

# MontanaTech

## Year Seven - Self-Evaluation Report



Northwest Commission on Colleges  
and Universities

Year Seven Self-Evaluation Report



**Montana**Tech

Submitted by  
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Chancellor

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## **Institutional Overview**

Montana Tech of The University of Montana traces its roots to the enabling act of 1889 that granted statehood to the people of Montana. In that act, the United States Congress set aside 100,000 acres to establish and maintain a school of mines. In 1900, the Montana State School of Mines opened its doors. In 1965, the school underwent a name change to the Montana College of Mineral Science and Technology. On January 21, 1994, the Montana Board of Regents (BOR) adopted a plan to restructure the entire Montana University System (MUS) followed by adoption of a resolution on July 6, 1995, initiating a second phase. This restructuring created the MUS and gave the college its new official name, Montana Tech of The University of Montana, or in our vernacular Montana Tech. The restructuring also assigned to Montana Tech what had been the Butte Vocational-Technical Center now known as Highlands College. Highlands College has the feel of a community college and primarily offers two-year and certificate programs.

Montana Tech has evolved into a dynamic institution composed of four schools and colleges: School of Mines and Engineering; College of Letters, Sciences, and Professional Studies; Highlands College; and the Graduate School. Prior to 1951, the college offered Bachelor of Science degrees in only five areas. Today, the institution offers degree programs at the doctorate, master, bachelor, associate, and certificate levels. The student body presents a national and global snapshot with 45 territories and states and 19 foreign countries represented. Montana Tech now has an approximate enrollment of 2,900 students, provides these graduates with the knowledge and skills necessary for successful lives and careers, conducts basic and applied research, and provides related services to the citizens of Montana and beyond.

Montana Tech is a leader in science, technology, engineering, and mathematics (STEM) education. Montana Tech is one of the few institutions in the United States that maintains a broad spectrum of minerals and energy engineering degree programs. All of Montana Tech's engineering programs are Accreditation Board for Engineering and Technology (ABET) accredited. Moreover, many of Montana Tech's engineering programs are not only unique to the region but may also be one of only a few in the country. For example, Montana Tech is one of only two U.S. schools that offer a bachelor of science (BS) degree in geophysical engineering, one of ten that offer a BS degree in metallurgical engineering, one of nineteen that offer a BS degree in mining engineering, and one of only twenty that offer a BS in petroleum engineering. Montana Tech also offers the more traditional engineering programs including Mechanical, Civil, and Environmental Engineering. In addition, Montana Tech also offers non-engineering degree and certificate programs that are not offered by other MUS units. These include, but are not limited to, BS degrees in Healthcare Informatics, Professional and Technical Communication, Liberal Studies, and Statistics, and the Pre-Apprentice Lineman certificate program. A number of Montana Tech's non-engineering programs have specialized accreditation/certification from entities such as the American Chemical Society (ACS) and The Commission on Collegiate Nursing Education (CCNE).

The campus plays an integral role in education, research, and economic development within the state and region. Montana Tech is strategically positioned within the MUS to assist the BOR in addressing their three strategic goals: 1. Access & Affordability: Increase the overall educational attainment for Montana residents; 2. Workforce & Economic Development: Assist in the expansion and improvement of the economy; and 3. Efficiency & Effectiveness: Improve institutional efficiency and effectiveness. The campus is also home to the Montana Bureau of Mines and Geology (MBMG) whose state agency mandate is to collect and publish information on Montana's geology to promote orderly and responsible development of Montana's energy, groundwater, and mineral resources. The MBMG provides these services to the public and a variety of constituents within the private sector, as well as federal, state,



and local governments. The MBMG's research faculty also closely collaborate with the academic faculty on a number of relevant research programs and in the mentoring of graduate students.

Montana Tech has an outstanding faculty. We have full-time core faculty for every degree program. The environment at Montana Tech is one that encourages faculty-student interaction. Undergraduate and graduate students are frequently involved with faculty and staff in research programs. Montana Tech's commitment to research has resulted in significant growth in its funded research over the last several years. The institution's funding base has diversified to include local, state, and national support from the private sector and government.

Montana Tech's world-renowned reputation is based on the successes of over 100 years of graduates in the institution's heritage programs in both the extractive engineering fields and in the associated science fields. While the campus continues to receive recognition for its heritage programs, the growth of programs in areas such as safety/industrial hygiene, business, energy, and healthcare have significantly broadened the diversity of degree programs. In turn, the diversity attracts a larger number of students who have more varied career interests and objectives. The changes in Montana Tech over the past years have only served to amplify our role and mission as "Montana's STEM" institution.



**NORTHWEST COMMISSION ON COLLEGES AND UNIVERSITIES**

**Basic Institutional Data Form**

Information and data provided in the institutional self-evaluation are usually for the academic and fiscal year preceding the year of the evaluation committee visit. The purpose of this form is to provide Commissioners and evaluators with current data for the year of the visit. After the self-evaluation report has been finalized, complete this form to ensure the information is current for the time of the evaluation committee visit. Please provide a completed copy of this form with each copy of the self-evaluation report sent to the Commission office and to each evaluator.

To enable consistency of reporting, please refer to the glossary in the 2003 Accreditation Handbook for definitions of terms.

Institution: Montana Tech of The University of Montana

Address: 1300 West Park Street

City, State, ZIP: Butte, MT 59701

Degree Levels Offered:  Doctorate  Masters  Baccalaureate  Associate  Other

If part of a multi-institution system, name of system: Montana University System

Type of Institution:  Comprehensive  Specialized  Health-centered  Religious-based

Native/Tribal  Other (specify) \_\_\_\_\_

Institutional control:  Public  City  County  State  Federal  Tribal

Private/Independent ( Non-profit  For Profit)

Institutional calendar:  Quarter  Semester  Trimester  4-1-4  Continuous Term

Other (specify) \_\_\_\_\_

**Specialized/Programmatic accreditation:** List program or school, degree level(s) and date of last accreditation by an agency recognized by the United States Department of Education. (Add additional pages if necessary.)

Program or School	Degree Level(s)	Recognized Agency	Date
Electrical Engineering	BS	Engineering Accreditation Commission of the Accreditation Board of Engineering & Technology (ABET/EAC)	2016
Environmental Engineering	BS	ABET/EAC	2016
General Engineering	BS	ABET/EAC	2016
Geological Engineering	BS	ABET/EAC	2016
Geophysical Engineering	BS	ABET/EAC	2016
Metallurgical and Materials Engineering	BS	ABET/EAC	2016
Mining Engineering	BS	ABET/EAC	2016
Petroleum Engineering	BS	ABET/EAC	2016
Industrial Hygiene –On Campus Program	MS	Applied Science Accreditation Commission (ABET/ASAC)	2016
Industrial Hygiene – Professional Track Program	MS	ABET/ASAC	2016
Occupational Safety and Health	BS	ABET/ASAC	2016
Software Engineering	BS	ABET/EAC	2016
Computer Science	BS	Computer Science Accreditation Board of Engineering & Technology (CSAC/CSAB)	2016
Nursing	BSN	Commission on Collegiate Nursing Education (CCNE)	2013

**Full-Time Equivalent (FTE) Enrollment** (Formula used to compute FTE: Undergraduate SCH/15+Graduate SCH/12)

**Official Fall FTE Student Enrollments**

<b>Classification</b>	<b>Current Year Dates: Fall 2016</b>	<b>One Year Prior Dates: Fall 2015</b>	<b>Two Years Prior Dates: Fall 2014</b>
Undergraduate	2,340	2,487	2,460
Graduate	141	140	115
Professional			
Unclassified			
Total all levels	2,481	2,627	2,575

**Full-Time Unduplicated Headcount Enrollment.** (Count students enrolled in credit courses only.)

**Student Headcount Enrollments**

<b>Classification</b>	<b>Current Year Dates: Fall 2016</b>	<b>One Year Prior Dates: Fall 2015</b>	<b>Two Years Prior Dates: Fall 2014</b>
Undergraduate	2,594	2,770	2,751
Graduate	215	210	194
Professional			
Unclassified			
Total all levels	2,809	2,980	2,945

**Numbers of Full-Time and Part-Time Instructional and Research Faculty & Staff and Numbers of Full-Time (only) Instructional and Research Faculty & Staff by Highest Degree Earned.** Include only professional personnel who are primarily assigned to instruction or research.

Total Number **Fall 2016** Number of Full Time (only) Faculty and Staff by Highest Degree Earned

<b>Rank</b>	<b>Full Time</b>	<b>Part Time</b>	<b>Less than Associate</b>	<b>Associate</b>	<b>Bachelor</b>	<b>Masters</b>	<b>Specialist</b>	<b>Doctorate</b>
Professor	36	1						36
Associate Professor	32	1				7		25
Assistant Professor	50					26		24
Instructor	36	84	3	3	11	12		7
Lecturer and Teaching Assistant								
Research Staff and Research Assistant	34	5			1	27		6
Undesignated Rank								

**Mean Salaries and Mean Years of Service of Full-Time Instructional and Research Faculty and Staff.** Include only full-time personnel with professional status who are primarily assigned to instruction or research.

<b>Rank</b>	<b>Mean Salary</b>	<b>Mean Years of Service</b>
Professor	\$80,424	22.1
Associate Professor	\$70,558	11.3
Assistant Professor	\$63,846	5.3
Instructor	\$51,923	9.2
Lecturer and Teaching Assistant		
Research Staff and Research Assistant	\$68,233	13.6
Undesignated Rank		

**Financial Information.** Complete each item in the report using zero where there is nothing to report. Enter figures to the nearest dollar. Auxiliary and service enterprises of the institution (housing, food service, book stores, athletics, etc.) should be included. The institution's audit materials should be an excellent reference for completing the report.

Fiscal year of the institution: July 1<sup>st</sup> through June 30th

Reporting of income:	Accrual Basis	Cash Basis	Accrual Basis	X
Reporting of expenses:	Accrual Basis	Cash Basis	Accrual Basis	X

**BALANCE SHEET DATA**

ASSETS	Last Completed FY Dates: FY16	One Year Prior to Last Completed FY Dates: FY15	Two Years Prior to Last Completed FY Dates: FY14
<b>CURRENT FUNDS</b>			
Unrestricted			
Cash	\$ 11,913,690	\$ 10,524,449	\$ 9,973,595
Investments			
Accounts receivable gross	\$ 2,053,429	\$ 1,363,771	\$ 1,076,399
Less allowance for bad debts			
Inventories	\$ 481,059	\$ 509,083	\$ 427,895
Prepaid expenses and deferred charges	\$ 312,306	\$ 329,800	\$ 252,037
Other (Securities lending collateral, Interest receivable, Pension Deferred Overflows, Inter-entity receivable)	\$ 2,841,041	\$ 3,466,209	\$ 756,907
Due from	\$ 12,530	\$ 11,231	\$ 2,149
<b>Total Unrestricted</b>	<b>\$ 17,614,055</b>	<b>\$ 16,204,543</b>	<b>\$ 12,488,982</b>
Restricted			
Cash	\$ 280,177	\$ 739,184	\$ 682,791
Investments			
Other (Account and Grant receivable, Investment receivable, Prepaid expenses, & Pension Deferred)	\$ 1,405,570	\$ 1,306,992	\$ 471,973
Due from	\$ 373,314	\$ 347,742	\$ 977,157
<b>Total Restricted</b>	<b>\$ 2,059,061</b>	<b>\$ 2,393,918</b>	<b>\$ 2,131,921</b>
<b>Total Current Funds</b>	<b>\$ 19,673,116</b>	<b>\$ 18,598,461</b>	<b>\$ 14,620,903</b>
<b>Endowment and Similar Funds</b>			
Cash	\$ 1,524	\$ 1,399	\$ 1,199
Investments	\$ 419,168	\$ 404,488	\$ 407,035
Other (identify)			
Due from			
<b>Total Endowment and Similar Funds</b>	<b>\$ 420,692</b>	<b>\$ 405,887</b>	<b>\$ 408,234</b>
<b>Plant Fund</b>			
Unexpended			
Cash	\$ 2,387,368	\$ 2,834,979	\$ 3,612,333
Investments			
Other (Interest receivable & Prepaid expense and deferred charges)	\$ 473	\$ 339	\$ 8,842
<b>Total unexpended</b>	<b>\$ 2,387,841</b>	<b>\$ 2,835,318</b>	<b>\$ 3,621,175</b>

**BALANCE SHEET DATA (continued)**

Investment in Plant			
Land	\$ 1,681,255	\$ 1,681,255	\$ 1,681,255
Land improvements	\$ 892,832	\$ 957,990	\$ 359,392
Buildings	\$ 38,494,433	\$ 41,195,546	\$ 42,330,360
Equipment	\$ 7,066,251	\$ 7,045,465	\$ 6,140,881
Library resources	\$ 44,978	\$ 56,450	\$ 43,112
Other (Capitalized Collections, CWIP, Intangible Assets)	\$ 6,397,442	\$ 1,591,452	\$ 2,815,205
<b>Total investments in plant</b>	<b>\$ 54,577,191</b>	<b>\$ 52,528,157</b>	<b>\$ 53,370,205</b>
Due from			
Other plant funds (identify)			0
<b>Total Plant Funds</b>	<b>\$ 56,965,032</b>	<b>\$ 55,363,475</b>	<b>\$ 56,991,380</b>
<b>Other Assets (Bureau, Student loan funds, Renewal and Replacement, Retirement of Indebtness, Agency funds)</b>	<b>\$ 12,437,067</b>	<b>\$ 12,162,500</b>	<b>\$ 10,270,882</b>
<b>Total Other Assets</b>	<b>\$ 12,437,067</b>	<b>\$ 12,162,500</b>	<b>\$ 10,270,882</b>
<b>Total Assets</b>	<b>\$ 89,495,907</b>	<b>\$ 86,530,323</b>	<b>\$ 82,291,399</b>
<b>LIABILITIES</b>	<b>Last Completed FY Dates: FY16</b>	<b>One Year Prior to Last Completed FY Dates: FY15</b>	<b>Two Years Prior to Last Completed FY Dates: FY14</b>
<b>Current Funds</b>			
Unrestricted			
Accounts payable	\$ 881,315	\$ 805,625	\$ 1,164,735
Accrued liabilities			
Students' deposits	\$ 62,380	\$ 62,642	\$ 62,399
Deferred credits	\$ 2,158,473	\$ 1,420,840	\$ 1,167,740
Other liabilities (Securities lending liability, Accrued compensated absences, OPEB Implicit Rate Subsidy, Pension Deferred Inflows)	\$ 18,038,649	\$ 18,079,682	\$ 9,253,283
Due to	\$ 16,429		
Fund balance	\$ (3,543,191)	\$ (4,164,246)	\$ 840,825
<b>Total Unrestricted</b>	<b>\$ 17,614,055</b>	<b>\$ 16,204,543</b>	<b>\$ 12,488,982</b>
Restricted			
Accounts payable	\$ 15,100	\$ 74,052	\$ 58,266
Other (Deferred revenue, Inter-entity payables, OPEB Implicit Rate Subsidy)	\$ 2,196,160	\$ 2,370,272	\$ 1,585,574
Due to	\$ 31,730		\$ 5,468
Fund balance	\$ (183,929)	\$ (50,406)	\$ 482,613
<b>Total Restricted</b>	<b>\$ 2,059,061</b>	<b>\$ 2,393,918</b>	<b>\$ 2,131,921</b>
<b>Total Current Funds</b>	<b>\$ 19,673,116</b>	<b>\$ 18,598,461</b>	<b>\$ 14,620,903</b>
<b>Endowment and Similar Funds</b>			
Restricted			
Quasi-endowed			
Due to			
Fund balance	\$ 420,692	\$ 405,887	\$ 408,234

**BALANCE SHEET DATA (continued)**

<b>Total Endowment and Similar Funds</b>	<b>\$ 420,692</b>	<b>\$ 405,887</b>	<b>\$ 408,234</b>
<b>Plant Fund</b>			
Unexpended			
Accounts payable	\$ 140,279	\$ 78,096	\$ 107,156
Notes payable			
Bonds payable			
Other liabilities (Accrued interest payable)	\$ 111,833	\$ 86,427	\$ 74,252
Due to			
Fund balance	\$ 2,135,729	\$ 2,670,795	\$ 3,439,767
<b>Total unexpended</b>	<b>\$ 2,387,841</b>	<b>\$ 2,835,318</b>	<b>\$ 3,621,175</b>
Investment in Plant			
Notes payable			
Bonds payable	\$ 7,275,017	\$ 7,888,077	\$ 8,329,687
Mortgage payable			
Other liabilities (Accrued interest payable)	\$ 35,374	\$ 37,930	\$ 39,243
Due to	\$ 2,638,932	\$ 2,582,971	\$ 2,751,003
Other plant fund liabilities (Invested in capital assets, net of related debt)	\$ 44,627,868	\$ 42,019,179	\$ 42,250,272
<b>Total Investments in Plant Fund</b>	<b>\$ 54,577,191</b>	<b>\$ 52,528,157</b>	<b>\$ 53,370,205</b>
<b>Fund Balance (Bureau of Mines, Student Loan Funds, Retirement of Indebtedness Funds, Renewal and Replacement Funds, Agency Funds)</b>	<b>\$ 9,276,026</b>	<b>\$ 9,005,596</b>	<b>\$ 7,062,007</b>
<b>Total Other Liabilities</b>	<b>\$ 3,161,041</b>	<b>\$ 3,156,904</b>	<b>\$ 3,208,875</b>
<b>Total Liabilities</b>	<b>\$ 36,762,712</b>	<b>\$ 36,643,518</b>	<b>\$ 27,807,681</b>
<b>Fund Balance</b>	<b>\$ 52,733,195</b>	<b>\$ 49,886,805</b>	<b>\$ 54,483,718</b>

**CURRENT FUNDS, REVENUES, EXPENDITURES, AND OTHER CHANGES**

REVENUES	Last Completed FY Dates: FY16	One Year Prior to Last Completed FY Dates: FY15	Two Years Prior to Last Completed FY Dates: FY14
Tuition and fees	\$ 21,082,978	\$ 20,152,217	\$ 18,647,043
Federal appropriations			
State appropriations	\$ 21,145,014	\$ 20,289,971	\$ 19,759,001
Local appropriations			
Grants and contracts	\$ 11,188,746	\$ 11,571,154	\$ 11,209,960
Endowment income			
Auxiliary enterprises	\$ 4,443,936	\$ 4,723,645	\$ 4,360,744
Other (Sales and service, Other operating revenue, Private gifts, and Investment Income)	\$ 5,771,679	\$ 6,286,582	\$ 5,333,445
<b>TOTAL REVENUES</b>	<b>\$ 63,632,353</b>	<b>\$ 63,023,569</b>	<b>\$ 59,310,193</b>
<b>EXPENDITURE &amp; MANDATORY TRANSFERS</b>			
Educational and General			
Instruction	\$ 18,594,575	\$ 18,141,193	\$ 17,908,713
Research	\$ 10,754,659	\$ 10,430,427	\$ 9,742,562
Public services	\$ 19,402	\$ 14,288	\$ 56
Academic support	\$ 3,432,531	\$ 3,613,518	\$ 3,409,966
Student services	\$ 4,724,266	\$ 4,141,915	\$ 4,277,487
Institutional support	\$ 4,231,945	\$ 4,341,380	\$ 4,015,020
Operation and maintenance of plant	\$ 4,538,178	\$ 4,396,663	\$ 4,114,129
Scholarships and fellowships	\$ 9,088,395	\$ 9,362,582	\$ 9,310,452
Other (Capital Expenditures)	\$ 1,081,471	\$ 1,354,942	\$ 1,889,943
Mandatory transfers for:			
Principal and interest	\$ 181,137	\$ 174,237	\$ 173,182
Renewal and replacements	\$ 536,731	\$ 902,645	\$ 735,645
Loan fund matching grants			
Other (identify)	\$ 396,526	\$ 470,738	\$ 447,120
<b>Total Educational and General</b>	<b>\$ 57,579,816</b>	<b>\$ 57,344,528</b>	<b>\$ 56,024,275</b>
Auxiliary Enterprises			
Expenditures	\$ 4,628,620	\$ 4,477,225	\$ 4,267,848
Mandatory transfers for:			
Principal and interest			
Renewals and replacements			
<b>Total Auxiliary Enterprises</b>	<b>\$ 4,628,620</b>	<b>\$ 4,477,225</b>	<b>\$ 4,267,848</b>
<b>Total Expenditure &amp; Mandatory Transfers</b>	<b>\$ 62,208,436</b>	<b>\$ 61,821,753</b>	<b>\$ 60,292,123</b>
<b>Other Transfers and Additions/Deletions</b>			
<b>Excess [deficiency of revenues over expenditures and mandatory transfers (net change in fund balances)]</b>	<b>\$ 1,423,917</b>	<b>\$ 1,201,816</b>	<b>\$ (981,930)</b>



**INSTITUTIONAL INDEBTEDNESS**

<b>TOTAL DEBT TO OUTSIDE PARTIES</b>	<b>Last Completed FY Dates: FY16</b>	<b>One Year Prior to Last Completed FY Dates: FY15</b>	<b>Two Years Prior to Last Completed FY Dates: FY14</b>
For Capital Outlay	0	0	0
For Operations	11,080,691	10,471,048	9,913,949

**Domestic Off-Campus Degree Programs and Academic Credit Sites:** Report information for off-campus sites within the United States where degree programs and academic coursework is offered. (Add additional pages if necessary.)

**Degree Programs** – list the names of degree programs that can be completed at the site.

**Academic Credit Courses** – report the total number of academic credit courses offered at the site.

**Student Headcount** – report the total number (unduplicated headcount) of students currently enrolled in programs at the site.

**Faculty Headcount** – report the total number (unduplicated headcount) of faculty (full-time and part-time) teaching at the site.

**PROGRAMS AND ACADEMIC CREDIT OFFERED AT OFF-CAMPUS SITES WITHIN THE UNITED STATES**

<b>Location of Site Name City, State, ZIP</b>	<b>Degree Programs</b>	<b>Academic Credit Courses</b>	<b>Student Headcount</b>	<b>Faculty Headcount</b>
Helena College 1115 North Roberts Helena, MT	BAS Business	18 onsite credits 30 recorded/online credits	26	2
Miles City Community College 2715 Dickinson Street Miles City, MT	AAS Radiologic Technology	50 credits online/blended (0 credit labs on site)	4	3

**Programs and Academic Courses Offered at Sites Outside the United States.** Report information for sites outside the United States where degree programs and academic credit courses are offered, including study abroad programs and educational operations on military bases. (Add additional pages if necessary.)

**Degree Programs** – list the names of degree programs that can be completed at the site.

**Academic Credit Courses** – report the total number of academic credit courses offered at the site.

**Student Headcount** – report the total number (unduplicated headcount) of students currently enrolled in programs at the site.

**Faculty Headcount** – report the total number (unduplicated headcount) of faculty (full-time and part-time) teaching at the site.

**PROGRAMS AND ACADEMIC CREDIT COURSES OFFERED AT SITES OUTSIDE THE UNITED STATES**

<b>Location of Site Name City, State, ZIP</b>	<b>Degree Programs</b>	<b>Academic Credit Courses</b>	<b>Student Headcount</b>	<b>Faculty Headcount</b>
NONE				



## Preface

### Update on Institutional Changes Since Last Report

In May 2016, the Montana Board of Regents (BOR) approved Montana Tech to offer the Bachelor of Science in Nursing (BSN). Montana Tech will still offer our BSN Completion program, which is an online program, but will no longer offer the Associate of Science in Nursing (ASN) degree program, but will complete the currently enrolled ASN Students. In May 2016, the BOR also approved standalone programs in Mechanical (ME) and Civil Engineering (CE). These programs were previously offered as options under the General Engineering (GE) program. Starting in fall 2016 we discontinued admitting students into the GE program.

In January 2017, Montana Tech completed a 30,000 ft<sup>2</sup> addition called the Natural Resource Research Center (NRRC). The building houses engineering science laboratories that will be used for both undergraduate labs and research labs, including a cleanroom lab and a petroleum reservoir lab. In addition, the NRRC houses approximately 3,000 ft<sup>2</sup> of “shelled” space that is available for expanding Montana Tech’s research capability.

As previously reported in May 2013, the Montana BOR approved the collaborative PhD in Materials Science between The University of Montana, Montana Tech, and Montana State University. This is Montana Tech’s first doctoral program. A substantive change document was filed with NWCCU, and Montana Tech has been granted candidacy status at the doctoral level. The commission will take action on the candidacy status of Montana Tech at its June 2017 meeting following the review and evaluation of the Year Seven Report. Montana Tech is expected to graduate its first doctoral graduate in May 2017.

### Response to Topics Requested by the Commission

In the Spring 2014 report from the Commission evaluators, Montana Tech received the following recommendations resulting from the Year Three Self- Evaluation Report.

**Recommendation #1:** The evaluation team recommends Montana Tech further define and refine mission fulfillment in the context of its purpose, characteristics, and expectations and develop benchmarks necessary to establish meaningful, assessable, and verifiable indicators of achievement for its objectives associated with core themes. (Standards 1.A.2 and 1.B.2).

**Response:** Through a collaborative process, Montana Tech aligned the strategic goals of the Strategic Plan, [A Commitment to Excellence](#), with core themes, established benchmarks for all indicators of achievement, and defined mission fulfillment in the context of its purpose, characteristics, and expectations. Mission fulfillment is achieved when all core themes have been met. A core theme is met when at least half of the objectives within a core theme have been accomplished. An objective is accomplished when at least half of the indicators of achievement within the objective have met or exceeded their respective benchmark.

