# Request for Approval with Assurances

**Montana Big Sky Pathways (Programs of Study)**

The Carl D. Perkins Career and Technical Education Act of 2006 (Perkins IV) calls for states to offer "career and technical programs of study," known as Big Sky Pathways in Montana, as an option to students and their parents when planning for and completing future coursework. These programs, at a minimum, must:

- Incorporate and align secondary and postsecondary education elements,
- Include academic and CTE content in a coordinated, non-duplicative progression of courses,
- Offer the opportunity, where appropriate, for secondary students to acquire postsecondary credits, and
- Lead to an industry-recognized credential or certificate at the postsecondary level, or an associate or baccalaureate degree.

## Assurances:

By my signature on this form, I assure that the proposed Big Sky Pathway submitted for approval by this high school/college satisfies the 10 stated requirements. For approval, all 10 requirements must be checked.

<table>
<thead>
<tr>
<th>Name of Big Sky Pathway (cluster level):</th>
<th>Constructive Art, Construction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name of High School:</td>
<td>Hamilton High School</td>
</tr>
<tr>
<td>Names of Secondary Lead Teacher and Counselor:</td>
<td>John McKee, I/S Lea Foulk</td>
</tr>
<tr>
<td>The Lead Secondary Teacher will be contacted if OPI has questions about this request</td>
<td></td>
</tr>
<tr>
<td>Lead Teacher's email address:</td>
<td></td>
</tr>
<tr>
<td>Lead Teacher's phone number:</td>
<td></td>
</tr>
<tr>
<td>Name of College:</td>
<td>VMT/COT</td>
</tr>
<tr>
<td>Name of College Program:</td>
<td>Carpentry</td>
</tr>
<tr>
<td>Name of College Lead Faculty Member:</td>
<td>Debra Jamieson</td>
</tr>
</tbody>
</table>

## Requirements for Approval

1. Includes all state and local graduation requirements
2. Identifies the appropriate secondary CTE, academic, and recommended elective courses offered by this high school which will prepare the student for college-level courses without remediation
3. Outlines a non-duplicative sequence of courses from grades 9-12 and from secondary to postsecondary education
4. Prepares students for entry into a postsecondary program or apprenticeship
5. Leads to an industry-recognized postsecondary credential, degree or employment
6. Includes appropriate state standards and/or industry skills standards. Identify standards used:
   - NCEER
7. Aligns with an AAS program offered by a Montana college (college of technology, community college, tribal college, MSU-Northern)
8. Links with a web-based guidance delivery system such as MCIS
   - If using something other than MCIS, please indicate:
9. When applicable, dual enrollment opportunities have been identified.
10. When applicable, Advanced Placement, IB courses and CTE START (statewide articulations) have been identified.

<table>
<thead>
<tr>
<th>High School Principal's Signature:</th>
<th>Date: 1/31/21</th>
</tr>
</thead>
<tbody>
<tr>
<td>H.S. Advisory Committee Member's Signature:</td>
<td>Date: 1/31/21</td>
</tr>
<tr>
<td>College Chief Academic Officer's Signature:</td>
<td>Date: 1/31/21</td>
</tr>
<tr>
<td>College Lead Faculty Member's Signature:</td>
<td>Date: 1/31/21</td>
</tr>
</tbody>
</table>

Please submit this Request for Approval form and a copy of the Big Sky Pathway Proposal to: OPI, Career and Technical Education, P.O. Box 202501, Helena, Montana 59620-2501

<table>
<thead>
<tr>
<th>OPI Specialist Approval:</th>
<th>Date of Approval: 9-6-2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>OCHT Approval:</td>
<td>Date of Approval: 9-6-2011</td>
</tr>
</tbody>
</table>

Both the college and the high school will receive a signed copy when the BSP is approved.
### HIGH SCHOOL: HAMILTON HIGH SCHOOL

### COLLEGE: UM - COT

### COLLEGE DEGREE PROGRAM: Industrial Technology Carpentry

#### Cluster Overview:
- Careers in the Architecture and Construction cluster involve the designing, planning, managing, building, and maintaining the built environment.

#### Pathway Options:
- Design/Pre-Construction
- Construction
- Maintenance/Operations

### BIG SKY PATHWAY PROPOSAL

#### Occupation Examples:
- Architect, Carpenter, Civil Engineer, Construction Foreman/Manager, Contractor, Demolition Engineer
- Crafter, Drywall Installer, Electrician, Electronic Systems Technician, Equipment/Material Manager
- General Carpenter/Builder, Heating, Ventilation, Air Conditioning and Refrigeration Mechanic, Interior Designer
- Painter, Paperhanger, Plumber, Project Estimator, Project Inspector, Roofer, Safety Director
- Sheet Metal Worker, Tile and Marble Setter

For a complete listing, go to: [http://online.onetcenter.org/find/career?c=2&q=Go](http://online.onetcenter.org/find/career?c=2&q=Go)

