chosen career destination.

#### What Are the Opportunities for Students Who Participate in a CTE Pathway?

- Maximize opportunities for students.
- Increase student awareness of careers and education and training.
- Strengthen the planning process using a College and Career Ready Plan.

#### How Do CTE Pathways Prepare Students for College and Career?

- Students complete appropriate academic and skill development courses.
- Students participate in Dual Enrollment courses that meet degree requirements.
- Students complete related state or industry skill assessments.
- Students earn industry certification, where available.

#### Are Dual Enrollment Classes Included in a CTE Pathway?

Yes! CTE Pathways include Dual Enrollment courses, and credits earned can be transferred to a college or university.

#### In Montana, What Number of Students Are Enrolled in CTE Courses?

- 72,080 males
- 65,745 females
- 137,825 9th-12th graders

#### What Do CTE Pathways Prepare Students For?

Postsecondary education. High school students enrolled in CTE Pathways receive advanced occupational training to pursue postsecondary certificates and degrees.

#### What Does Postsecondary Education Mean?

Postsecondary education means a one-year certificate, apprenticeship, military training, a two-year associate or technical degree or a four-year bachelor's degree.

#### What Does a CTE Pathway Look Like?

A CTE Pathway includes both foundation and elective courses within a student's area of interest. Students are required to earn a specific number of foundation and elective credits in order to be considered a CTE Pathway completer.

#### How Many Credits Does a Student Need to Be a CTE Pathway Completer?

A student needs 2.00 graduation credits to be a CTE Pathway completer.

#### What Percentage of Jobs Require Additional Training Beyond High School?

According to the Georgetown University Center on Education and the Workforce, 35 percent of job openings will require at least a bachelor's degree and 30 percent of the job openings will require some college or and associate degree.

#### How Many CTE Pathways Are There in Montana?

Montana will recognize over 50 Career Pathways within six Areas of Study.

#### What Are the CTE Areas of Study?

- Agricultural Education
- Business and Marketing Education
- Family and Consumer Sciences Education
- Health Science Education
- STEM Education
- Industrial and Trades Technology Education

#### What Pathways Are Offered Through CTE?

For a complete listing of CTE Pathways offered, talk to your high school counselor or access [http://opi.mt.gov/programs/CTAE/CTE.html#gpm1\\_1](http://opi.mt.gov/programs/CTAE/CTE.html#gpm1_1)

#### Are CTE Pathways Different from the National Career Clusters?

No. Each CTE Pathway is based on national skills standards and the national career clusters preparing students with academic and hands-on learning in order to successfully transition from high school to postsecondary education.

#### How Can I Learn More About CTE and CTE Pathways?

Talk to your school counselor, contact the Montana State Office of Education, or access [http://opi.mt.gov/programs/CTAE/CTE.html#gpm1\\_1](http://opi.mt.gov/programs/CTAE/CTE.html#gpm1_1)



**MONTANA CAREER PATHWAYS**  
**Career and Technical Education**  
**PATHWAY APPROVAL FORM**  
 Area of Study: Business and Marketing Education



**Career Pathway: Finance**  
**2017-2018 Academic Year**

Please review the information below based upon data with the CTE Participation Reports generated via course information submitted via TEAMS. Please indicate any work-based experiences which were made available to students this school year either by the CTE program or school/district below. If your program offered students the ability to receive industry recognized credentials/certification this school year, please indicate the name of the credentials/certifications in the space provided.

After the Pathway Approval Form has been reviewed and work-based learning experiences and industry recognized credentials/certification information has been added, key your name in the space provided next to the **Pathway Reviewed/Approved By** label and add the date in the space provided. Submit this form to OPI CTE Specialist Eric Swenson via email at [eswenson@mt.gov](mailto:eswenson@mt.gov) by May 1. Be sure to save a copy of this Pathway Approval Form for your records.

**High School/District** Shields Valley High School      **OPI CTE Specialist** Eric Swenson

| Foundation Course(s) (1 credit required) |                       |  |                           |          |
|--|-----------------------|--|---------------------------|----------|
| Course #                                 | Course Title          |  | District Course Title     | Term     |
| 10004                                    | Computer Applications |  | Technology Applications I | Semester |
| 12104                                    | Accounting            |  | Accounting I              | Year     |

| Elective Course(s) (1 credit required) |              |  |                                       |      |
|--|--------------|--|---------------------------------------|------|
| Course #                               | Course Title |  | District Course Title                 | Term |
| 12104                                  | Accounting   |  | Accounting II/Computerized Accounting | Sem  |
| 12055                                  | Business Law |  | Business Law                          | Sem  |

**Alternating Schedule Course(s)** Please list below any courses (including Course Code and Title and District Course Title) of courses offered on an alternating schedule which may not have been taught this year

| Course # | Course Title |  | District Course Title | Term |
|----------|--------------|--|-----------------------|------|
|          |              |  |                       |      |

**Career & Technical Student Organization** Business Professionals of America      **Members** 25

**Work-Based Learning Experiences** (Please list any pathway-related or school/district offered experiences offered for students)  
 Examples: Business/Industry Tours; Cooperative Work Experience; Career Fair; Job Shadow; Internship; Mentorship; Pre-Apprenticeship; Work Release  
 District: Job Shadow Day in Livingston, November 2017; Job Shadow Day in Bozeman, April 2018  
 Business Program: Through Business Professionals of America chapter, chapter members participate in a mentoring program with elementary students and have to spend at least 5 hours per month with their mentees

**Industry Recognized Credentials** (Please list program's Industry Recognized Credentials/Certifications available to students this academic year)

**Pathway Reviewed/Approved By** Mitzi Richards/Billi Taylor      **Date** 4/25/2018

Return this form by May 1 to Business Specialist Eric Swenson via email at [eswenson@mt.gov](mailto:eswenson@mt.gov).  
 Be sure to save a copy of this Pathway Approval Form for your records.