**Recommendation #2:** The evaluation team recommends Montana Tech review, revise, and approve policies and procedures related to students, student conduct, and grievance, in compliance with federal and state laws. (2.A.15, revised)

**Response:** The concerns of evaluators in this standard were twofold—policies and procedures for logging complaints and procedures regarding Title IX. Policies and procedures regarding students’ rights and responsibilities are clearly stated and available in the [Student Handbook](#), which is updated, published, and distributed to students annually in hard copy and via Montana Tech’s website. The

Montana University System ([MUS](#)) [complaint process](#) is published on Montana Tech's website and the Office of the Commissioner of Higher Education ([OCHE](#)) [website](#).

Montana Tech is committed to providing a safe and equitable environment for students, faculty, staff, alumni, friends, visitors, and the community. Montana Tech takes very seriously its responsibilities under Title IX, the Clery Act (and its SaVE amendments), the Civil Rights Act, and the Violence Against Women Act as they relate to sexual assault, sexual misconduct, sexual harassment, discrimination, retaliation, and bullying.

To these ends, Montana Tech developed updated [policies](#), [procedures](#), and training which strive to ensure that relevant inappropriate behavior is prevented or otherwise stopped and that those affected are treated both equitably and sensitively. Montana Tech also has a Title IX Coordinator and Title IX Committee responsible for the compliance, implementation, and monitoring of efforts to comply with Title IX. Montana Tech's also offers 24-hour reporting on its [Campus Safety web page](#).

**Recommendation #3:** The evaluation team recommends Montana Tech develop a clear, written agreement defining the separate relationships with the Digger Athletic Association and the Montana Tech Alumni Association. (Standard 2.F.8)

**Response:** In October 2014, Montana Tech and the Montana Tech Alumni Association signed an operating agreement. This agreement provides for mutually beneficial activities related to Montana Tech alumni and Montana Tech as outlined in the agreement (see [Operating Agreement – Alumni Association](#)). One important benefit listed under Montana Tech's responsibilities to the Alumni Association is that Montana Tech agrees to employ a Director of Alumni Affairs who shall function as the Association's Executive Director. The responsibilities of the Executive Director are to organize meetings, take notes, and perform tasks requested by the Alumni Association Board. This individual is not a voting member of the Board.

In February 2015, Montana Tech and the Digger Athletic Association (DAA) signed an operating agreement. The purpose of DAA is to perform the duties and responsibilities of a booster club. DAA provides Montana Tech athletics with financial support through various means such as scholarships and operation funds ([Operating Agreement – Digger Athletic Association](#)). The DAA works closely with the Chancellor and campus athletic committee on issues which may arise. In addition, the DAA commits to covering mutually agreed upon items such as athletics trainers through cost reimbursement.



# STANDARD 1

## Mission and Core Themes



## Mission, Core Themes, and Expectations

### Executive Summary of Eligibility Requirements 2 and 3

#### Authority

Montana Tech of the University of Montana (UM) is part of the Montana University System (MUS) which is governed by the Montana BOR of Higher Education with its constitutional authority to operate public higher education in Montana. Montana Tech has a Chancellor who serves as the full-time executive officer. The Chancellor reports to the President of UM-Missoula, and through the President to the Commissioner of Higher Education and the BOR. Montana Tech is fully authorized to award certificates, certificates of applied science, associate degrees, bachelor's degrees, graduate certificates, master's degrees, and doctoral degrees.

#### Mission and Core Themes

The mission and core themes of Montana Tech are clearly defined, published in the [Montana Tech Catalog](#), and have been reviewed and approved by the Montana BOR on November 21, 2014. The educational interests of our students are the primary purposes of the institution. Substantially all of our resources are dedicated to these purposes.

#### Standard 1.A—Mission

##### Standard 1.A.1

**The institution has a widely published mission statement—approved by its governing board—that articulates a purpose appropriate for an institution of higher learning, gives direction for its efforts, and derives from, and is generally understood by, its community.**

*Montana Tech, through exemplary undergraduate and graduate education, workforce development, research, and service, builds on a strong heritage in engineering, science, and technology that blends theory with practice in meeting the changing needs of society and the responsible development and use of natural resources.*

Montana Tech's strategic goals, as given in the most recent strategic plan completed in Fall 2016, represent the Core Themes of the institution:

1. Education and Knowledge
2. Student Achievement
3. Engaged Faculty
4. The Montana Tech Community

In 2013–2014, Montana Tech's 2004–2005 mission statement was revised. The revised mission statement was developed through a collaborative process involving administrators, both the faculty and staff senates, and the general Montana Tech community. The Montana Tech [mission statement](#) was approved by the Board of Regents on November 21, 2014.

Montana Tech's mission statement is aligned with the [mission](#) statement articulated by the Board of Regents for the Montana University System (MUS) and adopted on October 19, 2001, as follows:

*The mission of the Montana University System is to serve students through the delivery of high quality, accessible postsecondary educational opportunities, while actively participating in the preservation and advancement of Montana's economy and society.*

Through a shared process involving input from Montana Tech's Northwest Commission on Colleges and Universities (NWCCU) steering committee, faculty, and staff, Montana Tech has identified the following four core themes and the various internal objectives as fundamental aspects of the mission:

- 1. Education and Knowledge**—The following five objectives have been identified within this core theme:
  - a. Create and sustain strong graduate, baccalaureate, associate, and certificate programs.
  - b. Facilitate student learning through diverse delivery and educational experiences.
  - c. Prepare students for successful careers.
  - d. Provide students a gateway for transfer education.
  - e. Provide students with a general education.
- 2. Student Achievement**—The following three objectives have been identified within this core theme:
  - a. Students make acceptable progress towards their Montana Tech degree.
  - b. Students are prepared for employment, a four-year degree program, graduate school, or for professional school after graduating from Montana Tech.
  - c. Students have the opportunity to obtain academic distinction while attending Montana Tech.
- 3. Engaged Faculty**—The following three objectives have been identified within this core theme:
  - a. Faculty engage in the pursuit of successful teaching.
  - b. Faculty engage in research, scholarly activity, and/or professional development.
  - c. Faculty engage in service to their profession, the campus, and/or community.
- 4. The Montana Tech Community**—The following four objectives have been identified within this core theme:
  - a. Promote a diverse and inclusive environment.
  - b. Provide instructional, research, and living environments that enhance the educational experience.
  - c. Provide events and programs that serve the Montana Tech community.
  - d. Engage Montana Tech alumni and friends.



## Standard 1.A.2

**The institution defines mission fulfillment in the context of its purpose, characteristics, and expectations. Guided by that definition, it articulates institutional accomplishments or outcomes that represent an acceptable threshold or extent of mission fulfillment.**

Mission fulfillment is achieved when all core themes have been met. A core theme is met when at least half of the objectives within a core theme have been accomplished. Table 1.A.I summarizes the number of objectives per core theme necessary for Montana Tech to achieve mission fulfillment.

**Table 1.A.I Objectives Per Core Theme Necessary for Mission Fulfillment**

	Number of Objectives	Necessary Objectives per Core Theme
Core Theme 1 Education and Knowledge	5	3
Core Theme 2 Student Achievement	3	2
Core Theme 3 Engaged Faculty	3	2
Core Theme 4 The Montana Tech Community	4	2
<b>Total</b>	<b>15</b>	<b>9</b>

Similarly, an objective is accomplished when at least half of the indicators of achievement within the objective have been met or exceeded their respective benchmark. Table 1.A.II summarizes the number of indicators of achievement per objective necessary for Montana Tech to achieve an objective.

**Table 1.A.II Indicators of Achievement Objective Necessary for Objective to Be Met**

	Number of Indicators of Achievement	Indicators of Achievement Necessary to meet Objective
<b>Core Theme 1 Education and Knowledge</b>	<b>11</b>	
Objective 1—Create and sustain strong graduate, baccalaureate, associate, and certificate programs	4	2
Objective 2—Facilitate student learning through diverse delivery and educational experiences.	3	2
Objective 3—Prepare students for successful careers.	1	1
Objective 4—Provide students a gateway for transfer education.	2	1
Objective 5—Provide students with a general education.	1	1
<b>Core Theme 2 Student Achievement</b>	<b>4</b>	
Objective 1—Students make acceptable progress towards their Montana Tech degree.	2	1
Objective 2—Students are prepared for employment, a four-year degree program, graduate school, or professional school after graduating from Montana Tech.	1	1
Objective 3—Students have the opportunity to obtain academic distinction while attending Montana Tech.	1	1
<b>Core Theme 3 Engaged Faculty</b>	<b>3</b>	
Objective 1—Faculty engage in the pursuit of successful teaching.	1	1
Objective 2—Faculty engage in research, scholarly activity, and/or professional development.	1	1
Objective 3—Faculty engage in service to their profession, the campus, and/or community.	1	1
<b>Core Theme 4 The Montana Tech Community</b>	<b>8</b>	
Objective 1—Promote a diverse and inclusive environment.	1	1
Objective 2—Provide instructional, research, and living environments that enhance the educational experience.	3	2
Objective 3—Provide events and programs that serve the Montana Tech community.	2	1
Objective 4—Engage Montana Tech alumni and friends.	2	1

The threshold of at least half being fulfilled was selected for both objectives and indicators of achievement under each Core Theme because relatively high benchmarks were set for obtaining the indicators of achievement. The justification for setting high benchmarks for the indicators of

achievement is to achieve “exemplary undergraduate and graduate education, workforce development, research, and service” as detailed in our mission.

The goal at Montana Tech is to attain every indicator of achievement and every objective per year, and those not met will be addressed the following year. In addition, the variability in the level of difficulty in achieving each indicator of achievement will influence how many indicators of achievement are met each year. These two factors, high benchmarks for obtaining indicators of achievement and the variability in the difficulty of meeting benchmarks, are the justification for the threshold of at least half being fulfilled for both objectives and indicators of achievement under each Core Theme.

## Standard 1.B—Core Themes

### Standard 1.B.1

**The institution identifies core themes that individually manifest essential elements of its mission and collectively encompass its mission.**

The four core themes identified by Montana Tech, along with the objectives embedded within them, collectively define and encompass the mission of Montana Tech. All the core themes must be met in order for Montana Tech to successfully realize its mission. To enable Montana Tech to *build on a strong heritage in engineering, science, and technology that blends theory with practice in meeting the changing needs of society and the responsible development and use of natural resources through exemplary undergraduate and graduate education, workforce development, research, and service* the following core themes must be manifested:

1. Education and Knowledge
2. Student Achievement
3. Engaged Faculty
4. The Montana Tech Community

The remainder of this section analyzes each specific core theme by identifying respective objectives and indicators of achievement. The indicators of achievement are used to evaluate whether the objective has been realized and ultimately indicate whether the core themes and mission are being fulfilled.

### Standard 1.B.2

**The institution establishes objectives for each of its core themes and identifies meaningful, assessable, and verifiable indicators of achievement that form the basis for evaluating accomplishment of the objectives of its core themes.**

#### Core Theme 1: Education and Knowledge

A student at Montana Tech engages in more than just the study of a discipline. At Montana Tech, education grows into knowledge through the exploration of science, technology, ideas, and values that inform our lives and communities. Montana Tech provides students with opportunities to engage in both research and technology development, thereby enhancing the conditions required for knowledge to be integrated into meaningful applications.

**Objective 1 Create and sustain strong graduate, baccalaureate, associate, and certificate programs.**

#### Indicators of Achievement

- (a) Within annual program reviews, identification of both program strengths and weaknesses. These strengths and weaknesses should be identified on the basis of evidence supplied by (where appropriate): curriculum reviews, an assessment of faculty strengths and weaknesses, an assessment of student learning, and the number of graduates.

Benchmark: 70% of assessment reports of program reviews indicate whether or not this measure is appropriately addressed.

- (b) Graduate, baccalaureate, associate, and certificate programs tracked by enrollment and number of graduates.  
Benchmark:  $\geq$  3-year average
- (c) Within each program review, a summary of the results of program-specific measures of student learning.  
Benchmark: 70% of assessment reports of program reviews indicate whether or not this measure is appropriately addressed.
- (d) Within each program review, programs will identify ways to maintain current strengths and to address weaknesses.  
Benchmark: 70% of assessment reports of program reviews indicate whether or not this measure is appropriately addressed.

**Rationale**

All four indicators provide evidence of Montana Tech’s effectiveness in sustaining successful programs. Indicator (a) requires programs to identify strengths and weaknesses, while indicator (d) requires programs to identify strategies to maintain current strengths and make improvements within weak areas. Indicator (b) asks for specific information on the enrollment and graduates at the institution, while indicator (c) requires programs to evaluate student learning within their program.

The program reviews are conducted by departments, and the assessment reports are completed by Montana Tech’s assessment committee.

**Objective 2 Facilitate student learning through diverse delivery and educational experiences**

**Indicators of Achievement**

- (a) For each annual program review, a summary of the educational opportunities (and participation rate) available to students in the program. Examples: Number of Undergraduate Research Program (URP) participants, capstone course description and enrollment, seminar activities, conference attendance, guest lecture opportunities, and field trips.  
Benchmark: 70% of assessment reports of program reviews indicate whether or not this measure is appropriately addressed.
- (b) Distance education offerings tracked by:
  - i. Number of degrees and certificate programs offered through distance education, per year.
  - ii. Number of degrees and certificates awarded through distance education, per year.
  - iii. Number of courses offered through distance education, per year.
  - iv. Student Credit Hours (SCH) in distance education courses, per year and per type.
 Benchmark:  $\geq$  3-year average
- (c) An annual program review of the following programs designed to help students be successful in college.
  - i. An annual assessment of the Tech Success course
  - ii. An annual assessment of the Freshman Engineering Program
  - iii. An annual assessment of North Campus Academic Center for Excellence (ACE)

- iv. South Campus ACE (ACES)
- v. Advising

Benchmark: 100% assessment reports of the program review indicate whether or not this measure is appropriately addressed.

#### **Rationale**

Indicator (a) determines how each department optimizes educational experiences within its program. Indicator (b) provides evidence of diverse delivery through distance education. Indicator (c) assesses programs designed specifically to facilitate student learning and success.

### **Objective 3 Prepare students for successful careers.**

#### **Indicator of Achievement**

- (a) For each annual program review, a summary of the ways in which the program prepares graduates for a successful career. Examples: Internships, professional exam preparation, specialized training or software (e.g., learning the statistical package R), Program and Department Industrial Advisory Board (IAB) feedback.

Benchmark: 70% of assessment reports concerning program reviews indicate whether or not this measure is appropriately addressed.

#### **Rationale**

Indicator (a) provides details on how student education is preparing students for a career.

### **Objective 4 Provide students a gateway for Transfer Education.**

#### **Indicators of Achievement**

- (a) The institution will track and monitor the number of students from each freshman cohort who transfer per semester to another institution for each receiving institution.

Benchmark: Yes or No

- (b) The institution will track and monitor the average number of credits from each freshman cohort transferred per semester to another institution for each receiving institution.

Benchmark: Yes or No.

#### **Rationale**

Indicators (a) and (b) provide specific, quantitative claim that Montana Tech courses are often used for transfer education. Note that it is the responsibility of each program to determine if the measurements represent a strength or weakness.

### **Objective 5 Provide students with a General Education.**

#### **Indicator of Achievement**

- (a) A detailed program review of the quality of the general education program, including benchmarks and appropriate responses to data.

Benchmark: Yes or No, based on assessment reports of the program review.

### **Rationale**

Indicator (a) is the assessment tool used by Montana Tech to determine the level at which A.S. and B.S. degree-seeking students are meeting the expected outcomes of the general education curriculum.

## **Core Theme 2: Student Achievement**

Montana Tech is committed to helping students realize their academic potential. Inclusive within this commitment is the continual evaluation of graduation and retention rates. This type of evaluation is critical when determining the strength of Montana Tech's academic programs. There are, of course, many factors that influence student retention, and thus student achievement, at Montana Tech.

### **Objective 1: Students make acceptable progress towards their Montana Tech degree**

#### **Indicators of Achievement**

- (a) The graduation rates for both the North and South campus. These rates are based on cohorts consisting of students who are first-time, degree/certificate seeking, full-time freshmen when they enrolled for the fall semester at Montana Tech.  
Benchmark:  $\geq$ 3-year average
- (b) 2<sup>nd</sup>, 3<sup>rd</sup>, and 4<sup>th</sup> fall retention rate for Montana Tech students. For example, the North Campus freshmen retention rate is calculated as the percentage of first-time, degree-seeking, full-time freshmen from the previous fall who are again enrolled, full-time, the current fall semester. The retention rate will also include students who graduated.  
Benchmark:  $\geq$ 3-year average

#### **Rationale**

Indicators (a) and (b) are all quantitative measures of progress towards a degree. For indicator (a) progress is measured by calculating the rate at which students obtain degrees. Indicator (b) measures progress by determining the persistence level demonstrated by students moving from semester to semester, or through successive school years.

### **Objective 2: Students are prepared for employment, a four-year degree program, graduate school, or professional school after graduating from Montana Tech**

#### **Indicator of Achievement**

- (a) For each annual program review, The Outcome Survey (TOS) career outcomes and knowledge rate per major are reviewed. The outcome rate includes both employment and continuing education.  
Benchmark: Yes or No, per assessment report.

#### **Rationale**

Indicator (a) measures student preparation by determining employment and continuing education, which may include graduate or professional school. (See Objective 3 under Core Theme 1: Education and Knowledge, for indicators of how programs prepare students for careers.)



**Objective 3: Students have the opportunity to obtain academic distinction while attending Montana Tech**

**Indicator of Achievement**

- (a) For each annual program assessment report, a summary of academic distinction opportunities available to students and what distinctions have been achieved over the last year. Examples: Scholarships, distinctions based on Grade Point Average (GPA) (e.g., Deans' List), and team competitions (e.g., Computer Science students placing well in a national programming competition).  
Benchmark: 70% of assessment reports of program reviews indicate whether or not this measure is appropriately addressed.

**Rationale**

The indicator provides direct, both formative and summative, assessment of opportunities for academic distinction. As with other program review indicators, the specific department determines whether the academic opportunities and participation rates represent a strength or weakness.

**Core Theme 3: Engaged Faculty**

Faculty who excel in teaching, research, and scholarship are essential to supplying knowledge and education through a strong curriculum augmented by research and service. Montana Tech promotes and retains faculty, who are not only excellent classroom instructors but who are also active in scholarship and service.

**Objective 1: Faculty engage in the pursuit of successful teaching**

**Indicator of Achievement**

- (a) Summarized institutional, college, and department percentages of reviewed faculty meeting the departmental standards in successful teaching.  
Benchmark: 90% of tenure-track faculty reviewed in an academic year meet departmental standards in teaching.

**Objective 2: Faculty engage in research, scholarly activity, and/or in professional development.**

**Indicator of Achievement**

- (a) Summarized institutional, college, and department percentages of reviewed faculty meeting the departmental standards in research, scholarly activity, and/or in professional development.  
Benchmark: 90% of tenure-track faculty reviewed in an academic meet departmental standards in research, scholarly activity, and/or in professional development.

**Objective 3: Faculty engage in service to their profession, the campus, and/or to the community.**

**Indicator of Achievement**

- (a) Summarized institutional, college, and department percentages of reviewed faculty meeting the departmental standards in service to their profession, the campus, and/or the community.  
Benchmark: 90% of tenure-track faculty reviewed in an academic year meet departmental standards in service to their profession, the campus, and/or the community

## **Rationale**

For all three objectives, the respective indicator consists of summary statistics. A measure of quality for the indicators is based on each department's definition of quality, as found in respective department standards for promotion and tenure. The departmental faculty members will also submit abbreviated resumes with all three indicators of achievement addressed.

## **Core Theme 4: The Montana Tech Community**

The Montana Tech community is broadly defined as Montana Tech students, faculty, staff, alumni, and friends of Montana Tech. To meet the changing needs of society, Montana Tech must maintain a diverse and inclusive campus with the appropriate infrastructure; in addition, it must provide safe, healthy, living environments. Montana Tech is fortunate to receive strong and enduring support from its alumni, local city government, local businesses, and from national and international industries. Alumni and friends give Montana Tech a voice throughout the world, and Tech actively fosters these mutually beneficial relationships.

### **Objective 1: Promote a diverse and inclusive campus environment.**

#### **Indicator of Achievement**

- (a) An annual review of campus diversity

Benchmark: Yes or No, from the assessment reports of the program review indicate whether or not this measure is appropriately addressed.

#### **Rationale**

Indicator (a) provides several descriptive measures of the various forms of diversity occurring on the Montana Tech campus.

### **Objective 2: Provide instructional, research and living environments that enhance the educational experience.**

#### **Indicators of Achievement**

- (a) The distribution of the following instructional/research resources:

- vi. Academic buildings
- vii. Classrooms
- viii. Computer labs
- ix. Multi-media classrooms
- x. Research laboratories

Benchmark: Yes or No

- (b) An annual review of residence halls and dining services.

Benchmark: 100% assessment reports of the program review indicate whether or not this measure is appropriately addressed.

(c) An annual review of campus safety.

Benchmark: Yes or No, from the assessment reports of the program review indicate whether or not this measure is appropriately addressed.

**Rationale**

Indicator (a) measures the instructional/research infrastructure necessary for a positive educational experience. Indicators (b) and (c) are measures of the quality of student living environments that are essential for a student's well-being.

**Objective 3: Provide events and programs that serve the Montana Tech community.**

**Indicators of Achievement**

(a) The distribution, per year, of events open to the public that include:

- xi. concerts
- xii. plays
- xiii. lectures
- xiv. specialty events (e.g., the annual holiday bazaar)

Benchmark: Yes or No

(b) A review of the impact that athletic programs have on the Montana Tech community.

Benchmark: Yes or No, from the assessment reports of the program review indicate measure is appropriately addressed.

**Rationale**

Indicator (a) is a straightforward, descriptive measure of events open to the general public. Indicator (b), an assessment of Montana Tech's athletic programs, is an assessment of events that serve the Montana Tech community. Thus, Montana Tech's Athletic Director leads the committee that determines the measures and benchmarks used in assessing athletic programs.

**Objective 4: Engage Montana Tech alumni and friends.**

**Indicators of Achievement**

(a) Based on an annual review of the effectiveness of Alumni Engagement.

Benchmark: Yes or No, from the assessment reports of the program review indicate measure is appropriately addressed.

(b) Based on an annual review of the effectiveness of the Montana Tech Foundation.

Benchmark: Yes or No, from the assessment reports of the program review indicate measure is appropriately addressed.

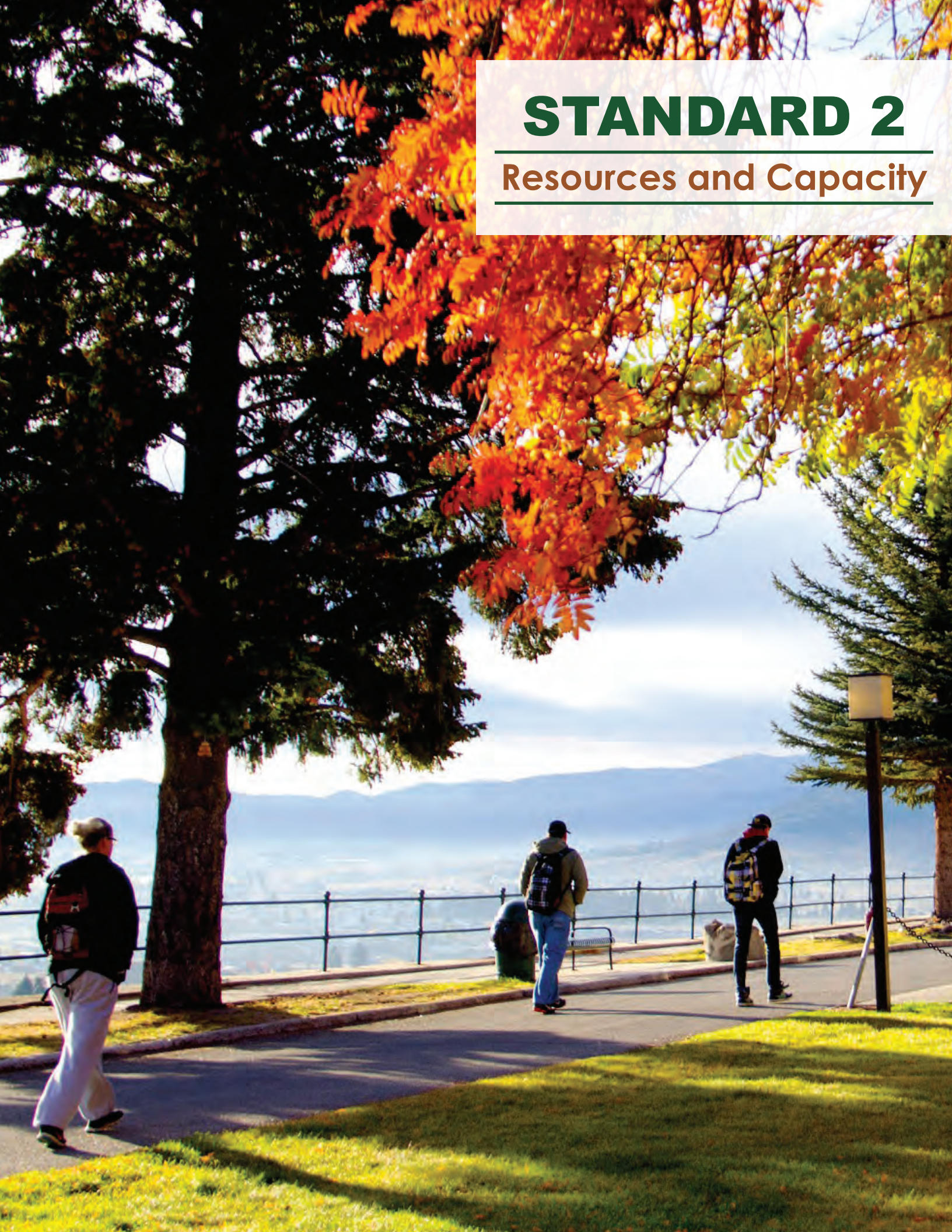
**Rationale**

Indicators (a) and (b) are assessments of two groups charged with keeping Montana Tech alumni and friends engaged. The Vice Chancellor for Development and University Relations, who also serves as President of the Montana Tech Foundation, is the lead in the assessment of these reviews.



