

Big Sky Pathways, Student MAPs, and MCIS

Montana Career Information System (MCIS), a tool for career exploration funded by the Student Assistance Foundation and housed in the Department of Labor and Industry, has developed a content-rich, highly engaging website for career and educational planning. With its emphasis on career planning through self-assessment, career information, portfolio-building, and postsecondary planning, MCIS has the potential to enhance secondary instruction and postsecondary advising. Moreover, MCIS has the capacity to play an important role in the development, implementation, and ultimate success of Big Sky Pathways.

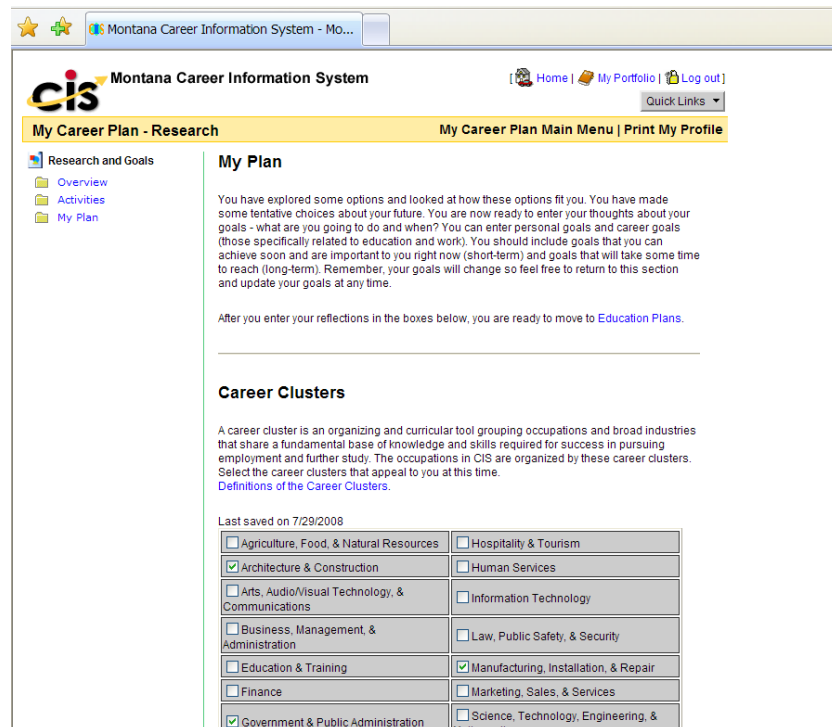
By capitalizing on the resources of MCIS, students will be able to create their own Big Sky Pathway MAP (Montana Achievement Plan) for an entire CTE Program of Study including information on tech prep articulation and other dual credit opportunities.

The following outlines how the partnership of Montana's Office of Public Instruction, MCIS, and the Montana University System demonstrates Montana's commitment to excellence by providing students with a tool that will help them transition to their career goal.

From self discovery to career plan using MCIS

1. **Self Assessment**--MCIS provides a number of free assessment tools which help students identify one or more career clusters based on the results of these inventories. MCIS is linked with O*Net (Dept. of Labor) which is linked to multiple databases.

2. **Career Cluster/Pathway Information**--By choosing a cluster and then a pathway, a student can access info on national wages and employment trends and an additional link to a specific state's info on wages and employment trends.



The screenshot shows the MCIS website interface. At the top, there is a navigation bar with links for Home, My Portfolio, and Log out. Below this is a yellow banner for 'My Career Plan - Research' with a 'Quick Links' dropdown menu. The main content area is titled 'My Plan' and includes a paragraph about exploring options and entering goals. Below this is a section for 'Career Clusters' with a grid of checkboxes for various clusters. The grid is as follows:

<input type="checkbox"/> Agriculture, Food, & Natural Resources	<input type="checkbox"/> Hospitality & Tourism
<input checked="" type="checkbox"/> Architecture & Construction	<input type="checkbox"/> Human Services
<input type="checkbox"/> Arts, Audio/Visual Technology, & Communications	<input type="checkbox"/> Information Technology
<input type="checkbox"/> Business, Management, & Administration	<input type="checkbox"/> Law, Public Safety, & Security
<input type="checkbox"/> Education & Training	<input checked="" type="checkbox"/> Manufacturing, Installation, & Repair
<input type="checkbox"/> Finance	<input type="checkbox"/> Marketing, Sales, & Services
<input checked="" type="checkbox"/> Government & Public Administration	<input type="checkbox"/> Science, Technology, Engineering, & Mathematics

3. **Montana Postsecondary Options by Pathway.** By the click of the mouse, a student may access summary information showing postsecondary options for a particular pathway. Each school listing will be hyperlinked to the college's website.