### SUGGESTED HIGH SCHOOL COURSES

#### 9th Grade
- Graduation Requirements: Workforce/2-Year College Prep
- 4-Year MT College/Univ Prep: (Rigorous Core)
- CTE and/or Electives: Woods I, Cad I

#### 10th Grade
- Graduation Requirements: Workforce/2-Year College Prep
- 4-Year MT College/Univ Prep: (Rigorous Core)
- CTE and/or Electives: Woods II

#### 11th Grade
- Graduation Requirements: Workforce/2-Year College Prep
- 4-Year MT College/Univ Prep: (Rigorous Core)
- CTE and/or Electives: Cabinet Making

#### 12th Grade
- Graduation Requirements: Workforce/2-Year College Prep
- 4-Year MT College/Univ Prep: (Rigorous Core)
- CTE and/or Electives: Construction Trades

### ADVANCED LEARNING OPPORTUNITIES

#### High School to College/Career Linkages

#### CTE START courses:

- Advanced Placement or IB courses:
  - AP English, AP Calculus, AP Chemistry, AP U.S. History

#### Dual Enrollment courses:
- Pre-Calculus and Sr. Composition

#### Online courses:
- MT Digital Academy

#### Other:

### POSTSECONDARY PROGRAM OF STUDY

#### Math
- 13—Semester 1: M-111 Technical Math

#### English
- 13—Semester 1: WRIT-101 College Writing I

#### Major
- 13—Semester 1: CSTM, 102 Concrete Carpentry, 120 Rough in Framing, 122 Carp Lab, 142 Finish Carpentry, 143 Intermediate Carpentry Lab

#### Other
- BUS 242 – Supervision
- CAPP 120 – Intro To Computers
- CADD 195 – Intro to Computer Aided Design & Drafting
- WLDG 103 – Welding Fundamentals for Construction Trades

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November 2010
# Montana Postsecondary Opportunities

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

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

<table>
<thead>
<tr>
<th>Colleges of Technology:</th>
<th>Community Colleges:</th>
<th>Tribal Colleges:</th>
<th>Four Year Colleges/Universities:</th>
</tr>
</thead>
<tbody>
<tr>
<td>BLCOT—Billings; GFCOT—Great Falls; HCOT—Helena; TECMCT—Butte; UMCOT—Missoula; GCP—Bozeman</td>
<td>DCC—Glendive; FVCC—Kalispell; MCC—Missoula City</td>
<td>BFCC—Browning; CDICC—Lame Deer; FBCC—Harlem; FPPC—Poplar; LBRC—Crow Agency; SCC—Box Elder; SKC—Pablo</td>
<td>MSU—Bozeman; MSUB—Billings; MSUN—Havre; TECH—Butte; UM—Missoula; UMW—Dillon</td>
</tr>
</tbody>
</table>

### 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
- Cabinet & Furniture Technology — FVCC
- Line Professional/Utility Line Worker — TECHCOT

### APPRENTICESHIP
- Requires diploma or GED
- Must be at least 18
- Minimum 2,000 hours of supervised experience
- Bricklayers, Building Maintenance Workers, Carpenters, Cement Masons, Electicians, 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](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
- Building Maintenance — UMCOT
- Building Technology & Trades — FVCC, MCC, FPCC, BFCC
- Carpentry — HCOT, UMCOT, TECH COT, GFCOT, MSUN, FBCCOL
- Construction Technology — SCC
- Heating, Ventilation, Air Conditioning — FVCC
- Line Professional/Utility Line Worker — FPCC
- Plumbing Technology — 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)
- Building Technology & Trades — FVCC, MCC, FPCC
- Carpentry — UMCOT, BLCOT, TECH COT, MSUN, FPCC
- Construction Technology — HCOT, BFCC
- Plumbing Technology — MSUN

### BACCALAUREATE DEGREE
- 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

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Degree and Program inventory above may not be all inclusive.

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November 2018
Industrial Technology
Carpentry Curriculum

Autumn Entry

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<thead>
<tr>
<th>First Year</th>
<th>Autumn</th>
<th>Spring</th>
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<tr>
<td>BUS 242T Supervision</td>
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<tr>
<td>CAPP 120 Introduction To Computers</td>
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<td>CSTN 102 Concrete Carpentry</td>
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<td>CSTN 120 Carpentry Basics &amp; Rough-In Framing</td>
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<td>CSTN 142 Interior And Exterior Finish Carpentry</td>
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<td>CSTN 143 Intermediate Carpentry Lab</td>
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<tr>
<td>M 111 Technical Mathematics</td>
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<td>Drafting</td>
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<td>CSTN 205 Advanced Carpentry</td>
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<td>CSTN 206 Advanced Carpentry Lab</td>
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<td>CSTN 276 Building For Solar Energy</td>
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</table>

The University of Montana

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- UM Foundation