# STANDARD 2

## Resources and Capacity





## Resources and Capacity

### Executive Summary of Eligibility Requirements 4 through 21

#### Operational Focus and Independence

Montana Tech is one of four separately accredited institutions affiliated with UM. As found in the [BOR Policy 205.2.1](#):

*A chancellor is the chief executive officer responsible for the management of a four-year campus affiliated with a university. The chancellor shall provide leadership and coordination for all campus activities, including academic, fiscal, and student affairs.*

Montana Tech has sufficient operational independence and is responsible for meeting its own Northwest accreditation standards and eligibility requirements.

#### Non-discrimination

Montana Tech does not discriminate against any students based on race, color, religion, creed, sex, national origin, age, mental or physical disability, marital status, sexual preference, or political belief. An Equal Educational Opportunity Policy is published in the [Montana Tech Catalog](#) and states:

*It is the policy of Montana Tech to provide equal educational and employment opportunity (EEO) to all persons regardless of race, color, religion, creed, sex, national origin, age, mental or physical disability, marital status, sexual preference, or political belief with the exception of special programs established by law.*

#### Institutional Integrity

The importance that both the MUS and Montana Tech place on institutional integrity is reflected in the numerous policies and procedures that address the ethical and professional conduct of administrators, faculty, staff, and students. In addition to these policies and procedures, many members of the faculty and staff, as licensed or registered professionals in their specific disciplines, voluntarily subscribe to codes of professional conduct that are explicit and, in many cases, legally binding. Moreover, various segments of the institution also subscribe to codes of conduct appropriate to their functions. For example, Student Services adheres to the American College Personnel Association National Association for Student Personnel Administrators (ACPA-NASPA) Standard of Ethics, and the Business Office adheres to the National Association of College and University Business Offices (NACUBO) Code of Ethics.

#### Governing Board

As described on the [BOR website](#)

*The governance and administration of the Montana University System is vested with the Board of Regents, which has full power, responsibility, and authority to supervise, coordinate, manage and control the Montana University System, and supervise and coordinate other public educational institutions assigned by law.*

*The Board consists of seven members appointed by the Governor, and confirmed by the Senate, to seven year overlapping terms. One of the members of the board shall be a student appointed*

*by the Governor who is registered full-time at a unit of higher education under jurisdiction of the board. The length of the term of the student member is one year with possibility of reappointment to successive terms.*

No member of the BOR has a contractual or employment relationship or personal financial interest with Montana Tech. The BOR meets six times per year in public sessions.

### **Chief Executive Officer**

Montana Tech's chief executive officer is the Chancellor, who is appointed by the BOR, is accountable for the operation of the institution, and reports to the President of UM. [BOR Policy 205.2.1](#) delegates to the Chancellor responsibility for the management, "leadership and coordination of all campus activities, including academic, fiscal, and student affairs" and to administer the applicable board-approved policies. No Montana Tech employee chairs the BOR. Please see the resume for the [Chancellor](#).

### **Administration**

Montana Tech's leadership team consists of five qualified administrators: the Chancellor and four Vice Chancellors. The Vice Chancellor for Academic Affairs also carries the title, "Provost." Each Vice Chancellor reports to the Chancellor and has a position description specifying the position's delegated responsibility and accountability. The Vice Chancellors are responsible respectively for academic and student affairs, finance and administration, research and graduate programs, and institutional development. Each Vice Chancellor is charged with planning, organizing, managing, and assessing the institution's achievements and effectiveness-both within and across designated areas of responsibility. Additionally, Montana Tech has four academic Deans and the Dean of Students. Moreover, each Vice Chancellor and Dean is a member of the NWCCU Steering Committee for accreditation and works towards the fulfillment of the mission and core themes.

### **Faculty**

In Fall 2015, Montana Tech employed 192 full-time faculty and 84 part-time faculty. Of the tenurable full-time faculty, 47% are tenured. Of the full-time faculty, 68% hold a doctoral degree, usually a PhD, and 25% hold a master's degree. The student-to-faculty ratio at Montana Tech is 15:1. All tenure/tenure-track faculty holding rank below full professor are reviewed annually by their respective department head and dean. Using a similar process, full professors are reviewed every third year by their department head and dean. Thus, Montana Tech employs appropriately qualified faculty in sufficient number to achieve its educational objectives.

### **Educational Program**

The goals of all educational programs at Montana Tech are developed by the faculty within the program, and most often in conjunction with an external review board and accrediting bodies. Goals are then reviewed by the respective college Dean, by the Curriculum Review Committee (CRC), Faculty Senate, and by the Provost. This review process serves as a further check that the program objectives fit with the mission of Montana Tech. The mission and objectives of every program are published in the Montana Tech Catalog. Student Learning Outcomes (SLO) are assessed annually through program reviews, and program reviews are assessed by two members of the assessment committee.

## General Education and Related Instruction

General education requirements for degree programs at Montana Tech are coherent, transparent, and clearly laid out in the catalog. A total of 30-31 credits in the general education core is the overall requirement needed to satisfy the general education component of all AS and BS degree-granting programs at Montana Tech. In addition, all baccalaureate degree-seeking students must complete a designated writing course at the 300-400 course level. For programs of study for which Certificates or Associate of Applied Science (AAS) degrees are granted, the general education requirements include a course in communication, computation, and human relations (please see 2.C.9 for additional details). In addition, every bachelor and graduate degree requires a planned program of study in that specialization, all of which are published in the Montana Tech's Catalog.

The MUS General Education Core, is described in [BOR Policy 301.10](#) and the Operational Rules for the MUS Core. The [Common Core Numbering \(CCN\) Course Guide](#) provides information across the MUS about the availability of general education offerings and requirements.

## Library and Information Resources

The Montana Tech Library's mission is consistent with [Montana Tech's mission](#), core themes, programs, and services.

*The Montana Tech Library is an integral part of Montana Tech because its highly trained staff advances knowledge creation within the Montana Tech community through services supporting the curation, promotion, and preservation of diverse resources and services essential for the scholarship and creativity of students, staff, and faculty.*

Montana Tech's library provides access to extensive scholarly collections for students in the four-year and graduate programs on the North Campus and for students in the two-year, certificate, and workforce-development programs at Highlands College. In addition, a small collection is located at the Academic Center for Excellence-South (ACES) at Highlands College to support its associate degree and certificate programs (please see 2.E.1 for additional details).

## Physical and Technological Infrastructure

The physical facilities at Montana Tech have always been planned, designed, and constructed with its core themes and mission in mind. Each facility was originally conceived with a specific purpose depending on the existing institution mission, goals, and program needs. As the mission has expanded and goals changed, facilities planning for updates, renovations, and new construction have kept pace. Strategic plans have been a consistent model at Montana Tech and generally followed as facility needs were confirmed. Examples of this model include Vision 2025 (version 1), [Vision 2025](#), [Strategic Plan, A Commitment to Excellence](#), and the [Master Plan](#).

## Academic Freedom

The institutional setting for academic freedom at Montana Tech is described in the introduction to Section 203, Faculty Code of Conduct in the [Montana Tech Faculty/Staff Handbook](#),

*The Institution is devoted to the pursuit of learning in the broadest sense. Its public responsibilities include the transmission of learning, the creation of knowledge, and the performance of services in related endeavors. Traditionally, colleges have served not only as*



*transmitters of learning and repositories of knowledge, but also as institutions for the development of that innovation and criticism without which civilization cannot progress. In the fulfillment of these traditional obligations, the Institution and its members are occasionally put in a position of apparent conflict among themselves and society. It is sometimes inevitable that new knowledge should find itself at odds with the old. Experimentation with new ideas and criticism of society is the inevitable and desirable result of a properly functioning institution.*

*These conflicts between the Institution and the community, and within the Institution itself, must not be allowed to interfere with the effective operation of the Institution. It is essential that the membership of the Institution be guaranteed freedom of expression, inquiry, association, criticism, and dissent without fear of reprisal, bodily harm, or physical disorder. The responsibility of maintaining academic freedom is shared by the Institution and through the persons of its students, its faculty, its administrators and its regents and by society.*

The Montana Tech Faculty [CBA Article 9](#) and Two-year College Faculty Association [CBA Section 4.15](#) provide information about academic freedom for faculty within each of the associations.

## **Admissions**

Montana Tech publishes the [admission policy](#) in the Montana Tech Catalog for [undergraduate programs](#), [graduate programs](#), and [nursing program](#) specific admission policies. Montana Tech adheres to BOR [Policy 301](#) Admission Requirements, [Policy 301.1](#) Admission Requirements for Undergraduates into Four-year University programs, and [Policy 301.3](#) Admission Requirements Graduate Students.

## **Public Information**

Montana Tech publishes accurate information regarding its mission and core themes; admission requirements and procedures; grading policy; information on academic programs and courses; tuition, fees, and other program costs; refund policies and procedures; opportunities and requirements for financial aid; and the academic calendar in its catalog. Names, titles, and academic credentials of administrators and faculty are published in the [Montana Tech Catalog](#) and on the [directory area of the website](#). Rules and regulations for student conduct can be found in the [College Community Expectations Program Manual](#) and referenced in the [Student Handbook](#).

## **Financial Resources**

The fiscal year 2016 Montana Tech annual operating budget for all fund types is \$83,937,876. This operating budget is comprised of \$34,781,170 in general funds, \$18,484,000 in restricted funds, \$7,556,181 in designated funds, \$5,774,464 in auxiliary funds, \$21,000 in loan and endowment funds, and \$17,321,061 in plant funds. ([All Funds Summary](#))

Historically, Montana Tech's financial practice is to incorporate an enrollment reserve (contingency) into the current unrestricted operating budget of 2%-5.5% of estimated revenues. If enrollment targets are met or all contingency funds are not committed, the Vice Chancellor for Administration and Finance invites the campus stakeholders to submit One-Time-Only proposals. Approved requests are funded by using the remaining contingency based upon a prioritization process which incorporates input from the Executive Council, the deans, and department heads. This enrollment reserve budget ensures that even if enrollment targets are not met, basic campus programs will be insulated from funding cuts in the current fiscal year.

In addition to the contingency, Montana Tech maintains a Reserve Revolving account pursuant to [BOR Policy 901.15](#). This policy allows each unit of the MUS to establish a designated reserve revolving account to specifically manage and mitigate the impacts of unanticipated revenue shortfalls and/or unanticipated and unavoidable increases in expenditures. (See 2.F.1 for more details.)

## **Financial Accountability**

[Annual Consolidated Financial Audits](#) and [Biennial Consolidated Financial-Related Audits](#) for the four affiliated campuses of UM are done by the Legislative Audit Division. Funding for this legislative audit is a line item in the general fund legislative appropriation at the system level. The UM affiliation receives an allocation as part of the biennium budget, and Montana Tech pays its prorated share of the audit costs. (See 2.F.7 for more details.)

The Legislative Audit Division prepares an [Audit Recommendation](#), and each campus prepares an [Action Plan](#) in response to any audit findings. This report specifies an action for each recommendation, and the action plan on all past recommendations pertaining to Montana Tech have been implemented and completed.

## **Disclosure**

Montana Tech accurately discloses to the Commission all required information through the Provost's office.

## **Relationship with the Accreditation Commission**

Montana Tech accepts the policies and standards of the Commission and agrees to comply with these standards and policies as currently stated or as modified in accordance with Commission policy. Montana Tech understands and agrees that the Commission may, at its discretion, make known to any agency or members of the public that may request such information, the nature of any action, positive or negative, regarding the institution's status with the Commission.

## **Standard 2.A–Governance**

### **Standard 2.A.1**

**The institution demonstrates an effective and widely understood system of governance with clearly defined authority, roles, and responsibilities. Its decision-making structures and processes make provision for the consideration of the views of faculty, staff, administrators, and students on matters in which they have a direct and reasonable interest.**

As a unit of the Montana University System (MUS), Montana Tech benefits from an effective, stable, and widely understood system of governance that has been in place since 1994, with clearly defined authority, roles, and responsibilities. MUS Board of Regents (BOR) has governance authority established by the Montana Constitution, with details covered in Montana law and in bylaws and [policies](#) updated by the BOR and legislature. The BOR's decision-making structures and processes have numerous mechanisms for consideration of the views of faculty, staff, administrators, and students. Among these mechanisms are formal scheduled meetings with each of these stakeholder populations on a rotating basis at each BOR meeting. Meetings take place on different campuses in the system, so that each campus hosts a meeting every two years. No significant changes in this system have occurred in recent

years. The BOR met at Montana Tech in September 2010, 2012, 2013, and 2015—providing ample opportunity for Montana Tech’s stakeholders to state their views.

At the institution level, Montana Tech is led by the Chancellor, the Provost, and three Vice-Chancellors. The roles, responsibilities, and authorities of these leaders, others who report to them, and the numerous committees participating in the decision-making structures, are included in the [Montana Tech Faculty/Staff Handbook](#). The *Montana Tech Faculty/Staff Handbook* is also provided in hard copy for each new employee, who must read and acknowledge receipt of it within the first 30 days of employment. Through the committees, formal and informal meetings and forums, email, and other methods, the views of faculty, staff, administrators, and students are both invited and considered. Alumni and employer stakeholders are also consulted frequently. These individuals serve on the IABs associated with many academic programs to allow for the consideration of their important views on the content and operation of each program and its effectiveness in preparing students for future success.

An example of widespread campus engagement is the strategic planning process. Recognizing that the mission and priorities of Montana Tech are of significant interest to faculty, staff, students, and to the larger off-campus community, Montana Tech initiated in 2011 an inclusive and participatory strategic planning process, which produced a new Strategic Plan, *A Philosophy of Excellence*, in spring 2013.

Representatives of all stakeholder groups participated; there were several open meetings to gather input and formulate priorities; updates on the process and contents were routinely shared on the campus website, directly from a “strategic plan” link on the bottom of the home page; and input was sought and obtained for the final priority setting through formal meetings, online polling, and informal means.

In 2015 the campus began the process of updating the strategic plan based on feedback from campus entities. The current version, [A Commitment to Excellence](#), of the strategic plan is being used to guide priorities, budgeting, and investments.

## **Standard 2.A.2**

**In a multi-unit governance system, the division of authority and responsibility between the system and the institution is clearly delineated. System policies, regulations, and procedures concerning the institution are clearly defined and equitably administered.**

The division of authority and responsibility continues to be clearly delineated and documented on the MUS [BOR](#) website. At the institutional level, Montana Tech’s policies are clearly defined, equitably administered, and documented on both the campus website and in the [Montana Tech Faculty/Staff Handbook](#), distributed to every new employee and also available through the campus website. In addition, the [Collective Bargaining Agreements](#) for the various unionized employees (faculty, classified staff, and crafts) include the human resources policies and procedures applicable to the covered workforce. The *Montana Tech Faculty/Staff Handbook* was updated in 2017 to reflect any changes in the collective bargaining agreements and campus policy. Whenever changes occur they are communicated via emails, meetings, and through “State of Tech” open meetings on campus led by the Chancellor. Overall, procedures are in place to administer policies and regulations equitably and effectively.

## **Standard 2.A.3**

**The institution monitors its compliance with the Commission’s Standards for Accreditation, including the impact of collective bargaining agreements, legislative actions, and external mandates.**

Montana Tech constantly monitors compliance with the Northwest Commission on Colleges and Universities' (NWCCU) Standards for Accreditation. The Provost takes the lead for this monitoring, with major participation by the Vice Chancellor for Administration and Finance. Three major strategies are employed: reviewing the NWCCU's publications and website, sending representatives to the NWCCU's workshops, and providing faculty and administrators as volunteer reviewers for the NWCCU's accreditation of other institutions. Whenever external mandates, legislative actions, collective bargaining agreements, and campus- or board-initiated policy changes are contemplated or instituted, this compliance is confirmed. Finally, whenever a self-study or progress report—such as this one—is developed, the process includes a thorough, top-to-bottom verification of compliance.

## **Governing Board**

### **Standard 2.A.4**

**The institution has a functioning governing board consisting of at least five voting members, a majority of whom have no contractual, employment, or financial interest in the institution. If the institution is governed by a hierarchical structure of multiple boards, the roles, responsibilities, and authority of each board—as they relate to the institution—are clearly defined, widely communicated, and broadly understood.**

Montana Tech's governing board is the MUS BOR, which consists of seven members, who are appointed by the Governor and confirmed by the Montana Legislature. Each member serves a 7-year term, except for the one student member, who must be enrolled full-time at one of the institutions and who serves a 1-year, renewable term. The roles and responsibilities of the BOR are defined explicitly by the laws of the State of Montana and by policies of the BOR. This information is publicly available on the MUS [BOR](#) website. Rarely does any member of the BOR have any contractual, employment, or financial interests in Montana Tech.

### **Standard 2.A.5**

**The board acts only as a committee of the whole; no member or subcommittee of the board acts on behalf of the board except by formal delegation of authority by the governing board as a whole.**

All BOR actions are taken at scheduled meetings, with public notice and public web posting of the agenda and all materials in advance. Each BOR meeting is broadcast in video over the internet. BOR Committee meetings are held sequentially during the BOR meeting. Decisions are made by the full board, as a committee of the whole, typically on the second day of each BOR meeting.

### **Standard 2.A.6**

**The board establishes, reviews regularly, revises as necessary, and exercises broad oversight of institutional policies, including those regarding its own organization and operation.**

The BOR establishes reviews, revises as necessary, and exercises broad oversight of institutional policies, including those regarding its own organization and operation. For example, in its May 2015 regular meeting, there was the BOR [Review of Policy 940.12.1](#). This provision was brought forward by the MUS student governments. The item proposed allowing increases in new "student driven fees" to be considered by the BOR annually. Former policy language indicated that approval of tuition and fees would only take place once every two years, normally during the May meeting of odd numbered years.

To view the minutes of any BOR meeting, see the BOR's [Agendas and Meetings](#) webpage. The BOR is ultimately responsible for the integrity of Montana Tech and for the quality of its programs.

All BOR actions are taken at scheduled meetings, with public notice and public web posting of the agenda and all materials in advance. Each BOR meeting is broadcast in video over the internet. BOR Committee meetings are held sequentially during the BOR meeting. Decisions are made by the full board, as a committee of the whole, typically on the second day of each BOR meeting.

### **Standard 2.A.7**

**The board selects and evaluates regularly a chief executive officer (CEO) who is accountable for the operation of the institution. It delegates authority and responsibility to the CEO to implement and administer board-approved policies related to the operation of the institution.**

Montana Tech's CEO is the Chancellor, who is appointed by the BOR. This individual is accountable for the operation of the institution, and reports to the President of The University of Montana in Missoula (UM-Missoula). BOR [Policy 205.2.1](#) delegates to the Chancellor responsibility for the management, "leadership and coordination of all campus activities, including academic, fiscal, and student affairs". In addition, it is the Chancellor's responsibility to administer the applicable BOR-approved policies. BOR [Policy 705.2](#) addresses the performance evaluation of Presidents, who are responsible for reviewing the performance of the Chancellor. In executive session, the President reviews with the BOR the performance of his upper level administrators, including Chancellors.

This organizational reporting structure changed in December, 2016. The Chancellor currently reports to the Commissioner of Higher Education who has delegated to the Chancellor responsibility for the management, "leadership and coordination of all campus activities, including academic, fiscal and student affairs".

### **Standard 2.A.8**

**The board regularly evaluates its performance to ensure its duties and responsibilities are fulfilled in an effective and efficient manner.**

[Board Policy 705.1](#) requires the BOR to conduct a self-study of its stewardship every three to four years. This process is covered by a separate procedural statement, subject to review by the BOR. Every member of the BOR provides a written assessment of the BOR's performance, as part of this process. In addition, at least once in every five years of a Regent's incumbency, the BOR and Regent together participate in a comprehensive joint review by external consultants.

## Leadership and Management

### Standard 2.A.9

**The institution has an effective system of leadership, staffed by qualified administrators, with appropriate levels of responsibility and accountability, who are charged with planning, organizing, and managing the institution and assessing its achievements and effectiveness.**

Montana Tech's leadership team consists of five qualified administrators: the Chancellor and four Vice Chancellors. The Vice Chancellor for Academic Affairs also carries the title of Provost. Each Vice Chancellor reports to the Chancellor and has a position description summarized in Section 107 of the [Montana Tech Faculty/Staff Handbook](#), and the summary covers the position's delegated responsibility and accountability. The Vice Chancellors are responsible respectively for academic and student affairs, finance and administration, research and graduate programs, and institutional development. Each Vice Chancellor is charged with planning, organizing, managing, and assessing the institution's achievements and effectiveness—both within and across designated areas of responsibility. Moreover, each of the four Vice Chancellors is a member of the Northwest Steering Committee for accreditation.

Please see the resumes for the [Chancellor](#), [Provost](#), [Vice Chancellor for Administration and Finance](#), [Vice Chancellor for Research and Dean of Graduate Studies](#), and [Vice Chancellor for Development and University Relations](#).

### Standard 2.A.10

**The institution employs an appropriately qualified chief executive officer with full-time responsibility to the institution. The chief executive officer may serve as an ex officio member of the governing board, but may not serve as its chair.**

The Chancellor of Montana Tech, Dr. Donald M. Blacketter, is appropriately qualified and has full-time responsibility to the institution as CEO. The Chancellor is not a member of the BOR.

### Standard 2.A.11

**The institution employs a sufficient number of qualified administrators who provide effective leadership and management for the institution's major support and operational functions and work collaboratively across institutional functions and units to foster fulfillment of the institution's mission and accomplishment of its core theme objectives.**

Montana Tech employs a lean but efficient number of qualified administrators who work collaboratively and provide effective leadership and management. Montana Tech's [organization chart](#) highlights the positions and reporting relationships of all qualified administrators. These administrators not only provide lean and effective leadership and management for the support and operational functions, but they also work collaboratively to foster fulfillment of the institution's mission and accomplishment of its objectives. The major internal governance boards and committees, and their functions and responsibilities, are described and listed in the [Montana Tech Faculty/Staff Handbook](#) and on the [committee roster](#), respectively. These committees foster communication and information flow, engage with stakeholders, and support and help inform decision-making by the responsible administrator.

For example, the Executive Council consists of the Chancellor and Vice-Chancellors and is organized to focus the leadership team, and through them the major support and operational functions, on fulfilling the mission of Montana Tech and serving its constituencies. One major role of the Executive Council is to

advise the Chancellor on budget allocations. The Executive Council annually invites and reviews budget proposals from every unit of the campus. Academic departments, athletic teams, administrative offices, support functions, etc., are each invited to provide input and to present their budgets and priorities, aligned with those of the institution. The [Budget Process](#) is available online.

This process focuses attention on institutional priorities, raises issues and concerns the leadership needs to address, and prioritizes funding needs across the institution. As a result, collaborations are fostered across institutional functions so that solutions will typically emerge whereby units are actually helping each other achieve success. This process and the collaborations maximize the value of each dollar. The end results are cooperation, transparency, and reinforced focus on Montana Tech's overall mission.

## **Policies and Procedures**

### **Academics**

#### **Standard 2.A.12**

**Academic policies—including those related to teaching, service, scholarship, research, and artistic creation—are clearly communicated to students and faculty and to administrators and staff with responsibilities related to these areas.**

Academic policies are published in the [Montana Tech Catalog](#) and/or the [Montana Tech Faculty/Staff Handbook](#), both of which are available to all faculty, staff, administrators, and students. Some of the most important policies are also included in the [Student Handbook](#). New faculty and staff participate in new employee orientation and are required to read the *Faculty/Staff Handbook* within 30 days of starting their employment at Montana Tech. This Faculty/Staff Handbook is regularly updated to reflect the requirements of the applicable collective bargaining agreements. In addition, the applicable academic policies are communicated by means of the supervisory chain to each member of the faculty and staff, and to students through the dean, departments, faculty, advisors, and the Enrollment Services staff. Program-specific academic policies are published and disseminated within many programs. For example, the Nursing Department publishes [handbooks](#) for its current programs with policy specific text for each program. In addition, students, faculty, and staff are aware that if they have questions about academic policies, they can obtain answers or referrals from the provost, deans, department chairs, and from the associated support staff.

#### **Standard 2.A.13**

**Policies regarding access to and use of library and information resources—regardless of format, location, and delivery method—are documented, published, and enforced.**

The Montana Tech [Library](#) website provides users with access to information resources. The Montana Tech Library and its information resources are available to faculty, staff, and to students through the online portal. In addition, whenever information resources requested by a specific faculty member are not available in the Montana Tech Library, arrangements are made for them to be provided through interlibrary loan.

The principal documents describing Montana Tech's Library access and use policies include: *Public Services Policies and Procedures Manual*, *Technical Services Policies and Procedures Manual*, and *Collection Development Policy*. These documents are available on the Montana Tech Library website, and they describe how the Library ensures access and manages use of both print and electronic library



and information resources. In addition, policies are published on the Library website for [Interlibrary Loan](#) and [Library Hours and Staff Directory](#). In addition to these formal, written policies, the Library also prints bookmarks distributed with each checked out item; the bookmarks include Library hours, due dates, and policies for renewals and fines. Late fees are calculated by the Library's computer system, Voyager.

