



Cluster Overview: Careers in the Architecture and Construction career cluster involve designing, planning, managing, building and maintaining the built environment.	Pathway Options: <ul style="list-style-type: none"> • Design/Pre-Construction • Construction • Maintenance/Operations 	Occupation Examples: Architect, Construction Manager, Cost Estimator, Civil Engineer, Construction/ Building Inspector, Bricklayers, Carpenters, Electricians, Plumbers, Pipefitters, Sheet Metal workers, Heating/Ventilation/Air Conditioning workers <i>For a complete listing, go to:</i> http://online.onetcenter.org/find/career?c=4&g=Go
--	---	---

SUGGESTED HIGH SCHOOL COURSES

Based on State Graduation Requirements and Montana College Admissions Criteria: <http://mus.edu/admissions.asp>
For more information, talk to your school counselor

9th	Graduation Requirements 2-Year College Prep	English, Math, Earth Science (lab science), Health Enhancement	<p style="text-align: center;">Cluster Foundation Courses:</p> <p>Information Technology Intro to the Built Environment Safety in the Workplace Technology Education</p> <p style="text-align: center;">Pathway Courses:</p> <p>Carpentry I, II Construction I, II Drafting I, II Metals I, II Welding I, II</p> <p style="text-align: center;">Student Organization(s):</p> <p>SkillsUSA TSA</p>
	4-Year MT College/Univ Prep (Rigorous Core)	English, Algebra I, Earth (lab) Science, Health Enhancement and 3 years of the following: World Language/Computer Science/Visual or Performing Arts/Career & Tech Ed	
	Career-Related Electives	Cluster Foundation Courses	
10th	Graduation Requirements 2-Year College Prep	English, Math, Biology (lab science), Global Studies	
	4-Year MT College/Univ Prep (Rigorous Core)	English, Geometry, Biology, Global Studies, and 3 years of the following: World Language/Computer Science/Visual or Performing Arts/Career & Tech Ed	
	Career-Related Electives	Cluster or Pathway Courses	
11th	Graduation Requirements 2-Year College Prep	English, U.S. History, Visual/Performing Arts	
	4-Year MT College/Univ Prep (Rigorous Core)	English, U.S. History, Algebra II, Chemistry or Physics and 3 years of the following: World Language/Computer Science/Visual or Performing Arts/Career & Tech Ed	
	Career-Related Electives	Pathway Courses	
12th	Graduation Requirements 2-Year College Prep	English, Government	
	4-Year MT College/Univ Prep (Rigorous Core)	English, Government, Social Studies, College Prep Writing, (additional math encouraged), and 3 years of the following: World Language/Computer Science/ Visual or Performing Arts/Career & Tech Ed	
	Career-Related Electives	Pathway Courses	

ADVANCED LEARNING OPPORTUNITIES High School to College/Career Linkages

Tech Prep courses:
Advanced Placement courses:
Running Start opportunities:
Work-based Learning:
On-line Learning:
Industry Recognized Certificate(s): NCCER (National Center for Construction Education and Research)

MONTANA POSTSECONDARY OPPORTUNITIES

*Montana University System Degree and Program Inventory: <http://www.homepage.montana.edu/~mus/drginv/>
Your Guide to Montana's Certificate and Associate Degree Programs <http://mus.edu/twoyear/YourGuide.html>*

Colleges of Technology: BLCOT—Billings; GFCOT—Great Falls; HCOT— Helena; TECHCOT—Butte; UMCOT—Missoula	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	<ul style="list-style-type: none"> 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	
PROFESSIONAL CERTIFICATE	<ul style="list-style-type: none"> Requires diploma or GED Less than 30 credits; little/no general ed credits Complete in one year or less 	Utility Line Worker—TECH COT	
APPRENTICESHIP	<ul style="list-style-type: none"> Requires diploma or GED Must be at least 18 Minimum 2,000 hours of supervised experience 	Bricklayers, Building Maintenance Workers, Carpenters, Cement Masons, Electricians, Glaziers, Plumbers, Pipefitters, Roofers, Sheet Metal Workers, Tile Setters See the MT Dept of Labor website for more information: http://wsd.dli.mt.gov/apprenticeship/default.asp	
CERTIFICATE OF APPLIED SCIENCE	<ul style="list-style-type: none"> Requires diploma or GED 30-45 credits; limited general education credits Complete in one year or less 	Building Maintenance--UMCOT Building Technology--BFCC, FVCC Carpentry--HCOT, UMCOT, TECH COT, GFCOT, MSU, FPCC Construction Technology--SCC Electrical Technology--FVCC Heating, Ventilation, Air Conditioning--FVCC Highway Construction--SKC Plumbing Technology--FVCC Utility Line Worker--FPCC	
ASSOCIATE'S OF APPLIED SCIENCE DEGREE	<ul style="list-style-type: none"> Requires diploma or GED 60-72 credits; includes 15-25 general ed credits Complete in two years <i>(if prepared academically in math and English)</i> 	Building Trades--FVCC, FPCC Carpentry--UMCOT, BLCOT, GFCOT, TECH COT, MSUN Civil Engineering Tech--TECHCOT Construction Technology--HCOT, BFCC Electrical Technology--MSUN, FVCC Heating, Ventilation, Air Conditioning--BLCOT Historic Preservation--TECHCOT Plumbing Technology--MSUN	
BACCALAUREATE DEGREE	<ul style="list-style-type: none"> Requires 4-year college prep for admission 128 credits (approximately) Complete in four years 	Civil Engineering--TECH Construction Engineering Technology--MSU Environmental Design/Architecture--MSU	