Cluster Overview:
Jobs in the Science, Technology, Engineering and Mathematics career cluster involve planning, managing, and providing scientific research and professional technical services (e.g., physical science, social science, engineering) including laboratory and testing services, and research and development services.

Pathway Options:
- Engineering and Technology
- Science and Math

Occupation Examples:
Engineers (all), Chemist, Astrophysicist, Botanist, Geologist, Mathematician, Physicist, Economist, Lab Tech, Scientist, Statistician

For a complete listing, go to: http://online.onetcenter.org/find/career?c=15&g=Go

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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:

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### MONTANA POSTSECONDARY OPPORTUNITIES

**Montana University System Degree and Program Inventory:** [http://mus.edu/Qtools/Degrees/degree_default.asp](http://mus.edu/Qtools/Degrees/degree_default.asp)

**Your Guide to Montana’s Certificate and Associate Degree Programs:** [http://mus.edu/2yr/YourGuide/](http://mus.edu/2yr/YourGuide/)

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#### MSU Two Year Colleges and Programs:
- City College MSUB—Billings (CC); Great Falls College MSU—Great Falls (GFC); Helena College
- UM—Helena (HC) Highlands College MT Tech—Butte(HC-Tech); Missoula College UM—Missoula (MC); Gallatin College MSU—Bozeman(GC)

#### Community Colleges:
- Dawson Community College (DCC)
- Flathead Valley Community College (FVCC)
- Miles Community College (MCC)

#### Tribal Colleges:
- Aaniih Nakoda College (ANC)
- Blackfeet Community College (BCC)
- Chief Dull Knife College (CDKC)
- Fort Peck Community College (FPCC)
- Little Big Horn College (LBHC)
- Stone Child College (SCC)
- Salish Kootenai College (SKC)

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

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#### MILITARY
- Requires diploma or GED
- 17 with parental consent; 18 without

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

**Examples:**
- Drafting Technology/Technician — HCOT
- Land Surveying — MSUN

See the MT Dept of Labor website for more information: [http://apprenticeship.mt.gov/](http://apprenticeship.mt.gov/)

#### CERTIFICATE OF APPLIED SCIENCE
- Requires diploma or GED
- 30-45 credits; limited general education credits
- Complete in one year or less

**Examples:**
- Computer Aided Design — HC
- Drafting Technology/Technician — CC, HC Tech
- Electrical Technology — FVCC
- Geographic Information Systems — BCC

#### 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)*

**Examples:**
- Civil Engineering Technology — HC Tech, MSUN
- Drafting Technology/Technician — CC, HC Tech, GC, MSUN
- Electrical Technology — MSUN, FVCC
- Engineering Technology — DCC
- Hazardous Material/Waste Mgmt Tech — FPCC
- Land Surveying — FVCC

#### BACCALAUREATE DEGREE
- Requires 4-year college prep for admission
- 128 credits (approximately)
- Complete in four years

**Examples:**
- Astronomy — UM
- Anthropology — UM
- Chemistry — MSU, U M, MT Tech, MSUB
- Chemical Engineering — MSU
- Civil Engineering — MSU, MT Tech
- Computer Engineering — MSU
- Economics — MSU, UM
- Electrical Engineering — MSU, MT Tech
- Environmental Engineering — MT Tech
- Geology/Earth Science — MSU
- Geoscience — UM
- Industrial Engineering — MSU
- Mathematical Sciences — MT Tech
- Mechanical Engineering — MSU, MT Tech
- Medical Technology — UM
- Metallurgical Engineering — MT Tech
- Microbiology/Medical Lab Science — MSU
- Petroleum Engineering — MT Tech
- Physics — MSU, UM
- Software Engineering — MT Tech

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