For computer and network use, Montana Tech is covered with a tiered network/computer use policy structure. At the highest level are the [Board of Regents Information Technology \(IT\)](#) policies covering UM-Missoula and Montana State University (MSU), and their affiliates. At the next level, each campus can define specifics relevant to unique operational IT practices. Many specifics are parallel and because of this, Montana Tech references UM IT Policies as well. The compliance structure starts at the top BOR level and follows a most restrictive application where rules may parallel. These policy sets are located at the publicly accessible website link, [Network/Computer Use Policies](#).

#### **Standard 2.A.14**

**The institution develops, publishes widely, and follows an effective and clearly stated transfer-of-credit policy that maintains the integrity of its programs while facilitating efficient mobility of students between institutions in completing their educational programs.**

Credit is awarded and transferred based on definitions and policies found in the [Montana Tech Catalog](#). With respect to transfer credit specifically, MUS [Policy 301.5](#) requires the transfer of college-level credit into all Montana campuses, including Montana Tech, from any regionally accredited institution, including community colleges. This policy is quoted in the [Montana Tech Catalog](#). This policy also addresses requirements for credit to be awarded for education from non-collegiate institutions and for evaluating prior learning of military and veteran students. The MUS has put into a place a [common course-numbering system](#) adopted by all the MUS campuses. This system facilitates matching courses across campuses and against degree requirements. It enables credit transfers between and among various MUS campuses.

### **Students**

#### **Standard 2.A.15**

**Policies and procedures regarding students' rights and responsibilities—including academic honesty, appeals, grievances, and accommodations for persons with disabilities—are clearly stated, readily available, and administered in a fair and consistent manner.**

Policies and procedures regarding students' rights and responsibilities are clearly stated and available in the [Student Handbook](#), which is updated, published, and distributed to students annually. The *Student Handbook* includes a section on students' academic rights and responsibilities ([p.5](#)), student conduct ([p. 6](#)), academic honesty ([p. 15](#)), grade appeals ([p. 20](#)), other policies and appeals (throughout), methods for resolving grievances ([p. 6](#)), and accommodations for persons with disabilities ([p. 12](#) and [16](#)). These policies are administered by the appropriate authorities. Two committees (the Student Disciplinary Appeals Committee and the Student Judicial Board) both provide routes for appeal and thereby a mechanism for ensuring fair and consistent administration. The Student Judicial Board is administered by the Associated Students of Montana Tech (ASMT). The Disciplinary Appeals Committee is co-chaired by the Provost and the Dean of Students, and its membership includes faculty, staff, students, and a representative of the Faculty Senate.



## Standard 2.A.16

**The institution adopts and adheres to admission and placement policies that guide the enrollment of students in courses and programs through an evaluation of prerequisite knowledge, skills, and abilities to assure a reasonable probability of student success at a level commensurate with the institution's expectations. Its policy regarding continuation in and termination from its educational programs—including its appeals process and readmission policy—are clearly defined; widely published, and administered in a fair and timely manner.**

BOR Policies [301](#) and [301.1](#) govern admissions standards. Montana Tech's admission and placement policies are described in the [Montana Tech Catalog](#) and updated annually. Admissions requirements for Freshmen are specified in the [Montana Tech Catalog](#). Briefly, to enter Highlands College, students must have graduated from high school (or have passed an equivalency exam). For placement, they take appropriate placement tests, and many are placed in developmental level math, and/or writing, as needed to help them develop the skills needed to succeed in college-level courses. Standards are specified in the catalog for admission into a baccalaureate program. They include completion of a college preparatory program as referenced in BOR policy [301.1](#), a high school grade point average (GPA) above 2.50, and a specified score threshold on the math and English tests of the ACT or SAT. Admissions requirements for transfer students are also specified at the same location in the Montana Tech Catalog. [Graduation requirements](#) and policies and procedures regarding continuation in, termination from, and readmission to degree programs are also described in the [Montana Tech Catalog](#). These policies are administered as described, with established mechanisms for appeals.

Admission to Montana Tech's [Graduate School](#) is described in the Montana Tech Catalog. Briefly, graduate admissions requirements are program specific, with a minimum requirement by all programs being that an applicant must have the equivalent of a U.S. bachelor's degree in an applicable discipline with a GPA for full admission of at least 2.9, along with adequate English-language proficiency, a personal statement, and reference letters. Many programs also require Graduate Record Examination (GRE) scores, and some require a résumé, writing samples, or other materials.

## Standard 2.A.17

**The institution maintains and publishes policies that clearly state its relationship to co-curricular activities and the roles and responsibilities of students and the institution for those activities, including student publications and other student media, if offered.**

Montana Tech has several types of co-curricular activities, including student clubs around interest areas, student clubs or professional organizations centered in academic departments, club-type sports, and student publications. The [Student Handbook](#) introduces the ASMT ([p. 9](#)), co-curricular support services (Career Services, ACE, ACES, HPER, Athletics, etc.) and other student organizations, which can be organized by students, and approved after review by the ASMT, the Director of Student Union and Student Activities, and the Dean of Students. Information about special activities organized for students, such as movies, trips, celebrations, etc., clearly state who is organizing and sponsoring the activity. The [Student Handbook](#) introduces the student newspaper, *The Technocrat*, and the radio station, KMSM-FM, and describes the associated standards and oversight responsibilities as well as processes whereby students could initiate additional media projects or other student clubs. Depending on the interests and initiatives of current students, some clubs and co-curricular activities increase in activity, while others go dormant from year to year. There are currently over 93 fund accounts for student clubs. Where appropriate, the clubs affiliate with national organizations—the normal process for academically or professionally oriented clubs.

For example, Montana Tech has a chapter of the national organization, American Indian Science and Engineering Society (AISES). This chapter was dormant until 2012/13, when a few American Indian students took the initiative to reactivate it, enlist new faculty/administrative sponsors, invite membership, and update the affiliation with the national organization. In 2014, the Montana Tech AISES Chapter was selected to host the spring 2014 AISES Region I annual conference on campus. Region I includes Alaska, the three western Canadian provinces, and the northwestern states in the US. AISES chapters in high schools, colleges, tribal colleges, and universities within this region were invited to participate.

## **Human Resources**

### **Standard 2.A.18**

**The institution maintains and publishes its human resources policies and procedures and regularly reviews them to ensure they are consistent, fair, and equitably applied to its employees and students.**

As a member of the MUS, Montana Tech is subject to the human resources policies established by the BOR. The two applicable sections are Section 700 (Personnel) and Section 800 (Compensation) (see [BOR Policies](#)). In addition, Montana Tech maintains and publishes campus-specific human resources policies and procedures and reviews them regularly to ensure they are consistent, fair, equitably applied, and current. Much of the information relevant here is included in the [Montana Tech Faculty/Staff Handbook](#), which is updated as needed. In addition, frequently used human resource information and forms are available on the campus website at [Human Resources Information](#) and [Forms](#).

### **Standard 2.A.19**

**Employees are apprised of their conditions of employment, work assignments, rights and responsibilities, and criteria and procedures for evaluation, retention, promotion, and termination.**

All Montana Tech employees go through a new employee orientation process. Montana Tech has several employee types (executives, administrators, contract professionals, union faculty, non-union faculty, unionized classified staff, unionized crafts, and non-union classified staff). Terms and conditions of employment for union job classifications are described in the appropriate collective bargaining agreement. The conditions of employment, rights and responsibilities, and criteria and procedures for evaluation, retention, promotion, and termination for other types of employees are described generically in the [Montana Tech Faculty/Staff Handbook](#). All contract employees receive both an annual appointment letter and an annual appraisal/evaluation.

Finally, individual departments orient their new faculty to departmental policies and procedures in general, as well as departmental standards for tenure and promotion specifically.

### **Standard 2.A.20**

**The institution ensures the security and appropriate confidentiality of human resources records.**

Montana Tech has a Human Resources Office (payroll/personnel) which is charged with maintaining the security and confidentiality all relevant records. Contracts for faculty and professionals are also kept in locked cabinets in the Chancellor's Office. All new employee searches follow a strict, standardized process assuring the security of applications and the confidentiality of applicants. See [Human Resources Office](#) under "Recruitment."

Montana Tech abides by all appropriate human resource guidelines, which include all policies specifically dealing with security and confidentiality, as identified by state policy in the [Code of Ethics: Standards of Conduct for State Employees](#) (State Human Resources Division, Department of Administration, March 2011).

## **Institutional Integrity**

### **Standard 2.A.21**

**The institution represents itself clearly, accurately, and consistently through its announcements, statements, and publications. It communicates its academic intentions, programs, and services to students and to the public and demonstrates that its academic programs can be completed in a timely fashion. It regularly reviews its publications to assure integrity in all representations about its mission, programs, and services.**

To ensure that Montana Tech consistently represents itself in a clear, concise, and accurate manner, the offices of Marketing and Public Relations, Enrollment Services, and Athletics cooperatively develop, distribute, and oversee all major communications conducted through electronic and print media; these include the website, all major publications, audio and video materials, and media relations. Prior to release, all externally directed communications are rigorously edited and reviewed by the Director of the Office of Public Relations and Marketing to assure their integrity and uniformity, usually following a thorough review by the Chancellor or appropriate Vice Chancellor. An example of Montana Tech's initiative to work with its constituents is provided in the Strategic Plan, [A Commitment to Excellence](#).

Montana Tech's primary publications are the [Montana Tech Catalog](#) and the [website](#). The catalog is now in digital form and is available via the website. This approach allows Montana Tech to make catalog updates in real-time, with the exception of updates to program curricula. Following the May BOR meeting, the curriculums are updated annually each summer for publication of the next edition of the Montana Tech Catalog.

Montana Tech consistently communicates the most pertinent statistical data publicly through the [Institutional Research](#) webpage. Data on enrollment, retention, and degrees awarded are publicly available through this office.

### **Standard 2.A.22**

**The institution advocates, subscribes to, and exemplifies high ethical standards in managing and operating the institution, including its dealings with the public, the NWCCU, and external organizations, and in the fair and equitable treatment of students, faculty, administrators, staff, and other constituencies. It ensures complaints and grievances are addressed in a fair and timely manner.**

The importance that both the MUS and Montana Tech place on institutional integrity is reflected in the numerous policies and procedures that address the ethical and professional conduct of administrators, faculty, staff, and students. In addition to these policies and procedures, many members of the faculty and staff, as licensed or registered professionals in their specific disciplines, voluntarily subscribe to codes of professional conduct that are explicit and, in many cases, legally binding. Moreover, various segments of the institution also subscribe to codes of conduct appropriate to their functions. For example, Student Services adheres to the American College Personnel Association – National Association for Student Personnel Administrators [ACPA-NASPA Standard of Ethics](#); and the Business

Office adheres to the National Association of College and University Business Offices [NACUBO Code of Ethics](#).

As employees of the State of Montana, the administrators, faculty, and staff of Montana Tech are all subject to rules of conduct provided by law. Montana Code Annotated (MCA), [MCA § 2-2-103](#), prefaces these rules by stating that “the holding of public office or employment is a public trust, created by the confidence that the electorate reposes in the integrity of public officers, legislators, and public employees. A public officer, legislator, or public employee shall carry out the individual’s duties for the benefit of the people of the state.” Rules of conduct are specified in [MCA § 2-2-121](#) and are incorporated by reference in the [Montana Tech Faculty/Staff Handbook](#).

In addition to the statutory rules, additional rules of conduct are provided by the following key policies on ethical and professional conduct:

- ***Ethics Standards of Conduct for State Employees***—Issued by the Montana Department of Administration, this document covers the rules specified by [MCA § 2-2-121](#) and applies to all employees of the State of Montana. Clearly addressed are items such as conflicts of interest, gifts, and use of public property for private purposes. ([Code of Ethics: Standards of Conduct for State Employees](#))
- ***Code of Expectations for the Montana Board of Regents of Higher Education***—This statement, adopted by the BOR in 2003, contains a set of principles imposed by the BOR on their own conduct ([Board of Regents Code of Expectations](#)).
- ***Equal educational and employment opportunity***—The equitable treatment of students, staff, faculty, and administrators is embodied in two closely related documents: the Equal Educational Opportunity and the Equal Employment Opportunity Statements, both contained in the Montana Tech Catalog, in the *Student Handbook*, and in the [Montana Tech Faculty/Staff Handbook](#). In addition, the Minority and Gender Equity Achievement Plan and the Access for Persons with Disabilities, contained in the [Student Handbook](#), further expand Montana Tech’s commitment to these principles.
- ***Faculty Code of Conduct***—The Faculty Code of Conduct contained in Section 203 of the [Montana Tech Faculty/Staff Handbook](#) addresses how to handle conflicts between the institution and the community and conflicts within the institution. This code of behavior encourages responsibly exercised academic freedom in an atmosphere of collegiality and mutual respect, thereby furthering the mission and objectives of the institution.
- ***Conflicts of interest***—An awareness of issues associated with conflicts of interest help employees recognize and avoid those circumstances that cause conflicts of interest, and they ensure that any actual or potential conflicts of interest are properly reviewed and, where necessary, are managed according to applicable laws and regulations. All faculty members are required to complete Montana Tech’s [Conflict of Interest and Disclosure Form](#).
- ***Consulting services***—While recognizing the value of engaging in consulting activities, the BOR also makes clear that teaching, research, and public service are the primary responsibilities of faculty members. Both Regents [Policy 401.1](#) and Section 219 of the [Montana Tech Faculty/Staff Handbook](#) clearly spell out that formal permission must first be obtained for anyone to engage in consulting activities.

- **Employment-related actions**—In addition to the equal employment opportunity statement referred to above, Section 204 through 214, and various paragraphs in Section V of the [Montana Tech Faculty/Staff Handbook](#) all cover detailed procedures for employment-related actions.
- **Intellectual property**—The development, ownership, and use of intellectual property is governed by [Policies 401.2](#) (on inventions and patents), by [401.3](#) (on copyrights), by [406](#) (on ownership of electronic course material), by [407](#) (on technology transfers to business entities), and by [1901.1](#) (on copying and use of computer software) which is promulgated both by the [Board of Regents Policies](#) and by Section 217 and 218 of the [Montana Tech Faculty/Staff Handbook](#).
- **Research activities**—Research and other scholarly activities are addressed by a number of policies listed in the [Principal Investigators Handbook](#) and in its associated supplement. Moreover, several of the policies that deal with conflicts of interest also specifically apply to research activities and include the [general policy on conflicts of interest](#).
- **Student conduct**—At the beginning of every academic year, the *Student Handbook* is made available to each student that lists expectations for conduct. Included here are rules associated with privacy, safety, and sexual harassment; with use of alcohol, drugs, and tobacco; and with use of facilities, firearms, and information technology. The current edition of the handbook is the [Student Handbook](#). Other documents addressing student conduct are:
  - [College Community Expectations Program](#)—This document contains procedures to resolve any issues resulting from alleged infringements of individual rights that might arise from student conduct.
- **Student Judicial Program**—The student-run Judicial Board acts as a forum for students to settle disputes in a controlled environment. The Dean of Students oversees the Judicial Board where the majority of disputes are resolved by peers working together to adjudicate the situation.
- **Academic dishonesty**—Section 308 of the [Montana Tech Faculty/Staff Handbook](#), the [Montana Tech Catalog](#), and [Student Handbook](#) all address issues arising from academic dishonesty. Enrollment at Montana Tech is a voluntary act. By enrolling, a student thereby enters an academic community and assumes the specific obligations and responsibilities of appropriate academic behavior required by the institution. These obligations and responsibilities are more specific than those imposed on citizens by civil and criminal law. However, Montana Tech students who believe that the academic rules have been applied to them unfairly can ultimately appeal their case to the Academic Standards Committee which is chaired by the Provost.
- **Student expectations**—The campus developed an “Academic Rights and Responsibilities Statement” included in the [Student Handbook](#). This statement addresses the students’ rights on campus as well as the expectations that the campus has of them as Montana Tech students.
- **Right to privacy**—Protections accorded to student academic records by the Family Educational Rights and Privacy Act (FERPA) are restated in the [Montana Tech Catalog](#) and the [Student Handbook](#). They are further detailed in Section 306 of the [Montana Tech Faculty/Staff Handbook](#).
- **Use of information technology**—The use of information technology is governed by a series of policies issued by the BOR and is further governed by a more detailed series of policies issued by Montana Tech’s Campus Technology Services. The acceptable use of hardware, software, e-mail,

and network resources; privacy; system security; and software piracy are all addressed by these policies.

### **Standard 2.A.23**

**The institution adheres to a clearly defined policy that prohibits conflict of interest on the part of members of the governing board, administration, faculty, and staff. Even when supported by or affiliated with social, political, corporate, or religious organizations, the institution has education as its primary purpose and operates as an academic institution with appropriate autonomy. If it requires its constituencies to conform to specific codes of conduct or seeks to instill specific beliefs or world views, it gives clear prior notice of such codes and/or policies in its publications.**

Conflict of Interest is prohibited by [Board of Regents Policy 770](#) and Montana Tech's [general policy on conflicts of interest](#). The BOR policy applies to the governing board and to all campus personnel. The Montana Tech policy applies to campus personnel and to some students. It requires an annual disclosure of possible conflicts of interest, with a case-by-case management plan put in place in those cases where the disclosed potential conflicts could be problematic. As a public university, education is Montana Tech's primary purpose, and it operates in a manner that prevents social, political, corporate, or religious organizations from exercising inappropriate influence over its academic programs.

### **Standard 2.A.24**

**The institution maintains clearly defined policies with respect to ownership, copyright, control, compensation, and revenue derived from the creation and production of intellectual property.**

The development, ownership, and use of intellectual property is governed by [Policies 401.2](#) (on inventions and patents), by [401.3](#) (on copyrights), by [406](#) (on ownership of electronic course material), by [407](#) (on technology transfers to business entities), and by [1901.1](#) (on copying and use of computer software) which is promulgated by the [Board of Regents Policies](#) and Sections 217 and 218 of the [Montana Tech Faculty/Staff Handbook](#).

Montana Tech's Research Office provides training workshops two or three times per year for "principal investigators." Principal investigators (PI) are administrators, faculty or staff members, who plan to submit and/or manage sponsored projects, funded by entities outside of Montana Tech. The PI training includes four sequential sessions: PI training, Conflict of Interest, Responsible Research, and Intellectual Property. Responsible Research sessions are provided to students, faculty, and staff at other times, because this topic is required of students who will be doing research. All training sessions are announced campus wide, and they are open to anyone. Records are kept of attendees. The Responsible Research training curriculum includes overview information on conflict of interest and intellectual property topics. The Intellectual Property curriculum deals extensively with policies and procedures related to ownership, copyright, control, compensation, and revenue derived from the creation and production of intellectual property. The presentation material from the latest training workshop (all parts) is available on the [Research Office website](#), under [Principal Investigator Training](#), and is updated each time the training session is offered.



## **Standard 2.A.25**

**The institution accurately represents its current accreditation status and avoids speculation on future accreditation actions or status. It uses the terms “Accreditation” and “Candidacy” (and related terms) only when such status is conferred by an accrediting agency recognized by the U.S. Department of Education.**

Montana Tech indicates its regional accreditation status on its website and in its publications. Many individual programs are accredited by the appropriate professional accrediting agency and indicate their accreditation status on the website and in published materials. Review of both website and publications demonstrates that accreditations are stated accurately and objectively.

## **Standard 2.A.26**

**If the institution enters into contractual agreements with external entities for products or services performed on its behalf, the scope of work for those products or services—with clearly defined roles and responsibilities—is stipulated in a written and approved agreement that contains provisions to maintain the integrity of the institution. In such cases, the institution ensures the scope of the agreement is consistent with the mission and goals of the institution, adheres to institutional policies and procedures, and complies with the NWCCU’s Standards for Accreditation.**

Montana Tech enters into contractual agreements with external entities only through procurement processes conducted in accordance with Section 603 of the [Montana Tech Faculty/Staff Handbook](#) and [Montana Tech's procurement processes](#). The scope of work for products and services in contractual agreements are clearly defined and written in procurement requisitions and documents, as prescribed in the procurement laws of the Montana Code Annotated and the Administrative Rules of Montana. Additionally, all construction and planning contractual agreements must follow the laws of the Montana Code Annotated, as well as State and MUS policies and procedures. The policies and procedures referenced in Section 603 of the [Montana Tech Faculty/Staff Handbook](#) are in sync with the policies and procedures prescribed by the UM – Missoula for all of its affiliated campuses. As such, there are only a few key individuals authorized to enter into agreements for Montana Tech, including the Chancellor, Vice Chancellor for Research, Vice Chancellor for Finance and Administration, and the Director of Purchasing and Budgeting. Agreements for goods and services up to \$50,000 are reviewed and approved by the Director of Purchasing and Budgeting. Agreements for goods and services over \$50,000 are reviewed and approved by the Director of Procurement for the UM - Missoula, pursuant to a delegation of purchasing authority agreement between the State of Montana’s Department of Administration and UM - Missoula. Once an agreement is approved by the appropriate manager, and technical/scope oversight of the contract is provided by an employee, who is held accountable for the results. Full payment is not made until UM - Missoula is satisfied with the delivered product(s) or service(s). For example, Montana Tech has contracted with Spectrum, an Enrollment Management Platform used by Montana Tech to recruit students. Although Spectrum manages its communication plan for Montana Tech, Montana Tech still retains the authority to review and approve the design and messaging of the communication to recruits prior to implementation of the communication plan.

## Academic Freedom

### Standard 2.A.27

**The institution publishes and adheres to policies, approved by its governing board, regarding academic freedom and responsibility that protect its constituencies from inappropriate internal and external influences, pressures, and harassment.**

The institutional setting for academic freedom at Montana Tech is described well in the introduction to Section 203, Faculty Code of Conduct in the [Montana Tech Faculty/Staff Handbook](#).

*The Institution is devoted to the pursuit of learning in the broadest sense. Its public responsibilities include the transmission of learning, the creation of knowledge, and the performance of services in related endeavors. Traditionally, colleges have served not only as transmitters of learning and repositories of knowledge, but also as institutions for the development of that innovation and criticism without which civilization cannot progress. In the fulfillment of these traditional obligations, the Institution and its members are occasionally put in a position of apparent conflict among themselves and society. It is sometimes inevitable that new knowledge should find itself at odds with the old. Experimentation with new ideas and criticism of society is the inevitable and desirable result of a properly functioning institution.*

*These conflicts between the Institution and the community, and within the Institution itself, must not be allowed to interfere with the effective operation of the Institution. It is essential that the membership of the Institution be guaranteed freedom of expression, inquiry, association, criticism, and dissent without fear of reprisal, bodily harm, or physical disorder. The responsibility of maintaining academic freedom is shared by the Institution and through the persons of its students, its faculty, its administrators and its regents and by society.*

Montana Tech's policies on academic freedom are based on the BOR Policy 302. This policy, in turn, is based on the 1940 Statement of Principles on Academic Freedom and Tenure of the American Association of University Professors that can be found both in [AAUP 1940 Statement of Principles on Academic Freedom and Tenure](#) and in subsequent revisions of this statement. Montana Tech's policies on academic freedom are specifically addressed in: [Montana Tech Faculty/Staff Handbook, Section 202, Academic Freedom](#) and [Section 203, Faculty Code of Conduct](#).

### Standard 2.A.28

**Within the context of its mission, core themes, and values, the institution defines and actively promotes an environment that supports independent thought in the pursuit and dissemination of knowledge. It affirms the freedom of faculty, staff, administrators, and students to share their scholarship and reasoned conclusions with others. While the institution and individuals within the institution may hold to a particular personal, social, or religious philosophy, its constituencies are intellectually free to examine thought, reason, and perspectives of truth. Moreover, they allow others the freedom to do the same.**

Section 202 of the [Montana Tech Faculty/Staff Handbook](#) reinforces Montana Tech's commitment to academic freedom and reinforces and promotes the right to think independently in the pursuit and dissemination of knowledge. The institution does not expound any particular personal, social, or religious philosophy; moreover, it recognizes and protects the right of all individuals to examine thought, reason, and perspectives and reach their own conclusions. At the same time, it protects the



rights of other constituencies in the campus community to do the same. Here, Montana Tech endeavors to foster reasoned and respectful discussion and dialogue on these matters, and does not tolerate infringements of the rights and academic freedoms by its employees and students.

### **Standard 2.A.29**

**Individuals with teaching responsibilities present scholarship fairly, accurately, and objectively. Derivative scholarship acknowledges the source of intellectual property, and personal views, beliefs, and opinions are identified as such.**

In the classroom, faculty, as public employees are expected to abide by the Code of Ethics, as identified in the Montana Code Annotated, 2011, Government Structure and Administration, [Standards of Conduct, Part 1. Code of Ethics](#), statement concerning public trust and public duty.

Research Integrity is under the purview of the Vice Chancellor for Research, who serves as the Research Integrity Officer (RIO). Research integrity is included in Responsible Conduct of Research (RCR) training, which is required of faculty and staff mentoring students in research and of all student researchers. For the special case of Human Subjects research, oversight is provided by the [Institutional Review Board](#) (IRB). IRB review and approval is required by U.S. Federal Policy for all research involving human subjects, or any research that collects information relating to human subjects. Montana Tech does not have its own campus IRB because it does not have the volume of such research. Instead, Montana Tech uses the UM IRB, and appoints a Montana Tech faculty member volunteer to serve on the UM IRB. All Montana Tech IRB proposals are received and reviewed by the Montana Tech member of the UM IRB.