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					

4. **Big Sky Pathway Montana Achievement Plan (MAP):** Students may view a model Pathway MAP based on their high school and college program of choice.

Each student will create a Big Sky Pathway MAP based on their own secondary options, postsecondary education/training goal and career choice. This should be done under the guidance of parents/guardians, counselors, and teachers. The student's MAP should be reviewed at least once each year and changes would be made based on the student's personal career goals. This MAP would be stored in their own MCIS portfolio.

Big Sky Pathway MAP for Carpentry/Construction											
High School: Helena High School						College: UM-Helena COT					
UM-HELENA COLLEGE OF TECHNOLOGY DEGREE AND CERTIFICATE OPTIONS:											
Certificate of Applied Science--35 credits One-year program--Provides students with entry-level residential construction skills. The program includes site layout, framing, floors, walls, and roofs, as well as interior and exterior finishing, and welding.					Associate of Applied Science Degree --71 credits Two-year program--provides students with a broader background in the residential and industrial construction field and some background in business. Includes the training listed to the left plus cabinet making, electrical, plumbing, CAD, construction management, estimating, metal construction, and masonry. These classes are taught using a combination of classroom work and hands-on building.						
Helena High School	Grade	English (4 credits)	Math (2 credits)	Science (2 credits)	Social Studies (3 credits)	Health (.5 credit) PE (1.5 credit)	Fine Arts (1 credit)	Career and Technical Education (1 credit)	Other (6 credits)	Recommended student organization(s) and workbased learning:	
HIGH SCHOOL DIPLOMA	9	English 1	Algebra	Earth Science	World Cultures	Frosh HP		Basic Tech AND Computer Skills for Life		Skills USA Job Shadows Internships Work Experience	
	10	English 2	Geometry	Biology		Soph HP/ Health			Carpentry 1 (2 credits)		
	11	English 3			US History		Choose one		Welding 1 Carpentry 2 (2 credits)		
	12	English 4	MAT112T Technical Math for Carpentry		Govt				Welding 2		
UM-Helena College of Tech	English	Math	Business or Office Tech	Human Relations	Welding	Construction					
CERTIFICATE (2 SEMESTERS)	Year 1 Sem 1		MAT112T Technical Math for Carpentry	OT112 Intro to Computers			CSTR103 Occupational Related Safety and Tool Usage CSTR120 Rough Framing - Floors, Walls, Trusses, and Rafters CSTR125 Construction Building Lab 1 CSTR145 Drafting, Blueprint Reading, and House Development				
	Year 1 Sem 2	ENG107T Technical Commun					CSTR131 Windows, Doors, and Exterior Finishing 3 CSTR135 Insulation and Energy Building Practices 1 CSTR150 Roofing Applications 3 CSTR160 Drywall Application and Finishing 3 CSTR165 Cabinet Installation, Interior Finish, and Painting 3 CSTR171 Construction Building Lab II				
A.S. DEGREE (4 SEMESTERS)	Year 2 Sem 1			BUS105 Intro to Business	HR110T Career Dev and Human Relations		CSTR200 Light Equipment and Rigging 2 CSTR205 Computer Aided Design 2 CSTR216 Advanced Structural Lab I 5 CSTR260 Advanced Framing Systems				
	Year 2 Sem 2					WELD100 Welding Fund	CSTR218 Site Prep, Foundations and Industrial Concrete CSTR220 Construction Project Management CSTR225 Decks and Patios CSTR226 Advanced Structural Lab II CSTR230 Cabinet Making CSTR250 Construction Estimating				
		Required High School Course	High School Elective	Tech Prep Course	Dual Credit Course	College Course	On-line Course				