## **Finance**

### **Standard 2.A.30**

**The institution has clearly defined policies, approved by its governing board, regarding oversight and management of financial resources—including financial planning, board approval and monitoring of operating and capital budgets, reserves, investments, fundraising, cash management, debt management, and transfers and borrowings between funds.**

BOR [Policy Section 900](#) establishes the policies and addresses oversight and management of financial resources. BOR both approves and monitors operating and capital budgets, reserves, cash management, debt management, and transfers and borrowings. All fees and fee waivers must be approved by the BOR. Although the BOR does not have direct control over the various campus-affiliated Foundations charged with philanthropic fundraising, the BOR requires them to submit [annual reports](#) and audited financial statements for BOR review as a way of ensuring integrity of operation.

## **Standard 2.B—Human Resources**

### **Standard 2.B.1**

**The institution employs a sufficient number of qualified personnel to maintain its support and operations functions. Criteria, qualifications, and procedures for selection of personnel are clearly and publicly stated. Job descriptions accurately reflect duties, responsibilities, and authority of the position.**

## Personnel Resources

In the fall of 2015, Montana Tech had a total of 621 employees, 416 full-time, 130 part-time, and 75 graduate assistants as shown in Table 2.B.I.

**TABLE 2.B.I EMPLOYEES AT MONTANA TECH**

	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>
Full-time	410	429	417	416
Part-time	126	120	123	130
Graduate Assistants	61	53	70	75
<b>TOTAL</b>	<b>597</b>	<b>602</b>	<b>610</b>	<b>621</b>

<b>Occupational Category</b>	<b>Full-time</b>	<b>Part-time</b>
Instructional Staff	145	84
Research Staff	41	5
Public Service Staff	0	0
Librarians, Curators, and Archivists	8	2
Student and Academic Affairs and Other Education Services	4	1
Management Occupations	60	4
Business and Financial Operations Occupations	11	0
Computer, Engineering, and Science Occupations	28	4
Community, Social Service, Legal, Arts, Design, Entertainment, Sports and Media Occupations	22	3
Healthcare Practitioners and Technical Occupations	1	0
Service Occupations	44	23
Sales and Related Occupations	2	0
Office and Administrative Support Occupations	38	4
Natural Resources, Construction, and Maintenance	8	0
Production, Transportation, and Material Moving	4	0
<b>Total number of staff</b>	<b>416</b>	<b>130</b>

Policies and procedures governing recruitment of faculty and staff are addressed in the [Montana Tech Faculty/Staff Handbook, Section 204](#), Recruiting and Selecting New Faculty and [Section 501](#), Hiring Procedures; in the Montana Tech Faculty Association Collective Bargaining Agreement ([MTFA-CBA](#)),

Article 10, Recruiting and Selecting of New Faculty; in the Montana Two-Year College Faculty Association ([MTYCFA-CBA](#)), Article 9.5, Extended Postings and Hiring Between Colleges; and in documents available in the Montana Tech Personnel Office and on the [Montana Tech Human Resources Website](#). Finally, a list of current job opening and materials and policies related to seeking a job at Montana Tech can be found on the [Montana Tech Employment Website](#).

### **Personnel Selection Process**

Recruitment begins when the need to hire a full-time faculty member, staff member, or classified staff member arises at the department level and is typically in response to a retirement, resignation, leave of absence, termination, or sometimes in response to a sabbatical. For Faculty positions, the department first prepares a formal [Personnel Requisition Approval \(PRA\)](#) Form with advice from the dean for the position. Directors prepare PRAs for staff members or classified staff positions. The PRA is then brought to the Executive Council, where the discussion centers on balancing specific departmental needs with the general needs of the institution. Subsequently, the PRA is submitted to the Vice Chancellor of Finance and Administration, who determines the request's overall budgetary impact.

Montana Tech takes great care to ensure fairness and diversity in its hiring process. Faculty positions are advertised nationally and through various sources, such as online job postings, niche journals, and/or national newspapers. Classified and Staff positions are advertised locally, posted at other MUS locations and at the local job service. In addition, search committees are formed with appropriate representation from various department members and women and minorities. The search committee is trained on Affirmative Action/Equal Employment Opportunity (AA/EEO) compliance and is guided by the AA/EEO officer throughout the process.

### **Employment Conditions**

Adjunct faculty play an important role at Montana Tech, not only in giving the institution flexibility in meeting its curricular demands, but also in augmenting additional expertise not available in the full-time faculty. A good example would be a nutrition course taught by a registered nutritionist. In general, Montana Tech's adjunct faculty members complement the full-time faculty and enrich the curricular offerings available to our students. Adjunct faculty are those faculty who are not tenure track and include part-time faculty paid on a per course basis.

To ensure that adjunct faculty are informed with respect to the institution, to work assignment, to rights and responsibilities, and to conditions of employment, adjunct faculty are provided with a copy of the [Montana Tech Faculty/Staff Handbook](#), available on the Montana Tech website. Here, adjunct faculty are subject to the same appropriate policies as full-time faculty. For example, the evaluation of adjunct faculty who teach in four-year programs is addressed in the [Montana Tech Faculty/Staff Handbook](#), Section 206.4.2 Evaluation of Part-Time Faculty. The instructional performance of adjunct faculty is evaluated in each semester they teach. Part-time faculty are generally not expected to serve on institutional committees or pursue scholarly research; however, they are welcome to participate in both, if they wish.

### **Standard 2.B.2**

**Administrators and staff are evaluated regularly with regard to performance of work duties and responsibilities.**

Classified Staff are evaluated annually by their immediate supervisors, who solicit input from appropriate parties, using a specific [Performance Review Form](#) available on the [Montana Tech Forms Website](#). These staff evaluations normally occur at the end of the fiscal year. In this process, department heads are evaluated annually by the Deans of their colleges with input from the faculty in their departments. The criteria by which department heads are evaluated can be found in the [Montana Tech Faculty/Staff Handbook](#), Section 206.4.5 Evaluation of Department Heads and in the, [MTFA-CBA](#), Article 22.50, Evaluation of Department Heads. Deans are evaluated annually by the Provost, and these criteria can be found in the [Montana Tech Faculty/Staff Handbook](#), Section 206.4.6 Evaluation of Deans. Professionals and Vice Chancellors are evaluated annually by their direct supervisors, who solicit input from appropriate members of the Montana Tech community. Finally, the Chancellor of Montana Tech is evaluated annually by the President of UM-Missoula, who solicits input from appropriate members of the Montana Tech community.

### **Standard 2.B.3**

**The institution provides faculty, staff, administrators, and other employees with appropriate opportunities and support for professional growth and development to enhance their effectiveness in fulfilling their roles, duties, and responsibilities.**

Faculty are encouraged to attend at least one regional or national meeting per year and are further encouraged to present the results of their scholarship at these meetings. Support to attend these meetings typically involves a combination of funds from the faculty member's department, the appropriate dean, the Vice Chancellor for Research, and the Provost. Tenure-track faculty are eligible to apply for a sabbatical every six years as outlined in Section 213 of the [Montana Tech Faculty/Staff Handbook](#). Faculty wishing to pursue a sabbatical must first submit a formal sabbatical request, as described in the [Sabbatical Request Memorandum](#), outlining how they intend to spend their sabbatical and what they intend to accomplish. The request must provide a plan for covering their courses during their absence. Faculty may apply for either a one-semester or a full academic year sabbatical. During the sabbatical, Montana Tech covers all (for a one-semester sabbatical) and two thirds (for a full year sabbatical) of their state-funded salary. In the 2015-2016 academic year, seven of seven sabbatical applications were approved. One faculty member took a sabbatical in Spring 2016 and Fall 2016. Montana Tech provides some support for faculty members who are pursuing their doctorates.

Montana Tech's administrators and staff are both encouraged and supported in taking advantage of various professional development opportunities, such as staff fee waivers, which covers tuition up to a maximum of six credit hours per fall and spring semester and four credit hours per summer semester. These are funded by the Deans, Provost, Vice Chancellors, and Department funds if available.

Montana Tech also provides many other professional development opportunities for its faculty and staff, such as hosting speakers and webinars, yearly human resource training, and various workshops. Departments and managers also provide individualized training for their personnel, depending on their professional goals and needs.

### **Standard 2.B.4**

**Consistent with its mission, core themes, programs, services, and characteristics, the institution employs appropriately qualified faculty sufficient in number to achieve its educational objectives, establish and oversee academic policies, and assure the integrity and continuity of its academic programs, wherever offered and however delivered.**

Consistent with Core Theme 3: Engaged Faculty, Montana Tech recruits, rewards, and retains faculty who are excellent instructors, active scholars, and committed to service. In the Fall of 2015, Montana Tech employed 193 full-time employees with faculty rank: 145 were faculty with significant instructional duties, 35 research faculty, 2 Librarians, 11 Management, 2 Engineer/Science, and 1 Media/Communications faculty. As summarized in Table 2.B.II, of the 193 full-time faculty members, 139 eligible for tenure, and of those 47.5% are tenured.

**TABLE 2.B.II RANK AND TENURE STATUS OF FULL-TIME FACULTY.**

	<b>Continuous Tenure</b>	<b>Probationary Tenure</b>	<b>Non-Tenure</b>	<b>Total</b>
Professor	39		15	53
Associate Professor	15	21	8	44
Assistant Professor	2	38	17	57
Instructor	2	8	8	18
Level IV	2			2
Level III	3	1		4
Level II	2	5		7
Level I	1		6	7
<b>Total</b>	<b>66</b>	<b>73</b>	<b>54</b>	<b>193</b>

As summarized in Table 2.B.III, 130 instructional faculty are tenure track/tenured. Of the tenure track instructional faculty, 68% hold a doctorate, 25% hold a master's, and 46% are tenured.

**TABLE 2.B.III TENURE INFORMATION FOR FULL-TIME FACULTY**

	<b>Continuous Tenure</b>	<b>Probationary Tenure</b>	<b>Non-Tenure</b>	<b>Total</b>
Community, Social Service, Legal Arts, Design, Entertainment, Sports, and Media Occupations			1	1
Computer, Engineering, and Science Occupations			2	2
Librarians, Curators, and Archivists		2		2
Management Occupations	6	1	4	11
Instructional Faculty	60	70	15	145
Research			32	32
<b>Total</b>	<b>66</b>	<b>73</b>	<b>54</b>	<b>193</b>

Table 2.B.IV summarized the degree areas of Montana Tech's full-time, tenure track and tenured instructional faculty. In addition to instructional faculty, Montana Tech has a significant number of full-time faculty whose primary responsibility is research. Of the 32 full-time research faculty at Montana Tech, 31 of these faculty are in the Montana Bureau of Mines and Geology (MBMG) and one is associated with the Center for Advanced Mineral Processing (CAMP).

**Table 2.B.IV DEGREES OF FULL-TIME TENURE TRACK/TENURED INSTRUCTIONAL FACULTY BY DEPARTMENT IN 2015-16.**

	Degrees of Full Time Tenure Track/Tenured Postsecondary Teachers by Department						Tenured	% Tenured
	N	Doc	% Doc	Mast.	Bach.	Other		
Biological Sciences	8	7	88%	1	0	0	4	50%
Business & Information Technology	5	4	80%	1	0	0	1	20%
Chemistry	7	7	100%	0	0	0	2	29%
Computer Science	4	3	75%	1	0	0	3	75%
Electrical Engineering	5	5	100%	0	0	0	3	60%
Environmental Engineering	5	4	80%	1	0	0	3	60%
General Engineering	7	6	86%	1	0	0	3	43%
Geological Engineering	5	5	100%	0	0	0	3	60%
Geophysical Engineering	6	4	67%	2	0	0	2	33%
Health Care Informatics	3	1	33%	2	0	0	0	0%
Liberal Studies	9	9	100%	0	0	0	6	67%
Mathematical Sciences & Statistics	10	8	80%	2	0	0	6	60%
Metallurgical & Materials Engineering	6	6	100%	0	0	0	3	50%
Mining Engineering	5	3	60%	2	0	0	1	20%
Nursing	9	0	0%	9	0	0	3	33%
Petroleum Engineering	8	4	50%	3	1	0	1	13%
Professional & Technical Communications	7	5	71%	2	0	0	3	43%
Safety Health & Industrial Hygiene	7	6	86%	1	0	0	5	71%
<b>4 Year Programs</b>	<b>116</b>	<b>87</b>	<b>75%</b>	<b>28</b>	<b>1</b>	<b>0</b>	<b>52</b>	<b>45%</b>
Highlands College	2	1	50%	1	0	0	0	0%
Highlands College - Business Technology	3	0	0%	2	1	0	3	100%
Highlands College - Health Sciences	3	0	0%	1	2	0	1	33%
Highlands College - Information Technology	3	0	0%	1	2	0	3	100%
Highlands College - Trades & Technical	3	0	0%	0	2	1	1	33%
<b>2 Year Programs</b>	<b>14</b>	<b>1</b>	<b>7%</b>	<b>5</b>	<b>7</b>	<b>1</b>	<b>8</b>	<b>57%</b>
<b>TOTAL</b>	<b>130</b>	<b>88</b>	<b>68%</b>	<b>33</b>	<b>8</b>	<b>1</b>	<b>60</b>	<b>46%</b>

## **Standard 2.B.5**

**Faculty responsibilities and workloads are commensurate with the institution's expectations for teaching, service, scholarship, research, and/or artistic creation.**

### **Teaching Workload**

Montana Tech's workload policy for faculty in 4-year programs is based on 15 credits of load per semester. For full-time tenure track faculty, 3 credits of load are automatically assigned to account for advising and institutional service. For probationary faculty, who are expected to develop an active/productive research/scholarship program in order to meet the standards for promotion and tenure, 3 credits of load may, with the department head's approval, be assigned for this effort. This same criterion applies to research-active faculty. The remaining 9 to 12 credits of load are assigned to instruction. In the area of instruction, one lecture credit equals one credit of load, and one laboratory credit equals two credits of load. The assignment of load for laboratory instruction reflects the increased contact hours involved in laboratory instruction and is consistent with Montana Tech's policy of paying twice as much per credit for laboratory instruction, as for lecture instruction. Faculty who do not advise, who are not active in institutional service, and/or who are not active in scholarship and research are expected to assume higher instructional loads. In addition, department heads receive a one course reduction in teaching workload.

For faculty at Highlands College, language contained in their collective bargaining agreement governs their workload:

*The instructional workload for full-time faculty shall normally fall within the range of 30 to 32 credits per academic year. The instructional assignment for a full-time faculty member shall normally not exceed 25 hours per week. Where instructional assignments consist of primarily laboratory, clinical, shop, internship or cooperative work experience supervision, the assignment for a full-time faculty member shall not exceed 30 hours per week. Faculty teaching more than thirty-two (32) credits or the hours defined above shall be eligible for overload compensation or a reduction in non-instructional assignments at the discretion of the campus administration. Bargaining unit faculty who teach at least 15 credits in a semester shall not receive a pro-rated salary during that semester.*

### **Research Workload**

Faculty involved in externally funded research during the academic year, may use contract/grant funding to buy out of teaching duties with prior approval of their department head, Dean, and Vice Chancellor of Research. Such buyouts are budgeted and conducted on the basis of a course load of 12 credits per semester (24 credits per academic year). The number of credits to be bought out should be divided by 12 (for a semester) or 24 (for the academic year) to determine the percentage FTE of buyout. Montana Tech has a system where each individual faculty researcher has a separate position for his or her externally funded research responsibilities. The buyout percentage (% of effort devoted to research) will be multiplied by the faculty member's research position salary to determine the amount of research salary paid by the externally sponsored program(s).

Because of the buyout, the faculty member will receive the calculated percentage(s) of salary from the contract/grant(s), and the remaining percentage of salary (adding to 100%) from the faculty member's academic position. As an example of how this works, consider a research-active faculty. Assume this faculty member normally teaches 9 credits per semester, performs 3 credit per semester of research

(total of 12 credits per semester), and earns a state salary of \$60,000 per 9-month academic year and has a research position salary of \$90,000. Further assume, this faculty member requests a 3-credit course buyout per semester for 25% release time (6 credits /24 credits = 25%) to work on externally funded research. The faculty member salary would be paid 25% of the \$90,000 research position salary - \$22,500 plus 75% of the \$60,000 academic rate -\$45,000 for a total of \$67,500. This salary represents 100% effort (25% research + 75% academic) during the 9-month academic year. For more information refer: [Research Position Base Salaries](#) and [Compensation from Sponsored Programs](#).

## **Standard 2.B.6**

**All faculty are evaluated in a regular, systematic, substantive, and collegial manner at least once within every five-year period of service. The evaluation process specifies the timeline and criteria by which faculty are evaluated; utilizes multiple indices of effectiveness, each of which is directly related to the faculty member's roles and responsibilities, including evidence of teaching effectiveness for faculty with teaching responsibilities; contains a provision to address concerns that may emerge between regularly scheduled evaluations; and provides for administrative access to all primary evaluation data. Where areas for improvement are identified, the institution works with the faculty member to develop and implement a plan to address identified areas of concern.**

### **Faculty Evaluation Process**

All instructional faculty, with the exception of full professors, are evaluated annually at the departmental level. Full-professors are only evaluated every three years, on a rotating basis, with approximately one-third of all the full professors being evaluated in any given year. The faculty member who is under review prepares a portfolio. The department head then conducts an evaluation of the submitted portfolio with input from the tenured faculty in the department. The department head may solicit confidential opinions from other faculty on the individual's performance, and is required to solicit input from tenured departmental members for faculty governed by the MTFA-CBA. Finally, review of part-time faculty is only based on and addresses instruction.

Procedures and expectations for evaluation, tenure, and promotion of faculty at Montana Tech are covered in the following:

- [Montana Tech Faculty/Staff Handbook](#), Section 206, Evaluation, Tenure, Promotion and Merit – North Campus Faculty for all faculty in four year B.S. and M.S. granting programs
- [MTFA-CBA](#), Article 14, Faculty Evaluation, for faculty in four year B.S. and M.S. granting programs, who are part of the MTFA Collective Bargaining Unit (where the Montana Tech Faculty/Staff Handbook and the MTFA-CBA differ, the MTFA-CBA takes precedence)
- [Montana Tech Faculty/Staff Handbook](#), Section 207, Evaluation, Tenure, Promotion and Merit – Highlands College.
- [MTYCFA-CBA](#), Article 7, Faculty Evaluation, for faculty in certificate and two year programs in Highland College, who are part of the MTYCFA Collective Bargaining Unit (where the Montana Tech Faculty/Staff Handbook and the MTYCFA-CBA differ, the MTYCFA-CBA takes precedence)
- [Montana Tech Faculty/Staff Handbook](#), Section 208. Classification, Promotion and Merit- Montana Bureau of Mines and Geology Professional Faculty and Staff for faculty and staff in the Montana Bureau of Mines and Geology (MBMG), using the procedures and form outlined in the [MBMG Faculty Evaluation Procedures](#)



- [Montana Tech Faculty/Staff Handbook](#), Section 206.4.2 Evaluation of Part-Time Faculty for part-time faculty who are expected to have students evaluate each of their courses and to have the department heads in their instructional areas review their instructional performance.

## Collective Bargaining

On June 1, 2005, the Montana Board of Personnel Appeals certified the MTFA, which is affiliated with the Montana Education Association —Montana Federation of Teachers (MEA-MFT). Thus, the MTFA became the exclusive representative for the bargaining unit, which is comprised of all teaching faculty in 4-year programs on academic appointment, department head(s) and/or department chairpersons, and lab director(s) with faculty status at Montana Tech. This bargaining unit excludes library faculty, nursing faculty, faculty represented by the MTYCFA collective bargaining agreement, part-time academic appointments of less than .5 (one-half) FTE, all employees of the Bureau of Mines and Geology, and those faculty who are professional engineers (PE) or engineers in training (EIT). Also excluded are coaching staff, museum staff, deans, non-teaching management personnel, visiting faculty, research assistants, post-doctoral fellows, and researchers with academic rank who would teach less than .5 (one-half) FTE.

The latest MTFA-CBA, which was ratified in September of 2015 and subsequently approved by the Montana BOR, addresses issues and policies related to wages, benefits, and working conditions for faculty who are members of this bargaining unit. Those faculty in the bargaining unit who teach in 4-year programs offering B.S., M.S., and doctoral degrees are largely concentrated in the College of Letters, Sciences, and Professional Studies. However, there are faculty in the College of Letters, Sciences, and Professional Studies who are not in the bargaining unit, notably nursing faculty. Also, some faculty in the School of Mines and Engineering are in the bargaining unit. Because of this, when the MTFA-CBA was first developed, care was taken to keep it in agreement with policies and procedures set forth in the *Montana Tech Faculty/Staff Handbook*. In any instance where the MTFA-CBA and the *Montana Tech Faculty/Staff Handbook* are not in agreement, the MTFA-CBA, as a contract, will take precedence. Faculty evaluation for faculty teaching in 4-year programs is addressed in the [MTFA-CBA](#), Article 14, Faculty Evaluation. Faculty in 2-year programs are represented by the MTYCFA. Faculty evaluation for faculty teaching in 2-year programs is addressed in the [MTYCFA-CBA](#), Article 7, Faculty Evaluation.

## Student Evaluation Process

As required by the *Montana Tech Faculty/Staff Handbook*, [Section 206.4](#), the MTFA-CBA [Section 22.311](#), and by the [MTYCFA-CBA](#), faculty instruction in all courses is evaluated by students just prior to the end of the course each time the course is taught. Students evaluate courses using the uniform campus-wide [Montana Tech Course Instruction Evaluation Form](#). This form was developed by a faculty committee and agreed to by a vote of the general faculty. This student evaluation form solicits Likert scale responses to 25 questions that address instructional behaviors and also allows for free response to three general questions:

- What aspects of this course contributed to your learning?
- What aspects of this course did not contribute to your learning?
- Suggestions—What would you change to improve the course?

Finally, the form allows departmental-specific questions to be added. This link provides an example of a [Sample Real Course Evaluation](#) with the professor's name and course identifying remarks removed.

## Access to Evaluation Data

Once grades have been submitted, faculty have on-line access to these evaluations, as do department heads for the faculty in their departments, deans for the faculty in their colleges, and the Provost for all faculty. If the evaluation has been filled out on-line, then the free responses are included in the on-line evaluation. On the other hand, if the evaluation was completed on paper, then the free responses are provided by departmental assistants to the both faculty members and department head separately. In either case, faculty and academic administrators have appropriate access to the raw student evaluation data. Every semester faculty members use these evaluations to assess and improve the quality of instruction in their courses. Moreover, these evaluations are used by department heads, deans, the Provost, and others in the evaluation cycle to help make decisions on promotion and tenure. Access to student evaluations for faculty and administrators is available at [On-Line Access to Student Evaluations](#).

## Sample Evaluation Process for a 4-Year Faculty Member

To give a flavor for the time-line and criteria used in Montana Tech's faculty evaluation, a sample evaluation process for a tenure-track assistant professor teaching in a 4-year program and undergoing mid-tenure review is described in the following information. Because faculty are eligible to apply for tenure in their sixth year, for a tenure track faculty, who was given no time credit toward tenure at the time of initial appointment, mid-tenure review would occur during the faculty member's third year at Montana Tech. The primary steps in the process are as follows:

- The process begins with the faculty member preparing a portfolio which addresses accomplishments in the areas of instruction, research/scholarship, and service during the first three years at Montana Tech. This portfolio would contain a cover letter, letters of support from colleagues, copies of the faculty member's two prior annual departmental evaluations, an up-to-date vita, summaries of courses taught and student evaluations from these courses, evidence of research and/or scholarly activity, and details of service to the department, college, profession, and community.
- The entire portfolio is due to the department head by October 1st. Based on the portfolio, the department head first solicits input from the tenured departmental faculty (although other faculty and staff may be asked to comment) and then writes a letter of support or non-support for the faculty member under review.
- The portfolio, the department head's letter, and any additional evidence marshaled either by the department head or by the faculty member under review are next forwarded to the dean of the respective college by November 1st. Here, the dean reviews the portfolio, the department head's letter, and any other relevant evidence.
- The dean then writes a letter of support or non-support and submits the entire package to the Collegiate Evaluation Committee by December 1st. (Voting members of the Collegiate Evaluation Committee consist of full-time, tenured, full professors.) Two of these members are elected annually by the faculty from the College of Letters, Sciences, and Professional Studies; and two are elected from the School of Mines and Engineering. A fifth outside voting faculty representative is selected by the faculty member under review. The Collegiate Evaluation Committee reviews the candidate's materials, soliciting other information or seeking clarification as needed, and finally writes a positive, negative, or qualified recommendation before passing the review package to the Provost by February 21st.

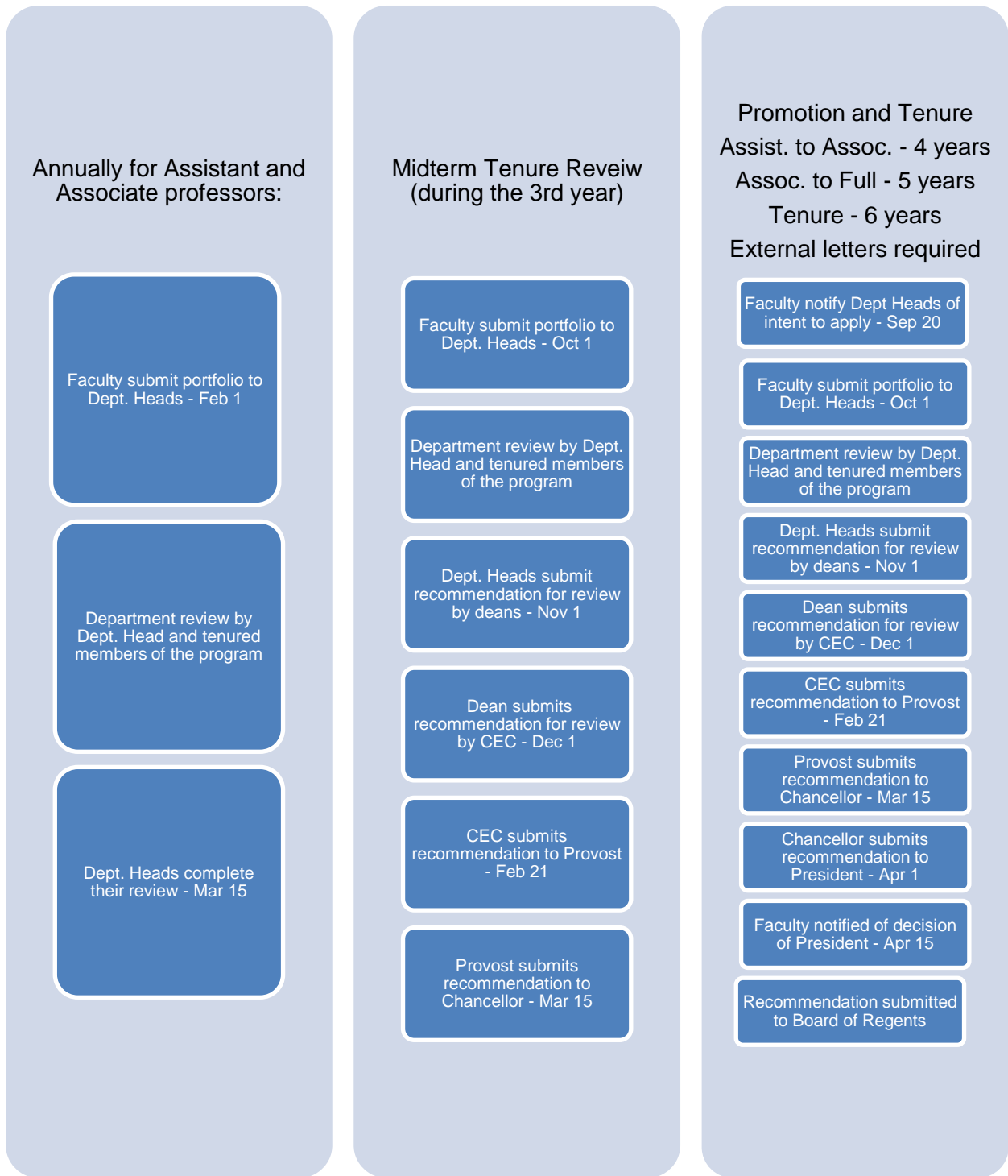
- The Provost, in turn, evaluates all of the aforementioned materials and recommendations and then forwards a written recommendation on to the Chancellor by March 15th. The portfolio, as it was after review by the Dean, is archived in the Dean's office.
- By April 1<sup>st</sup>, the Chancellor ultimately affirms or denies previous assessments of the faculty member's progress toward tenure, noting any areas of concern in a written reply to the faculty member.

At every stage of this process, faculty members may add to or modify their portfolio. However, they may not delete material from it. Within seven calendar days of the completion of any stage of the process, faculty members under review are to be notified in writing of the recommendations made at that stage. The process for applying for tenure or for promotion for instructors to Level II or III or for faculty to associate or full professor is essentially the same as that described above for mid-tenure review with the exception that the Chancellor's recommendation is forwarded to the President of UM-Missoula and then ultimately to the State of Montana BOR. Please see the Figure 2.B.1, Portfolio Flow Sheet, developed by the Provost and used to summarize the promotion and tenure process for both faculty applicants and new hires.

### **Addressing Concerns**

Concerns that emerge during the faculty evaluation process are addressed by the immediate supervisor, e.g., department heads for faculty in their department, in consultation with the affected faculty member. The next supervisor in the chain is expected to be aware that an evaluation concern is being addressed. This process may result in a written improvement plan with identified benchmarks to which both the department head and affected faculty member have agreed. For faculty teaching in 4-year programs and subject to collective bargaining, see the [MTFA-CBA](#) Article 22.313, Criteria for Evaluation of Instructional Performance, point 2 for related language.

The process for evaluating faculty at Highlands College is available in the [MTYCFA-CBA](#).



**Figure 2.B.1—Portfolio Flow Sheet**

## Standard 2.C–Education Resources

### Standard 2.C.1

**The institution provides programs, wherever offered and however delivered, with appropriate content and rigor that are consistent with its mission; culminate in achievement of clearly defined student learning outcomes; and lead to collegiate–level degrees or certificates with designators consistent with program content in recognized fields of study.**

Appropriate course content and rigor, consistent with Montana Tech’s mission, is ensured through a process in which the mission-appropriateness of all new or expanding programs is first determined by the academic department in which the particular program under consideration will be housed. The department faculty initially assess whether or not sufficient faculty and other resources are available either to create or to continue programs in support of Montana Tech’s overall strategic plan.

At Montana Tech, mission-consistent content and rigor of programs are ensured by a specific internal curricular review process which consists of the following six considerations:

- Pursuant to Montana BOR [Policy 303.10](#), Montana Tech publishes its academic program plans for the next 3-year period. The academic program planning list contains all programs that the campus may submit to the BOR for its consideration.
- Any changes to a department’s curriculum or the consideration of any new programs begins with the faculty in the department. All curricular changes are required to be documented using the standardized [Curriculum Review Committee \(CRC\) form](#), which requires the submission of a course syllabus containing course student learning outcomes.
- Once curricular changes are approved at the department level, the completed CRC form with attachments is then sent to the respective Academic Dean for consideration and approval.
- The CRC request is then considered by the CRC and for undergraduate curricular changes, if approved by the CRC, sent to the Faculty Senate for further review and final approval. For graduate curriculum changes, the Graduate Council reviews the request and on approval forwards the request to the CRC.
- If any General Education requirements are involved, then the General Education Committee (GEC) must review these course applications which are to be included in the list of campus-approved courses that satisfy [General Education requirements for graduation](#). Courses must be taught at least once to be considered for inclusion in the General Education offerings. Departments are required to use the [General Education Application Form](#) when requesting consideration of their course(s). Once approved by the GEC, these recommendations are sent to the Faculty Senate for final approval (see sections 2.C.9 and 2.C.10).
- Courses that may be used to satisfy the writing (*W*) requirement for graduation are reviewed both by the CRC and by the Faculty Senate.
- Final on-campus approval resides with the Faculty Senate.
- [Level I](#) and [Level II](#) curricular changes are submitted to the Office of the Commissioner of Higher Education for Montana BOR approval.

In addition, Montana Tech ensures mission-appropriate content and rigor by relying on external program-reviews provided by program-specific accrediting bodies such as the Accreditation Board for Engineering and Technology (ABET). All of Montana Tech’s engineering programs are ABET accredited, and a number of other programs have discipline-specific accreditation, such as the Commission on Collegiate Nursing Education (CCNE) accreditation of the Nursing degree and the American Chemical Society Certification (ACSC) of the Chemistry degree. The periodic reviews of curricula by faculty in

preparation for accreditation visits from their discipline-specific accrediting bodies ensure that programs, both new and proposed, are aligned with Montana Tech's mission. Finally, required annual program reviews of academic programs ensure that each program is mission-appropriate.

### **Standard 2.C.2**

**The institution identifies and publishes expected course, program, and degree learning outcomes. Expected student learning outcomes for courses, wherever offered and however delivered, are provided in written form to enrolled students.**

Degree and program learning outcomes are published annually in the Montana Tech catalog. Expected learning outcomes for courses are oftentimes stated in the course syllabus, which is provided to enrolled students per the recommended [Montana Tech syllabus policy](#).

Course, program, and degree learning outcomes are developed by the faculty within the particular program, and often these outcomes are developed in conjunction with an external review board and/or a discipline-specific accreditation entity.

### **Standard 2.C.3**

**Credit and degrees, wherever offered and however delivered, are based on documented student achievement and awarded in a manner consistent with institutional policies that reflect generally accepted learning outcomes, norms, or equivalencies in higher education.**

Montana Tech defines academic credit as stated in the [Academic Regulations and Requirements](#) section of the catalog and adheres to NWCCU's [Credit Hour Policy](#) and [federal policies](#). Documented student achievement, credit, and course grades are based on explicit definitions and policies embedded in national norms. All courses, whether campus-based, online, or blended, adhere to this definition of academic credit. Thus, the content covered in a 3-credit online course is equivalent to the content covered in a traditional 3-credit course. For example, compare the [syllabus in a face-to-face course](#) with the syllabus of the same course delivered [online during the summer session](#).

For the Montana Tech semester system, one semester credit is assigned for one hour of lecture per week or two to three hours of laboratory per week. The in-class time may include, lectures, discussions, laboratories, fieldwork, recitations, or problem solving sessions.

Student achievement is documented via grades earned and courses passed. Graduating students complete a formal [application for graduation](#) during the semester prior to the expected semester of completion. Curriculum, Advising, and Program Planning (CAPP) analysis available to faculty and students, coupled with a thorough review of the graduation application by the student's advisor and the registrar provides confirmation that the student has met the requirement for graduation.

### **Standard 2.C.4**

**Degree programs, wherever offered and however delivered, demonstrate a coherent design with appropriate breadth, depth, sequencing of courses, and synthesis of learning. Admissions and graduation requirements are clearly defined and widely published.**

## **Appropriate Breadth, Depth, and Sequencing of Courses**

Ensuring the appropriate breadth, depth, and sequencing of courses begins at the department level. Here, faculty are responsible for developing new courses and for regularly reviewing and, if necessary, revising existing courses within the department's curriculum to ensure these courses follow national norms on course breadth and depth. Additionally, a large number of courses offered at Montana Tech have undergone state-wide "common course numbering" designed, in part, to ensure appropriate breadth and depth in the course material for each commonly numbered course in the MUS. These courses are now part of the MUS [Common Course Numbering Guide](#). As part of the process, discipline-specific faculty from around Montana met to discuss course content, depth, breadth, learning outcomes, and other relevant topics. One goal was to give students and administrators at higher education units in Montana confidence that, for example, if students take College Algebra at one college/university they would have had sufficient breadth and depth in the topic for the course to transfer automatically to any other higher education unit within the MUS.

Finally, one of the roles of the CRC is to ensure that new courses presented by an academic department have sufficient depth, breadth, and are sequenced properly. Every academic department publishes a semester-by-semester academic plan in the catalog that students can use as a guide to plan the sequence of courses in which they enroll. This recommended sequencing of courses—as well as the campus rubric used to identify courses (100 versus 200 level, etc.)—is used to properly sequence courses for students enrolled at Montana Tech. Graduate level courses are reviewed using the same process as undergraduate courses with the addition of a review by the Graduate Council prior to being reviewed by the CRC.

## **Synthesis of Learning**

Synthesis of learning is demonstrated by having students successfully completing the capstone course requirement specific to each degree. Additionally, senior seminars, internships, and other culminating experiences, such as the *ETS Proficiency Profile* exam, demonstrate synthesis of learning.

## **Admission and Graduation Requirements Clearly Defined and Published**

Admission and graduation requirements are clearly defined and published in a number of different locations and available to students. Admission requirements can be found in the [Montana Tech Catalog](#) as well as on the [Montana Tech webpage](#) and the [Montana Board of Regents Policy 301](#).

[Graduation requirements](#) are identified in the catalog and through links available on the [Montana Tech webpage](#). Faculty, staff, and students also have access to the CAPP degree audit system. This system informs the user (faculty, staff, students) of progress toward a chosen degree as well as the remaining requirements for degree completion. Students who are considering changing their major can use CAPP to identify the courses that they would need to complete should they decide to change their major.

## **Graduate Programs**

Admission and graduation requirements for Montana Tech's graduate programs are clearly defined and published in the [catalog](#) and on the [Graduate School's webpage](#). All graduate degree programs demonstrate a coherent design with appropriate breadth, depth, sequencing of courses, and synthesis of learning. A graduate student's program of study is developed by the individual student in coordination with and approved by the student's graduate committee chair and committee members. The committee chair must approve the program of study to ensure that program requirements are met.



Additional information on graduate school programs can be found in Standard 2.C.13 of this NWCCU report.

## **Standard 2.C.5**

**Faculty, through well-defined structures and processes with clearly defined authority and responsibilities, exercise a major role in the design, approval, implementation, and revision of the curriculum, and have an active role in the selection of new faculty. Faculty with teaching responsibilities take collective responsibility for fostering and assessing student achievement of clearly identified learning outcomes.**

### **Curriculum Planning**

Faculty members of instructional departments propose and develop the corresponding curriculum. They also play the primary role in approving the general curriculum through their participation in the Graduate Council, CRC, and Faculty Senate.

As an example of faculty involvement in curricular planning, consider the process by which a new course is added to the curriculum. The idea for a new course generally originates with a faculty member, who will often have first taught the course as a special topics course, which has proven successful and generated a positive student response. This faculty member will then bring a request to the appropriate department to add this course to the curriculum. If the faculty members in that department agree with the request, a formal submission for a new course will be prepared. This formal submission will include a suggested course number, title, credits, catalog description, and prerequisites; will have an attached sample syllabus, which includes course student learning outcomes; and will clearly identify any known effects on library resources and other programs. The following link provides an [Example Curriculum Review Request](#) from the Statistics Program and Computer Sciences Department. This formal request is then vetted by the departments and the faculty in the college in which the request originated. If the appropriate college approves, the request next passes to the CRC, which has faculty representation from each instructional program, and only faculty are voting members of this committee. Once the request is approved by the CRC, it is presented to the Faculty Senate, which is largely composed of instructional faculty, for final approval. Clearly, the faculty own the curriculum.

### **Learning Outcomes**

Departmental faculty are principally responsible for developing the program student learning outcomes for discipline-based degrees, and these outcomes can be found in the [Montana Tech Catalog](#) in the general information area for each department. For example, the course student learning outcomes for the computer science course, CSCI 438, Theory of Computation, can be found in the syllabus for this course, [CSCI 438 Syllabus](#). Course student learning outcomes are typically assessed through some combination of assignments, quizzes, exams, participation, and projects.

### **Selection of New Faculty**

Policies and procedures governing recruitment of faculty and staff are addressed in the [Montana Tech Faculty/Staff Handbook](#), Section 204, Recruiting and Selecting New Faculty and Section 501, Hiring Procedures; in the [MTFA-CBA](#), Article 10, Recruiting and Selecting of New Faculty; in the [MTYCFA-CBA](#), Article 9.5, Extended Postings and Hiring Between Colleges; and in documents available in the Montana Tech Personnel Office and on the [Montana Tech website](#).

Recruitment begins when the need to hire a full-time faculty member first arises at the department level and is typically in response to a retirement, resignation, leave of absence, a termination, or sometimes to a sabbatical. With advice from the appropriate dean, the department prepares a formal [PRA](#) for the position. The PRA is then brought to the Dean's Council, where the discussion centers on balancing specific departmental needs with the overall needs of the institution. If the PRA is approved by the Dean's Council, the request for a faculty hire results in the PRA being forwarded to the Executive Council, where the impact of the hire on the institution's finances is considered. An active PRA requires signatures by the appropriate Department Head, Dean, Provost, the AA/EEO Officer, Vice Chancellor for Administration and Finance, and, ultimately, the Chancellor.

Once fully approved, the requested position is posted on [Employment at Montana Tech](#) and advertised locally, regionally, and nationally as appropriate. The text of the advertisement is part of the PRA and is largely written by the affected department, with oversight from the appropriate Dean, the Provost, and the AA/EEO Officer. Finally, appropriate venues for advertising the position are suggested by the department.

### **Selection Process**

Concurrent with advertising for the position, a search committee is formed. This committee consists of at least three faculty members representing the academic department and one faculty member from outside the department. Student involvement is encouraged and may include a student member who is appointed to the search committee by the Department Head. Both the search committee members and the chair of the committee, who is usually the affected department head, develop an applicant screening matrix based on the PRA of required and preferred criteria to help sharpen the focus of the candidate review process. Prior to the advertised date for reviewing applications, the search committee meets with the AA/EEO Officer as part of an orientation process on the rules and regulations governing the search process.

The search committee then reviews applications and typically classifies these applications as Tier I (two to four candidates to be invited in for an interview); Tier II (potential candidates, if a hire doesn't materialize from Tier I); and Tier III (candidates who are not to be considered further). At this point references are checked on Tier I candidates, interview arrangements are made for Tier I candidates, and Tier III candidates are notified that they are no longer being considered. Interviews typically require one to two days, during which time the candidate meets with the department and other interested faculty, with students in the affected majors, with a representative of the Personnel Office, and with the applicable Dean. The candidate also meets with the Vice Chancellor for Research and Graduate Studies, if appropriate, the Provost, and, of course, with the search committee. Typically, the interview process includes a discipline-specific presentation or teaching example given to the search committee and other interested faculty, staff, and students. This presentation or teaching exemplar is an effective indicator in judging the candidate's ability to teach.

Instructional adjunct faculty are hired as needed by the department head with the dean's approval. The department head is responsible for vetting the adjunct faculty member's qualifications, for assessing their instructional performance, and for recommending or not their continued employment.

### **Employment Guidelines**

After the search committee makes its recommendation, the department head, dean, and Provost put together an employment offer. This offer covers salary, credit toward promotion and tenure, moving expenses, and any other conditions of the initial hire. Guidelines on allocation of moving expenses can

be found in the [Montana Tech Faculty/Staff Handbook](#), Section 501.4, Relocation Expenses. Montana Tech may offer one to two years toward promotion and rarely one to two years toward tenure for prior experience that the candidate has in a tenure track position at an accredited college or university. When a candidate with a master's degree is hired in a department or program, where the doctorate is the normal terminal degree, Montana Tech may in the letter of appointment require the new hire to complete an appropriate doctorate as a condition of future promotion or tenure. In any case, upon the Chancellor's approval, the candidate is notified of the offer. If the candidate accepts the offer, the remaining candidates are notified that the position has been filled. Meanwhile, the completed search file is forwarded to the Montana Tech Personnel Office for archiving.

## **Standard 2.C.6**

**Faculty with teaching responsibilities, in partnership with library and information resources personnel, ensure that the use of library and information resources is integrated into the learning process.**

Librarians and faculty collaboratively develop library instruction sessions tied to subjects, classes, and assignments designed to educate students on locating, accessing, evaluating, and using library resources. Library faculty assist students with coursework assignments and also provide in-depth research help to senior design students, those working on undergraduate research projects, and graduate students.

Some faculty and departments have developed specific courses to introduce students to library and information resources. For example, library and chemistry faculty team-teach a required chemistry literature class specifically developed for chemistry majors. This class meets in the library and is designed to guide students and provide hands-on experience finding scientific and technical information. Librarians also work with faculty to create online [subject guides](#) that provide discipline-specific assistance.

When working with students in class sessions or individual research consultations, librarians emphasize sound research methods, critical thinking strategies, and appropriate use of information. In addition, the library provides in-depth consultations to introduce graduate students to advanced materials and resources related to thesis research. The library also supports individual faculty to help them develop information searching and retrieval skills.

Both faculty and students participate in library planning and development through membership on the Library Committee. This committee is comprised of 25 faculty (including two from the Highlands College), one student senator, and a representative from the MBMG. These individuals serve as direct advisors to the Library Director and are charged with informing their constituents about library resources and services. Faculty also contribute to library development by making regular requests for book, journal, and database purchases. Faculty, staff, and students can suggest library acquisitions through the library's "[Suggest Items](#)" form. Finally, the CRC guidelines require all faculty to list library resources for both course content changes and for new courses.

The library provides global access to campus scholarship and archives campus events through [Digital Commons @ Montana Tech](#).

The [Montana Tech Library webpage](#) is maintained by library staff. It provides information on library resources and services, including interlibrary loans, and is the primary access point for e-journals and other electronic resources. The webpage is the only means of electronic access for distance learning

students and remote instructors, and the library supplements this access with subject guides and [tutorial videos](#).

Please see Standard 2.E of this NWCCU report for a more detailed discussion of how the library and instruction are integrated.

### **Standard 2.C.7**

**Credit for prior experiential learning, if granted, is: a) guided by approved policies and procedures; b) awarded only at the undergraduate level to enrolled students; c) limited to a maximum of 25% of the credits needed for a degree; d) awarded only for documented student achievement equivalent to expected learning achievement for courses within the institution's regular curricular offerings; and e) granted only upon the recommendation of appropriately qualified teaching faculty. Credit granted for prior experiential learning is so identified on students' transcripts and may not duplicate other credit awarded to the student in fulfillment of degree requirements. The institution makes no assurances regarding the number of credits to be awarded prior to the completion of the institution's review process.**

In September of 2015, the MUS BOR adopted [Policy 301.19–Prior Learning Assessment](#) (PLA) to recognize the value of prior learning in the achievement of academic goals. Historically, Montana Tech has granted little or no credit for experiential learning. However, students who believe that their industrial work experience, military work experience, their employer-sponsored courses or training, or their self-study qualifies them for particular course credit may request to challenge a course. By challenging a course, students seek to earn course credit by passing appropriate examinations rather than by attending class and meeting usual course requirements. Please see the [Montana Tech Catalog Challenge Procedure – Prior Learning Assessment \(PLA\)](#), for more detail.

### **Standard 2.C.8**

**The final judgment in accepting transfer credit is the responsibility of the receiving institution. Transfer credit is accepted according to procedures which provide adequate safeguards to ensure high academic quality, relevance to the students' programs, and integrity of the receiving institution's degrees. In accepting transfer credit, the receiving institution ensures that the credit accepted is appropriate for its programs and comparable in nature, content, academic quality, and level to credit it offers. Where patterns of student enrollment between institutions are identified, the institution develops articulation agreements between the institutions.**

Among units within the MUS, there is a highly developed and consistent transfer agreement based on common course numbering. These transfer agreements were developed by Faculty Learning Outcome Councils (FLOCs), with discipline-focused faculty representation from all units in the MUS. One goal of this agreement is to ensure that the evaluation of general education transfer credits within the MUS is a fair and consistent process. This initiative has resulted in the "block transfer procedure," which is described in the Montana Tech Catalog as follows:

*An undergraduate student who has completed the lower division coursework in an approved general education program ..., and who transfers to another of those institutions, cannot be required to take additional general education coursework at the lower division level.*

For more information on the transfer of courses within the MUS, please see the [MUS Transferability Initiative Website](#). Here, transfer within the MUS is governed by system policies, found in [Policies](#)

[Governing Transfers in the MUS](#). The system policy is further elaborated by institutional transfer policies at Montana Tech, which can be found in [Montana Tech Transfer Credit Policies](#). Questions on the transfer of credits from both within and without the MUS are determined by faculty at the department level. Institutional policies governing the transfer of credit from outside the U.S. can also be found on the Montana Tech website under [Transfer of International Credit](#). This website contains articulation agreements that recognize long-standing patterns of transfer enrollment between, for example, Southern Alberta Institute of Technology (SAIT) and Northern Alberta Institute of Technology (NAIT) [Petroleum Tech programs](#) and Montana Tech's Petroleum Engineering degree.

Graduate students may transfer up to six credits taken at other graduate schools to a Montana Tech graduate program—provided that these credits meet the following requirements:

- The course was acceptable for graduate credit at the school where it was taken.
- A grade of at least a "B" was earned.
- Final determination of transfer credits is made by the student's graduate committee.

Any transfer credit requests older than six years from the anticipated graduation date of the student not only must meet the transfer credit requirements but must also be approved by the Dean of Graduate Studies. A student may petition to transfer more than six credits with the approval of his committee chair, the department head, and the Dean of Graduate Studies.

## Undergraduate Programs

### Standard 2.C.9

**The General Education component of undergraduate programs (if offered) demonstrates an integrated course of study that helps students develop the breadth and depth of intellect to become more effective learners and to prepare them for a productive life of work, citizenship, and personal fulfillment. Baccalaureate degree programs and transfer associate degree programs include a recognizable core of general education that represents an integration of basic knowledge and methodology of the humanities and fine arts, mathematical and natural sciences, and social sciences. Applied undergraduate degree and certificate programs of thirty (30) semester credits or forty-five (45) quarter credits in length contain a recognizable core of related instruction or general education with identified outcomes in the areas of communication, computation, and human relations that align with and support program goals or intended outcomes.**

As described in Standard 1.B, Montana Tech's General Education program is aligned with the objective to provide all students with a general education, which in turn, falls under the core theme Education and Knowledge. An important part of the process of achieving this objective is to ensure that all students enrolled in an Associate of Science or Baccalaureate Degree program have access to their respective general education component via the [Montana Tech Catalog](#). Here, the requirements are given in a form consistent with a coherent and recognizable general education core.

As shown in Table 2.C.9.I, the general education curriculum at Montana Tech is structured around five general, academic, core areas: (1) Communications, (2) Humanities/Fine Arts (3) Mathematical Sciences, (4) Physical and Life Sciences, and (5) Social Sciences. These five areas serve as the foundation for a traditional liberal arts curriculum and provide a gateway through which students explore basic knowledge, methodologies, and pathways to productive citizenship. Moreover, within each core area a course distribution model is presented in the Montana Tech Catalog. A student fulfills Montana Tech's general education program by selecting and passing courses within each respective course distribution

model, until the minimum number of required credits has been met. (Table 2.C.9.I lists the course credits required within each core area.)

**TABLE 2.C.9.I GENERAL EDUCATION CORE AREAS**

Area		Credits
(1)	Communications	6
(2)	Humanities/Fine Arts	6
(3)	Mathematical Sciences	6
(4)	Physical and Life Sciences (1 course with a lab required)	6-7
(5)	Social Sciences	6

Thus, a total of 30-31 credits are required to satisfy the general education component of all associate of science (AS) and bachelor of science (BS) degree-granting programs at Montana Tech. Additionally, all baccalaureate degree-seeking students must complete a designated writing course at the 300-400 course level.

To best determine whether the general education core is helping students develop the breadth and depth of intellect necessary for the active pursuit of personal fulfillment, as well as for the sustainability of a democratic society, eight student outcomes have been identified by Montana Tech and are also published in the [Montana Tech Catalog](#). They are the following:

- (c) Students will be able to use writing as a means to engage in critical inquiry by exploring ideas, challenging assumptions, and by reflecting on and applying the writing process.
- (d) Students will be able to speak with clarity, accuracy, and with fluency in public contexts.
- (e) Students will be able to reason both analytically and quantitatively at an algebraic level.
- (f) Students will be able to use an understanding of the physical and natural world to identify and solve problems.
- (g) Students will demonstrate an understanding of ethics, cultural endeavors, and legacies of world civilizations.
- (h) Students will be able to describe the biological, social, political, and economic forces that influence human behaviors and attitudes.
- (i) Students will be able to demonstrate the processes and proficiencies involved with creating and/or interpreting creative works.
- (j) Students will be able to demonstrate proficient critical thinking skills.

Accordingly, as students achieve each of the eight outcomes through engagement with their general education course work, they will not only acquire but also practice the skills needed to form a foundation upon which effective learning is built.

As shown in Table 2.C.9.II, all the student outcomes are mapped to specific general education core areas. Clearly, there will be one to several mappings for many of the outcomes. For example, outcome (a) Students will be able to use writing as a means to engage in critical inquiry by exploring ideas,

challenging assumptions, and by reflecting on and applying the writing process, describes a proficiency of critical importance for many of the courses within the general education core areas of communication, humanities, and social sciences. As a result of these multiple mappings, the student outcomes of the general education curriculum represent an integrated set of accomplishments when applied to the general education core.

**TABLE 2.C.9.II STUDENT OUTCOMES**

<b>General Education Student Outcome</b>	<b>Core Area Aligned with the Outcome</b>	<b>Examples of Courses used to Assess Outcomes</b>
(a) written communication	1	WRIT121, WRIT321
(b) oral communication	1	COMX111, COMX211
(c) mathematics	3	M121, STAT216
(d) physical and natural sciences	4	BIOB101, CHMY141
(e) social sciences and humanities	2,5	ANTY122, HSTA101
(f) social sciences	2,5	ECNS201, PSYX100
(g) humanities	2	LIT112, LIT210
(h) critical thinking	1-5	ETS score

As demonstrated by both the general education core and the corresponding student outcomes, Montana Tech has made a commitment to a general education program that requires students to assimilate basic knowledge and methodologies. Moreover, assessment of the program is integral to Montana Tech’s quest for continual improvement of its general education core. As noted in Table 2.C.9.II, all student outcomes are mapped directly to core areas. Thus, assessment of the core involves assessing the level of attainment students achieve for each outcome. Both a complete description and the results of Montana Tech’s assessment of general education can be found in the [General Education Program Review for Academic Year 2014-2015](#).

A general education curriculum is also required for all Certificate and Associate of Applied Science degree programs at Montana Tech. As described in the [Montana Tech Catalog](#):

*Programs of study for which a Certificate of Applied Science (CAS) or an Associate of Applied Science (AAS) degree are conferred include a course in (1) communication, (2) computation, and (3) human relations. Related courses are identified as those numbered below 100 and are not considered as a general education transfer course. The required general education/related instruction varies for each program with a minimum of 12 credits required for the AAS degree.*

**Standard 2.C.10**

**The institution demonstrates that the General Education components of its baccalaureate degree programs (if offered) and transfer associate degree programs (if offered) have identifiable and assessable learning outcomes that are stated in relation to the institution’s mission and learning outcomes for those programs.**

The General Education Review Committee reviews and accepts/rejects courses submitted by faculty seeking to have the course designated as a “Gen Ed” requirement. To be considered, the course must



have been taught at least one semester and be approved by the CRC. An example of a course that was approved as a Communication Core is [COMX217- Oral Interpretation](#).

Assessment of the general education curriculum at Montana Tech involves measuring how successful the overall student population is in attaining the student outcomes provided by the instructors. It is assumed that courses designated as general education core meet one or more of the eight student outcomes. Tools used for obtaining measurements include the [Educational Testing Service Proficiency Profile Exam](#), the grade distribution of specified courses (75% percent of students receiving a C- or better in the course denotes attainment). These courses are reviewed and selected by the General Education Review Committee, within each of the five core areas (Table 2.C.9.I), and the level of attainment observed for course outcomes mapping to at least one general education student outcome. Detailed description of the assessment of these outcomes can be found in the [General Education Program Review for Academic Year 2014-2015](#).

### **Standard 2.C.11**

**The related instruction components of applied degree and certificate programs (if offered) have identifiable and assessable learning outcomes that align with and support program goals or intended outcomes. Related instruction components may be embedded within program curricula or taught in blocks of specialized instruction, but each approach must have clearly identified content and be taught or monitored by teaching faculty who are appropriately qualified in those areas.**

As described in 2.C.9, the related instruction components of CAS and AAS degree programs are defined as courses numbered below 100. These courses are taught by qualified instructors and have outcomes that both align with and support program student outcomes. Examples of program reviews from Highlands College can be found on the [Montana Tech Program Review website](#).

For many of the related instruction courses, the assessable course outcomes have been defined by groups made up of faculty from public universities within the MUS. Defining course outcomes was a natural follow-up to the process used in determining a common course numbering system for courses taught throughout the MUS system. More information on common course numbering can be found at the MUS [Common Course Guide website](#)

How course outcomes align with program student outcomes can be determined by inspection of both. For example, M095, Intermediate Algebra, is used by many CAS and AAS programs to fulfill the computation requirement. The course outcomes for M095 are provided to illustrate this alignment.

Upon completion of this course, a student will be able to:

- Solve linear, absolute value, quadratic, rational, and radical equations
- Simplify polynomial, radical, and rational expressions
- Solve linear and absolute value inequalities
- Graph linear and quadratic equations
- Recognize and determine equations of lines
- Recognize, evaluate, and perform operations on functions
- Recognize logarithmic and exponential expressions and equations

Continuing this example, M095 is a related instruction component of the AAS Medical Assistant degree program, where program student objectives include the following:

- Provide a quality education blending theory and practice to assist students with meeting their individual employment goals while impacting the ever-increasing needs of the health care industry.
- Facilitate effective communication, problem-solving and critical thinking through a variety of traditional and technological resources. Students receive a general education core, targeted administrative and business courses, and clinical skills education.
- Expose students to a variety of work-based learning opportunities to meet personal interests.

Realization of the M095 course goals are required for the technical aspects detailed in the program student outcomes. For example, the level of mathematical sophistication required to achieve the course goals will be useful as graduates pursue other degrees or demonstrate administrative competencies. Please see the [General Education Program Review for 2014-2015](#) for more details.

## Graduate Programs

### Standard 2.C.12

**Graduate programs are consistent with the institution’s mission; are in keeping with the expectations of their respective disciplines and professions; and are described through nomenclature that is appropriate to the levels of graduate and professional degrees offered. They differ from undergraduate programs by requiring greater depth of study and increased demands on student intellectual or creative capacities; knowledge of the literature of the field; and ongoing student engagement in research, scholarship, creative expression, and/or appropriate high-level professional practice.**

Consistent with its mission, Montana Tech’s graduate programs provide degree and certificate opportunities in several engineering, science, and health fields that meet the changing needs of today’s society. [Montana Tech’s graduate web page](#) and [graduate recruiting brochure](#) clearly link the programs with the institution’s mission and heritage. The graduate programs offered include several master’s degrees, three 15–18-credit graduate certificates, one collaborative [PhD program in materials science](#) (with UM-Missoula and MSU-Bozeman), and an interdisciplinary PhD program (in partnership with and degree awarded by the UM-Missoula). The [Montana Tech Catalog](#) provides the following description.

*The Graduate School provides opportunities for advanced study and research in science, engineering, and technical communication. It fosters a community of faculty and students motivated by a shared commitment to blending theory with practice to advance research, scholarship, and applications that meet the changing needs of society and contribute to the responsible and sustainable development and use of natural resources.*

The difference between undergraduate and graduate programs is that graduate programs and courses are more advanced, go into greater depth, and require students to take more initiative and demonstrate more independence than is the case for undergraduate programs and courses. In cases where 400-level and 500-level courses have similar titles or are taught together to small enrollments, the 500-level version has deeper learning goals and more demanding assignments (see [example syllabi](#)).

Montana Tech’s graduate degree programs are strongly connected with and guided by the expectations of their respective disciplines and professions. To maintain relevancy and obtain professional feedback, each program benefits from the advice of an external advisory committee, known as an Industrial Advisory Board (IAB). The members of the IABs are professionals in the field and/or leaders in companies that employ our graduates. To provide graduate-study opportunities to full-time working

technical professionals beyond southwest Montana, Montana Tech offers two non-thesis master's degree programs and one master's certificate program via [distance learning technologies](#). The master's degree programs are in Project Engineering and Management and in Industrial Hygiene, while the on-line certificate program is in Health Care Informatics. For the on-campus master's degrees, both thesis and non-thesis options are available. The only exception is the on-campus master's program in Industrial Hygiene (IH), which requires a thesis, thereby complementing the non-thesis IH distance program for working professionals, which requires a comprehensive exam.

All graduate degree programs, certificates, and new courses are reviewed by the [Graduate Council](#)—a faculty committee that functions in an oversight and review capacity and helps ensure consistency and quality across graduate programs. One of the on-campus master's degree programs is the [Interdisciplinary Master of Science \(IMS\) degree](#). Under this degree program, individual students can tailor a master's degree curriculum that spans two or more disciplines to their professional needs. To ensure the quality, depth, and advanced character of individualized IMS curricula, a student's proposed degree curriculum must be developed and approved prior to the student matriculating into the program. Thus, the prospective student first must meet with the Dean of Graduate Studies and then work directly with at least two faculty members (at least one of whom is active in an established graduate program) to design the student's IMS curriculum. This program plan is then approved by the student, the faculty members, and ultimately by the Dean of Graduate Studies. This process helps ensure that individualized interdisciplinary degree programs require the appropriate depth of study and are aligned with the institution's mission, core themes, and strengths.

To ensure that graduate students and prospective students are aware of the requirements and policies associated with their graduate programs, Montana Tech updates its [Graduate Student Handbook](#) and the general [Graduate School](#) section of the Montana Tech Catalog annually. The latest version of both documents is provided to new students at a formal New Graduate Student Orientation session held at the start of the fall and spring semesters.

### **Standard 2.C.13**

**Graduate admission and retention policies ensure that student qualifications and expectations are compatible with the institution's mission and the program's requirements. Transfer of credit is evaluated according to clearly defined policies by faculty with a major commitment to graduate education or by a representative body of faculty responsible for the degree program at the receiving institution.**

Clear information on the content, focus, research opportunities, and requirements of each of [Montana Tech's graduate programs](#) is available to prospective students on the campus website. [Admission](#) policies are described in the Montana Tech Catalog. The [graduate application web page](#) describes the specific material every applicant must submit. This information is used by faculty in each program to evaluate the prospective student's qualifications. In short, all programs require the following materials: transcripts from every undergraduate and graduate institution the prospective student has attended, three letters of reference, and a personal/professional statement outlining academic and professional goals. These requirements, including additional program-specific admissions requirements, are detailed on the [graduate application web page](#). The program-specific requirements are indicated near the bottom of this page. Examples of "additional program-specific" materials include GRE scores for several programs, technical writing samples for Petroleum Engineering, writing samples and project ideas for Technical Communication, and two years of applicable work experience for the distance-learning master's degree programs.

International student applicants have additional admission requirements (see [International Requirements](#)). These requirements include a demonstration of English proficiency and course-by-course evaluation of the transcripts from universities in most foreign countries, either by the World Education Services (WES) or by Educational Credentials Evaluators (ECE). These requirements are publicized, along with the requirements for all applicants.

Once an application is complete, it is reviewed by faculty, who are involved in the specific graduate program. Prospective students who do not satisfy the formal admissions requirements are not admitted. However, if their applications provide evidence of capability to succeed in their program of choice, they may be admitted provisionally or on probation. For example, students who are changing to a different field, may be required to take some undergraduate course(s) during a post-baccalaureate period or during their first year in the graduate program to ensure they are adequately prepared for graduate course work in the new field.

To transfer credit from courses taken at another institution into a Montana Tech graduate program, students must submit a petition to transfer credit ([Petition to Transfer Credit Form](#)). Policy limits the number of credits that may be transferred into a degree program to a maximum of six semester credit hours. A student desiring to transfer additional credits must submit a [Petition to the Graduate Dean](#) with the specific requests. To be accepted for transfer credit, courses must have been at the graduate level where they were taken, they must apply to the Montana Tech degree program, they must be on a topic that has not become outdated in the intervening time, and the student must have earned a grade equivalent to B or better. The final decision about transferring up to six semester credits is made by the faculty in the degree program. Any transfer credit requests exceeding six credits must be reviewed and approved by both the department faculty and the Dean of Graduate Studies.

## **Standard 2.C.14**

**Graduate credit may be granted for internships, field experiences, and clinical practices that are an integral part of the graduate degree program. Credit toward graduate degrees may not be granted for experiential learning that occurred prior to matriculation into the graduate degree program. Unless the institution structures the graduate learning experience, monitors that learning, and assesses learning achievements, graduate credit is not granted for learning experiences external to the students' formal graduate programs.**

Montana Tech does not award graduate credit for experiential learning prior to matriculation. When programs require or include an optional internship or field experience, the individual student would register for the internship or field credits during the applicable term. In such cases, the internship or other experience is structured, monitored, supervised, and included within the formal graduate program.

The IH (professional track) distance MS program accepts applicants who are Certified Industrial Hygienists (CIH), Certified Safety Professionals (CSP), or Certified Professional Ergonomists (CPE) as meeting the requirements for admission, regardless of their undergraduate major or courses. This exception is only provided to applicants whose undergraduate GPA satisfies Montana Tech's overall graduate admissions requirements. These professional certifications are based on rigorous examinations and formal training (though not necessarily from accredited colleges or universities). Students with these professional credentials do not receive academic credit toward their degree from Montana Tech, but they may have one or two specific courses (up to six credits) of the 37-credit degree program "waived" in recognition of these credentials and the knowledge/skill base involved.

## Standard 2.C.15

**Graduate programs intended to prepare students for research, professional practice, scholarship, or artistic creation are characterized by a high level of expertise, originality, and critical analysis. Programs intended to prepare students for artistic creation are directed toward developing personal expressions of original concepts, interpretations, imagination, thoughts, or feelings. Graduate programs intended to prepare students for research or scholarship are directed toward advancing the frontiers of knowledge by constructing and/or revising theories and creating or applying knowledge. Graduate programs intended to prepare students for professional practice are directed toward developing high levels of knowledge and performance skills directly related to effective practice within the profession.**

Overall, Montana Tech's graduate programs are intended to prepare students for research and/or professional practice in their fields and professions. The overarching educational objectives are to assist students in achieving professional advancement; recognition for advanced, valuable, state-of-the-art expertise and skills; and success in keeping up-to-date professionally. The Graduate School has five student outcomes: advanced knowledge and skills, blending theory with practice for complex problem solving, advanced communication skills, leadership skills and ethics, and significant contributions to advance knowledge. Master's degree and certificate programs are expected to address four of the five student outcomes, while doctoral degree programs must address all five.

To fulfill these objectives and help students achieve the outcomes, each graduate program at Montana Tech has been designed to engage its students directly in activities in which they can perform and practice the professional skills, scholarship, and research expected of a graduate degree recipient in that field. As a result, by the time students complete the degree requirements, they are prepared to demonstrate the high level of responsibility, expertise, originality, and critical analysis expected of a graduate degree recipient in the field. The [Annual Program Review](#) for the Graduate School describes the evidence and process used to assure programs and students achieve these outcomes.

Most of the master's degree students complete theses or project reports. Montana Tech submits the theses to ProQuest in digital form, and ProQuest makes them "permanently" accessible online to scholars, researchers, and the public. These documents can be downloaded for a fee from anywhere with web access. This access is free for anyone with Montana Tech identification. In addition, since 2015, both master's theses and master's project reports are posted on and available free of charge from [Digital Commons@Montana Tech](#) (unless they have a publication embargo for proprietary reasons). Doctoral dissertations will be published in the same ways, when they are finalized.

## Continuing Education and Non-Credit Programs

### Standard 2.C.16

**Credit and non-credit continuing education programs and other special programs are compatible with the institution's mission and goals.**

[Montana Tech's mission](#) includes meeting "the changing needs of society" by providing access to knowledge and education for the community. Furthermore, Core Theme 4, Objective 3, states that this institution will "provide events and programs that serve the Montana Tech community." Continuing education courses are one way Montana Tech accomplishes these objectives. Montana Tech's continuing education and other special programs are compatible with our mission and core themes, in that all courses offered through these programs have a foundation in Montana Tech's mission and

expertise and meet the same standards for academic quality required of the traditional academic courses. The vast majority of all continuing education courses are taught simultaneously with classes offered for academic credit.

### **Standard 2.C.17**

**The institution maintains direct and sole responsibility for the academic quality of all aspects of its continuing education and special learning programs and courses. Continuing education and/or special learning activities, programs, or courses offered for academic credit are approved by the appropriate institutional body, monitored through established procedures with clearly defined roles and responsibilities, and assessed with regard to student achievement. Faculty representing the disciplines and fields of work are appropriately involved in the planning and evaluation of the institution's continuing education and special learning activities.**

Montana Tech retains responsibility for course offerings, evaluation of student achievement, and fiscal integrity of its programs. Established academic policies and procedures for program and course approval are managed by the faculty, department heads, and deans of the respective colleges. Many of the courses offered as continuing education courses are taught by Montana Tech faculty. They are also evaluated with the same process as academic credit courses.

### **Standard 2.C.18**

**The granting of credit or Continuing Education Units (CEUs) for continuing education courses and special learning activities is: (a) guided by generally accepted norms; (b) based on institutional mission and policy; (c) consistent across the institution, wherever offered and however delivered; (d) appropriate to the objectives of the course; and (e) determined by student achievement of identified learning outcomes.**

Through the centralized management of Continuing Education through Enrollment Services, institutional policies are adhered to consistently. Enrollment Services must approve all course offerings. When courses are offered for academic credit, the regulations of the academic curriculum are followed. Standards for student contact hours, costs, and transcripting are applied to all continuing education opportunities. When offering courses that award CEUs, Montana Tech works directly with the Office of Public Instruction to ensure the courses meet current standards. Additionally, when the [Institute for Educational Opportunities](#) offers special learning activities, the policy followed is in accord with national guidelines as established by the [International Association for Continuing Education and Training \(IACET\)](#). Furthermore, when students are awarded continuing education credit based on outcomes, the credits are substantively equal to the outcomes of the students taking the class via a traditional model. This process is ensured in that the instructor and department offering the continuing education course are also responsible for the traditional course. Table 2.C.18 contains examples of the variety of continuing education courses that Montana Tech has offered.

**TABLE 2.C.18 – EXAMPLES OF CONTINUING EDUCATION COURSES**

CAPP 131	Basic MS Office
DDSN 245	Civil Drafting I
DDSN 246	Civil Drafting II
BIOL 591	Research in the Class: Phage Biology for Teachers
BIOO 235	Rocky Mountain Flora
GEO 291	Intro to GIS
HPRV 230	Historic Construction Technology of Stained Glass
MT 291	Montana 1965-1985 Period of Change

**Standard 2.C.19**

**The institution maintains records which describe the number of courses and nature of learning provided through non-credit instruction.**

Montana Tech does not offer non-credit programs or courses.

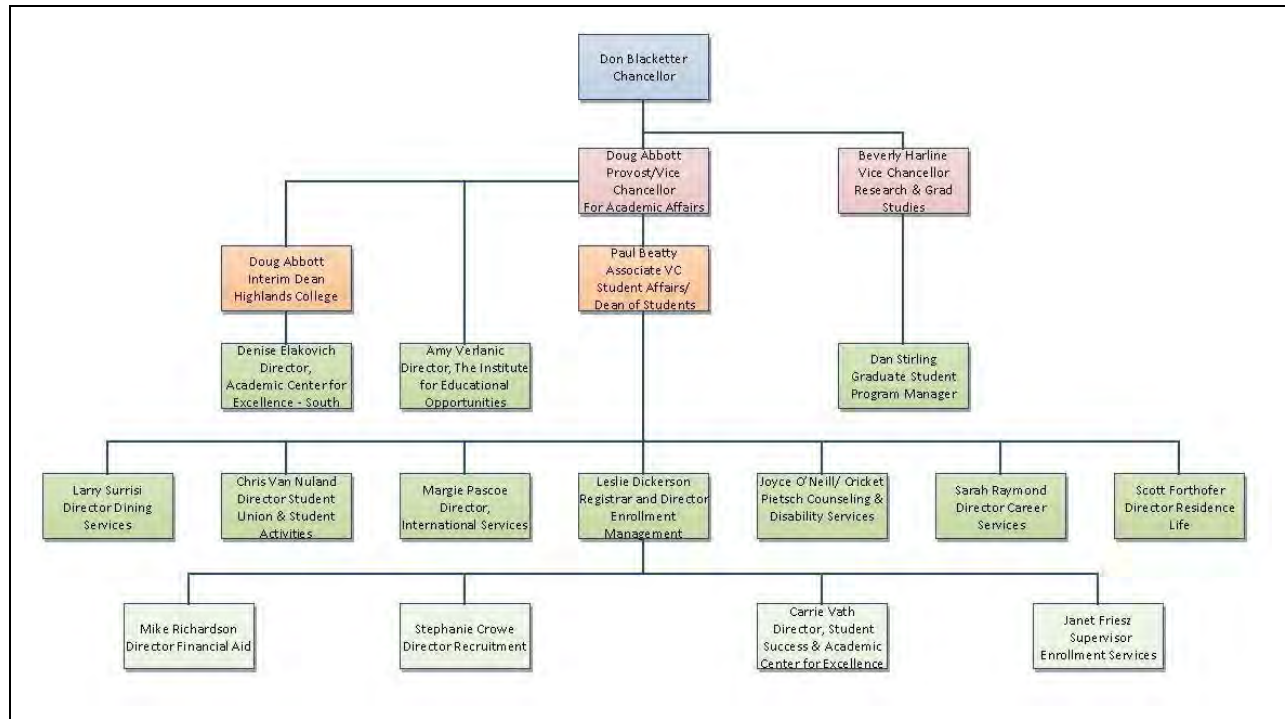
**Standard 2.D–Student Support Resources**

**Standard 2.D.1**

**Consistent with the nature of its educational programs and methods of delivery, the institution creates effective learning environments with appropriate programs and services to support student learning needs.**

Montana Tech’s Student Services provides academic and support services with appropriate programs and services to support student learning needs. Under the primary leadership of the Provost, a coordinated student-centered approach is in place to provide services. Figure 2.D.I shows the structure of Montana Tech’s Student Services Organization as it assists students at both the Montana Tech and Highlands College campuses.





**Figure 2.D.I: Student Services Organizational Chart**

Student Services is structured to provide focused and consistent services to Montana Tech students. The student services organization includes the following 12 key resource areas, highlighted in green, to support student learning needs:

1. [Academic Center for Excellence \(ACE\)](#)—The two Montana Tech ACE Centers provide walk-in, appointment, and on-line tutoring services to both the North and South (Highlands College) campuses to help students achieve their full academic potential.
2. [The Institute for Educational Opportunities](#)—Montana Tech’s TRiO Student Success Services (SSS) supports first-generation, economically disadvantaged students as well as those students with disabilities. In addition, SSS supports opportunities for academic development and provides academic tutoring, financial and economic literacy training, mentoring, and advocacy and motivates students toward successfully completing their postsecondary science, technology, engineering, or math (STEM) education.
3. [Counseling](#)—Two full-time licensed therapists provide mental health services and promote wellness programming. In addition, the therapists coordinate disability services.
4. [Disability Services](#)—Montana Tech is committed to ensuring full and equal participation by eliminating barriers and making appropriate accommodations which allow students with disabilities to have equal opportunity in all aspects of campus life.
5. [International Students](#)—The Director of International Services works with foreign students to maintain proper immigration status and supports them throughout their academic experience at Montana Tech.
6. [Student Union/Activities](#)—Student Union, the hub for campus information and activities, is staffed by the Director of the Student Union/Activities, a Campus Scheduling Officer, and support personnel.

7. [Residence Life](#)—The Director of Residence Life and support staff assist students in on-campus residence hall living and campus apartment housing.
8. [Career Services](#)—Career Services staff serves students and alumni with career exploration, preparation, and implementation (starting their job search). The office assists company recruiters in connecting with students, alumni, faculty, and administration with a variety of services. Montana Tech students are consistently well-prepared for the job search and interviews, resulting in a significantly high Career Outcomes knowledge rate of over 90%.
9. [Student Health Services](#)—The Health Center is staffed by a physician two hours a day and a nurse four hours a day. The Center provides walk-in services for health-related issues Monday through Friday.
10. [Dining Services](#)—The Director of Dining Services, the management team, and support staff are dedicated to providing a variety of nutritious, well-balanced meals at reasonable prices.
11. [Financial Aid](#)—This office administers grants, loans, work-study, and [scholarships](#). Approximately 90 percent of our first-time students receive some form of financial aid.
12. [Enrollment Services](#)—Enrollment Services provides all services related to enrollment. Services include Registrar, admissions, class registration, financial aid, veteran’s services, transfer credit evaluations, and graduation check list. The Enrollment Services staff is cross-trained to assist both prospective and current students in all of these important areas, providing an effective one-stop shop to facilitate and enhance enrollment process at Montana Tech for our students.
13. [Recruiting](#)—The Recruitment Office is responsible for targeting and communicating with potential Montana Tech students, with the goal of increasing the overall enrollment of new, full-time student who will be successful at Montana Tech. They accomplish this by analyzing markets, identifying possible prospects, representing Montana Tech at various events, and communicating with potential students throughout the enrollment cycle, including personal interaction with students and the design and implementations of recruitment campaigns.

## Standard 2.D.2

**The institution makes adequate provision for the safety and security of its students and their property at all locations where it offers programs and services. Crime statistics, campus security policies, and other disclosures required under federal and state regulations are made available in accordance with those regulations.**

Montana Tech is committed to keeping the campus community (main campus, south campus, and apartment housing) safe and secure for all students, faculty, staff, and visitors. The Safety Committee, made up of faculty, staff, and students, is an active committee on campus. The Safety Committee has received funding for several important safety improvements. Examples include funding for Automated External Defibrillators (AED), additional exterior lighting, lock upgrades on classroom doors, and a new outdoor siren/public address (PA) system. Finally, successful safety grant proposals enabled Montana Tech to purchase additional snow removal equipment so that the campus streets, parking lots, and sidewalks are now a safer place to travel.

All students who are enrolled in a laboratory class where hazardous materials are used, or where a hazardous environment exists, are required to complete an online laboratory safety training every semester. This program is run through Moodle, and instructors require the students to complete the training and pass a test. Students must score at least a 90 percent on the exam before they are allowed

to work in the laboratory. Moreover, records of participation are maintained in the Environmental Health & Safety Office.

## **Emergency Response**

Montana Tech annually publishes the [Student Life Programs Emergency Procedures Manual](#) and the [Montana Tech Emergency Procedures](#); both are referenced in the [Student Handbook \(Emergency Procedures and Emergency Contacts\)](#). The “Montana Tech Emergency Plan Instructions” are disseminated via email to the campus at the beginning of the academic year and include information on the evacuation of buildings and assembly areas as well as many other aspects of the plan. [Montana Tech’s Alcohol Policy](#) is found on page 17 of the handbook, the [Drug Free Workplace Policy](#) on page 19, the [Firearm/Weapon/Explosive Policy](#) on page 21, the [Discrimination, Harassment, Sexual Misconduct, Stalking and Retaliation Policy](#) on page 22, and the [Annual Security Report](#) on page 25.

Montana Tech conducts evacuation drills at the beginning of every Fall semester for all classroom/office buildings on campus and once a semester for the residence halls. An email notification is sent to faculty, staff, and students at the beginning of Fall semester to remind them of the protocol and procedures for evacuations. Signs are posted in all buildings to indicate the location of the assembly area for that particular building.

Montana Tech changed vendors in the fall of 2015 for our emergency notification system. The new system, Regroup, allows us to send emergency notifications via text, email, and phone calls and is an opt-out system rather than an opt-in system, which was the protocol for our previous system. The outdoor siren/PA system is being expanded so any emergency information can be disseminated through that mode as well.

Montana Tech also works closely with Butte-Silver Bow Law Enforcement to use the Nixle 360 system. This system is a public safety communications system used by Butte-Silver Bow Law Enforcement to communicate with groups of people in a defined geographic area. Nixle 360 uses a database of telephone numbers and associated addresses, which when tied into geographic information systems (GIS), can be used to deliver recorded emergency notifications to a selected set (geographical area) of telephone service subscribers.

## **Campus Security**

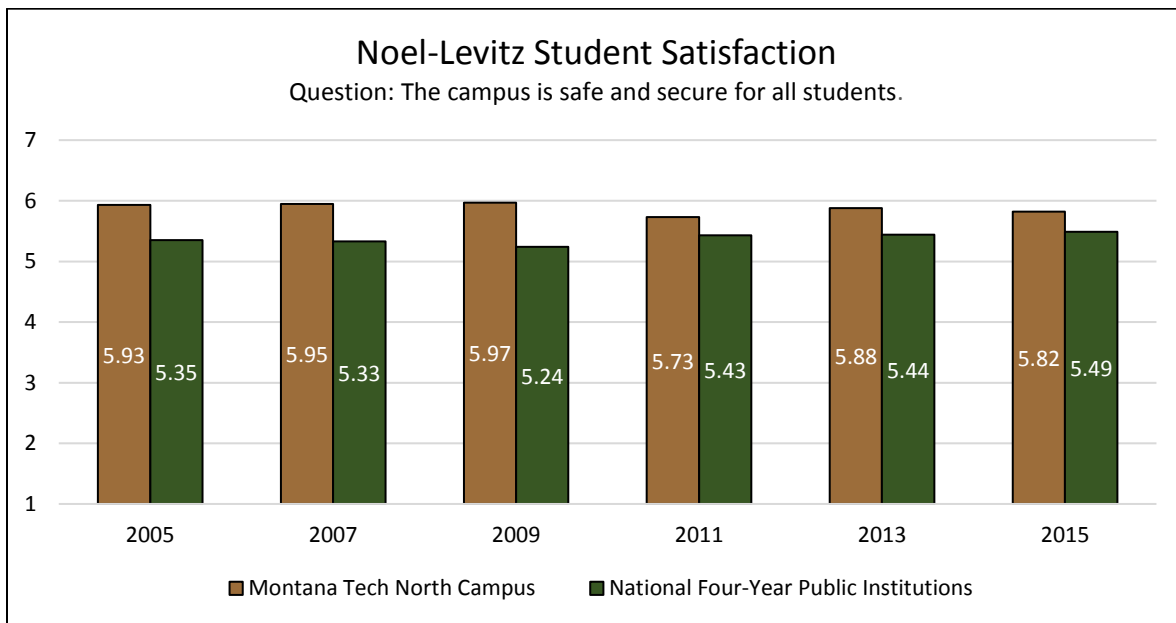
Montana Tech’s Campus Security provides services such as investigating thefts, handling of alcohol-related incidents or other on-campus behavior problems, and providing late-night escort services to campus buildings and parking lots. Officers are trained in law enforcement, crisis management, as well as cardiopulmonary resuscitation (CPR) and first-aid. Campus Security works closely with Butte-Silver Bow Law Enforcement, which can be reached by dialing 911; campus security can be reached by dialing 496-4357 (HELP).

Montana Tech requires all new students to take an online AlcoholEdu module, including the sexual assault prevention module called HAVEN. AlcoholEdu and HAVEN are web-based alcohol and sexual misconduct prevention programs that use the latest prevention techniques and science-based research to educate students. All new students are required to complete the courses, thereby resulting in significant prevention of alcohol abuse and sexual misconduct. (See Montana Tech’s [AlcoholEdu](#) and [HAVEN Impact Reports](#))

Montana Tech seriously takes its responsibilities under Title IX, the Clery Act (and its SaVE amendments), the Civil Rights Act, and the Violence Against Women Act as they relate to sexual assault,

sexual misconduct, sexual harassment, discrimination, retaliation, and bullying. Montana Tech developed updated policies, procedures, and training that strive to make sure relevant inappropriate behavior is prevented or otherwise stopped and that those affected are treated both equitably and sensitively. Montana Tech’s Title IX Coordinator is responsible for the compliance, implementation, and monitoring of efforts to comply with Title IX. Montana Tech also offers 24-hour reporting on its Campus Safety Webpage. Montana Tech’s [Annual Security Report](#) is published in the student handbook and on the website.

According to the Student Satisfaction Inventory (SSI), students believe the campus is safe and secure, and Montana Tech is committed to providing a safe working and learning environment for students, faculty, and staff. Figure 2.D.II depicts student responses on the Noel-Levitz SSI surveys. Students consistently report above national averages compared to 4-year public institutions because they believe the campus is safe and secure.



**Figure 2.D.II: Student Satisfaction Surveys**

### Standard 2.D.3

**Consistent with its mission, core themes, and characteristics, the institution recruits and admits students with the potential to benefit from its educational offerings. It orients students to ensure they understand the requirements related to their programs of study and receive timely, useful, and accurate information and advising about relevant academic requirements, including graduation and transfer policies.**

Beginning with the recruiting cycle and continuing beyond graduation, Montana Tech gathers and analyzes information on individual student needs and demographic trends. Every semester, Enrollment Services compiles and disseminates a 3<sup>rd</sup> Week Enrollment Summary for the campus and for the Office of the Commissioner of Higher Education (OCHE). This document reports student characteristics, such as international students, male/female ratios, transfer students, special admit types such as Jump Start and Western Undergraduate Exchange (WUE) students, as well as overall headcount and FTE. This data is then used to drive institutional decision making and programming (see [Enrollment Comparison Report](#)).

Educational needs are identified during the recruiting and admissions process. ACT/SAT scores, high school GPA, Compass Assessment (Montana Tech's chosen instrument used to assess placement of students in appropriate math and writing classes), high school courses, and past college courses/GPA are all used to help students enroll in programs and courses that best fit their level of preparedness.

Beginning with the 2013–2014 academic year, Montana Tech invested in an enrollment management platform, [Spectrum](#), that allows us to target students who are more academically prepared for our rigorous programs of study. This platform, houses all email outreach, which is customized for the type of students whose information is within the platform, ensuring that recruits get information that is accurate and timely for their needs. Additionally, Spectrum creates a personalized website for each student, and that website is also customized based on the prospective student's personal interests. Application checklists, visit dates, scholarship instructions, and registration procedures are just a few of the items customized for each student within the Spectrum platform.

Students are oriented to admission requirements (which include required course work for acceptance, math and English standards, and GPA through the future students' website), admissions publications, and through personal counseling via email, standard mail, and personal interaction. Montana Tech's average knowledge rate of 91% for graduates is an indicator of our practice of recruiting good students with the potential to benefit from Montana Tech's educational programs.

#### **Standard 2.D.4**

**In the event of program elimination or significant change in requirements, the institution makes appropriate arrangements to ensure that students enrolled in the program have an opportunity to complete their program in a timely manner with a minimum of disruption.**

As found in the BOR Policy and Procedures Manual ([Section 303.4](#)), Montana Tech may impose a program moratorium prior to eliminating a program. This approach gives students the opportunity to complete their program in a timely manner. In addition, a student may choose the degree requirements of any catalog published while they are continuously enrolled at Montana Tech. Thus, if a significant change is made in a degree requirement during a student's tenure at Montana Tech, the student may choose to follow the corresponding requirements of an earlier catalog.

#### **Standard 2.D.5**

**The institution publishes in a catalog, or provides in a manner reasonably available to students and other stakeholders, current and accurate information that includes:**

The [Montana Tech Catalog](#) serves as a guide for students, faculty, and others interested in the institution; it also covers academic regulations and requirements, admission, expenses, financial aid, student life, and undergraduate academic requirements.

The [Montana Tech Catalog](#) provides all general and specific academic and student services information required by prospective and currently-enrolled students, including the following

- (a) [Mission statement and core themes](#)
- (b) [Entrance requirements and procedures](#)
- (c) [Grading policy](#)

- (d) Information on [academic programs](#) and courses, including degree and program completion requirements, expected learning outcomes, required course sequences, and projected timelines to completion based on normal student progress and the frequency of course offerings;

Through the catalog and website, Montana Tech provides accurate and current information to students and the public. Staff regularly reviews publications and the website to ensure that the information is current. A list of the information maintained for students and other stake holders is provided below.

For information on expected learning outcomes published in the Montana Tech Catalog, see links below.

### **College of Letters, Sciences, and Professional Studies**

- [Biological Sciences](#)
- [Business](#)
- [Chemistry](#)
- [Computer Science](#)
- [Data Science](#)
- [General Science](#)
- [General Studies](#)
- [Health Care Informatics](#)
- [Liberal Studies](#)
- [Mathematical Sciences](#)
- [Network Technology](#)
- [Nursing](#)
- [Professional & Technical Communication](#)
- [Software Engineering](#)
- [Statistics](#)

### **School of Mines and Engineering**

- [Electrical Engineering](#)
- [Environmental Engineering](#)
- [General Engineering \(Including Civil and Mechanical\)](#)
- [Geological Engineering](#)
- [Geophysical Engineering](#)
- [Metallurgical & Materials Engineering](#)
- [Mining Engineering](#)
- [Petroleum Engineering](#)
- [Safety, Health & Industrial Hygiene](#)

### **Highlands College**

- [Associate of Science](#)
- [Business Technology](#)
- [Health](#)
- [Network Technology](#)
- [Trades and Technical](#)

## Graduate School

- Graduate School Outcomes

(e) Names, titles, degrees held, and conferring institutions for administrators and full-time faculty

(f) Rules, regulations for conduct, rights, and responsibilities

(g) Tuition, fees, and other program costs

(h) Refund policies and procedures for students who withdraw from enrollment

(i) Opportunities and requirements for financial aid

(j) Academic Calendar

### **Standard 2.D.6**

**Publications describing educational programs include accurate information on: a) National and/or state legal eligibility requirements for licensure or entry into an occupation or profession for which education and training are offered; b) Descriptions of unique requirements for employment and advancement in the occupation or profession.**

The [Nursing Program](#) is the only Montana Tech Degree that has licensure requirements specific to this standard. The Nursing Department ensures that all documents and publications are accurate and current. The nursing website is updated by the department's administrative associate to reflect changes in the program; provides current information about Montana Tech's nursing degrees, students, graduates, board results; and notifies prospective and current students of admission deadlines and policies.

Whenever changes occur in a departmental document or publication, all constituents are notified through a variety of methods. For instance, when the decision was made to convert the associate of science nursing degree to a pre-licensure 120-credit bachelor's degree, several steps were involved. First, the Director of Nursing met with all students in spring of 2014 to discuss and answer questions on courses, clinical requirements, and on the accreditation status of the bachelor's degree program. Next, the department website was updated to notify potential students, and an email was sent to all pre-nursing and nursing students well in advance of registration.

Each semester, nursing faculty review and revise, if necessary, the [Nursing Department Student Handbooks](#). All new and returning students are provided with an electronic copy of the Nursing Student Handbook during orientation each semester. During the semester, if changes are made to academic policies, requirements, information, evaluation of student performance, or to general policies, a specific process is followed. First, the Director of Nursing meets with each cohort to explain the change and answer student questions and concerns. Second, all nursing students are given a written explanation of the change and are required to sign off acknowledging their awareness of the change(s). Third, in addition to keeping the students informed, all program documents, publications, websites, and other information sources are updated by the departmental administrative associate to reflect the change(s) and keep current and potential students informed.

In spring 2016, a new nursing brochure was developed to recruit nursing students. It highlights both the pre- and post-licensure bachelor of science nursing degrees and also highlights curriculum and offerings.



Academic progression requirements are outlined in the [Nursing Student Handbooks](#) and in the [Montana Tech Catalog](#). All nursing students are given this information during the initial advising session and during orientation each semester.

#### **Standard 2.D.7**

**The institution adopts and adheres to policies and procedures regarding the secure retention of student records, including provision for reliable and retrievable backup of those records, regardless of their form. The institution publishes and follows established policies for confidentiality and release of student records.**

Current student records, including transcripts, are maintained on the Banner Student Information System Database, which is backed up nightly and secured off-site. Records that pre-date implementation of Banner (1989) are stored in fire-proof file cabinets or electronically in NOLIJ™ (the system used to store/retrieve scanned documents). This system is backed up weekly and secured off-site.

All employees with access to student records are required to complete FERPA training annually. All new employees are required to complete this training prior to being granted access to relevant student records. Our policy regarding confidentiality and release of student records is located in the [Montana Tech Catalog](#).

#### **Standard 2.D.8**

**The institution provides an effective and accountable program of financial aid consistent with its mission, student needs, and institutional resources. Information regarding the categories of financial assistance (such as scholarships, grants, and loans) is published and made available to prospective and enrolled students.**

Montana Tech has an effective and accountable program of federal, state, and institutional aid which is consistent with its mission. All federal and state aid programs are published on the [Montana Tech website](#). The December 1st priority filing deadline is published and made available to both prospective and returning students, and information is available at the [FAFSA website](#). Montana Tech awards approximately \$20 million per year through federal/state grants, work study programs, federal loans, scholarships, and tuition waivers. Per federal guidelines, the mission of financial aid is to award students to the best of our ability to meet their unmet need.

Scholarship opportunities are published on the [Montana Tech website](#). Montana Tech has one scholarship application with priority deadlines of January 15<sup>th</sup> for new students and another scholarship application with a priority deadline of February 15<sup>th</sup> for continuing students. Montana Tech awards over \$1 million in scholarships and tuition waivers per year to over 400 students. Graduate students apply for scholarships through a separate application process.

#### **Standard 2.D.9**

**Students receiving financial assistance are informed of any repayment obligations. The institution regularly monitors its student loan programs and the institution's loan default rate.**

Students who borrow federal student loans are required to complete an online entrance and exit counseling through the Department of Education website, [www.studentloans.gov](http://www.studentloans.gov), that reviews all of the rights and responsibilities of borrowing a student loan including repayment obligations. The Financial Literacy Education Program has Financial Literacy Specialist(s) available. Their contact information is available on the ACE website (this office houses the Financial Literacy Program) and is shared with those who need assistance to complete the on-line exit counseling.

All students who apply for financial aid and attend Montana Tech are required to complete financial education in Transit, an electronic financial literacy program provided by OCHE, during their first semester of attendance. In addition, sessions on financial literacy and individual appointments are available to all students, and these sessions cover the importance of monthly budgeting, student loan borrowing, credit cards, scholarship searches, and how to pay for college.

Every month a list of delinquent borrowers is sent to the Student Financial Services Default Prevention Unit, with whom which we contract to provide default prevention. Those students are contacted by mail and phone calls to let them know what their options are before they default on their financial obligations.

Every year, Montana Tech receives preliminary default rate data in February and final cohort default rate data in September through the Department of Education. This information is used to determine when our default prevention efforts are working, where we can improve, and how we can explore new ideas for keeping students from defaulting.

Montana Tech has been the recipient of the College Access Challenge grant from OCHE for the past four years. This grant is managed by the Director of Student Success and focuses on improving financial literacy. The grant covers a part-time financial literacy specialist housed on the South campus and a graduate student position housed on the North campus. The staff focus on offering workshops, one-on-one financial counseling sessions and manage the Everfi Transit – Financial Wellness™ online program. Montana Tech was a leader among the MUS requiring all students to complete this program starting in 2014. In 2015, Montana mandated that all students must complete programs. Transit – Financial Wellness™ is designed to empower students with the skills to successfully manage their finances while in school and beyond, and minimize dropout and student loan defaults through education. Transit – Financial Wellness™ equips learners with the knowledge and skills necessary for making responsible financial decisions. This program coupled with the face-to-face interactions provided by the grant will ideally result in a reduction of students who default on their loans or drop out of school due to financial pressures, and increase the number students paying their school fees on time.

## **Standard 2.D.10**

**The institution designs, maintains, and evaluates a systematic and effective program of academic advisement to support student development and success. Personnel responsible for advising students are knowledgeable of the curriculum, program requirements, and graduation requirements and are adequately prepared to successfully fulfill their responsibilities. Advising requirements and responsibilities are defined, published, and made available to students.**

### **Initial Student Placement**

Montana Tech gives high priority to placing students in the most appropriate math courses on the basis of their current skill and knowledge base. All new students are required to provide standardized test scores, previous college-level math coursework, and/or are tested at Montana Tech for math

assessment purposes. Based upon these early assessment results, each student is then carefully advised and placed in the most appropriate math course. For example, a student must have a 27 Math ACT or equivalent assessment to be placed in Calculus I. Moreover, freshman students admitted to Montana Tech “at-risk” or who are placed on probation are required to enroll in MT 1016 Montana Tech Success.

### **Advising Process**

Montana Tech uses a predominantly decentralized (professional or faculty advisors are located in their respective academic departments) faculty-only advising model. Students are assigned a faculty advisor in their declared major, and this faculty member will remain the student’s advisor during the entire period that the student is continuously pursuing the same degree. This arrangement develops a strong and lasting relationship between the student and advisor, primarily because the student is required to meet with this advisor at least once each semester to pre-register for the next semester’s courses. During this required visit, and perhaps during other visits, both the faculty member and the student discuss the student’s career aspirations and curricula choices. At the discretion of the advisor, an alternate pin number can be made available to those students who choose to register themselves online. These alternate pin numbers change each semester and are only available from the academic advisor. The [advising website](#), which is available for faculty, contains information on advising tips, learning communities, math and writing placement policy, and on general education requirements.

The Freshman Engineering Program (FEP) and Director of Student Success are geared towards advising freshman in the School of Mines and Engineering (SME) and College of Letters, Sciences and Professional Studies (CLSPS), respectively. This means that the majority of Montana Tech students are advised by a faculty member. Freshman in SME follow a centralized self-contained model, in which professional and faculty advisors are housed in one academic or administrative unit and advise them until they declare a major at the end of their first year. Freshman in CLSPS, excluding the department of nursing, follow a shared split-model, in which advising is carried out by faculty in their departments, as well as ACE staff. During the summer registration events, the FEP staff, Director of Student Success, and volunteer nursing faculty advise and guide the Enrollment Services Office in managing the new student registration process. Special care is made to ensure proper math and writing placement of each student based on ACT, SAT, or Compass test scores. During the summer, the Director of Student Success is available to help all students, and department heads and Highlands College faculty are expected to be available for advising/registering one day per week during the summer.

### **Student Development and Success**

In fall 2008, Highlands College established an AS program to allow transferability to a baccalaureate program either at Montana Tech or elsewhere across the state or nation. This program is specifically designed for those students who do not meet the minimum standards for entrance directly into one of Montana Tech’s 4-year degree programs. As a result, students now have the opportunity to become a bachelor’s degree-seeking student at Montana Tech through Highlands College. While taking developmental courses to strengthen their math and/or writing skills, students work with their AS advisor to design an individualized and flexible program that allows the student to take other transferrable courses that fulfill either general education or program-specific requirements. Upon completion of the developmental courses, students in the AS can choose either to finish the AS program or to transfer into the four-year degree program of their choosing.

Finally, the responsibilities of the North Campus ACE were also restructured in 2014 to sharper focus on student success. The Director of Student Success oversees the academic support services (Tutoring,

Academic Coaching, and the Writer's Studio) within ACE, manages the MT1016 College Success curriculum and supervises the instructors, chairs the Committee on Retention Efforts (CORE), oversees "best practices" in advising for faculty and staff, co-advises all students (regardless of major) on academic probation/suspension, and works closely with the FEP and AS staff. The Director of Student Success provides "Student Success" lectures to any faculty/departments who request this service during the first two weeks of the semester and is actively involved with new student orientation and recruitment events.

### **Standard 2.D.11**

**Co-curricular activities are consistent with the institution's mission, core themes, programs, and services and are governed appropriately.**

The Director of the Student Union/Student Activities develops, promotes, and manages co-curricular programs at Montana Tech. Student activity forums, technical presentations ("Tech talks"), and field trips to National Parks, such as Yellowstone and Glacier, target all students. Activities for the entire student body include comedy shows, movies, magic shows, music, and scavenger hunts, as are trips to Lewis and Clark Caverns, Fairmont Hot Springs, and Discovery Basin Ski Resort. American Indian Heritage Day and Veterans Day appreciation luncheons are examples of annual events that are indicators of achievement related to Core Theme 4, Objective 1 Promote a diverse and inclusive campus environment.

The ASMT provide budgetary support for the Director of the Student Union/Student Activities to hire two students to assist in designing and implementing such co-curricular activities as Club Rush, Homecoming week, the Annual Holiday Stroll, and M-Days week. This partnership between ASMT and the Director of the Student Union/Student Activities provides a collaborative approach to enhancing events for the entire student body.

Club Rush, an annual semester event, is offered to entice students to join and formulate campus clubs and organizations. Montana Tech has 40 to 50 [active clubs](#) that meet regularly throughout the year. A number of clubs attend national conventions related to a specific academic degree areas. Overall, clubs help with campus and community events, such as the Circle K and student athletes' annual involvement with the community-wide food drive.

The Highlands College Student Leadership also promotes a sense of community on the South Campus, to enhance a sense of belonging with Montana Tech at large and to provide service to the Butte community in general. This is achieved through various activities and events, which offer fun and educational components to enrich the college experience for students. Activities include, but are not limited to, the Welcome Back Lunch, Homecoming participation, Halloween Open House, Thanksgiving Lunch with an educational theme, collections for food baskets, an Easter event, and the Graduation celebration/lunch.

### **Standard 2.D.12**

**If the institution operates auxiliary services (such as student housing, food service, and bookstore), they support the institution's mission, contribute to the intellectual climate of the campus community, and enhance the quality of the learning environment. Students, faculty, staff, and administrators have opportunities for input regarding these services.**

Montana Tech operates auxiliary services in the following areas: Residence Halls, Apartment Housing, Health Physical Education Recreation (HPER) facilities, Dining Services, Bookstore, Student Union, and

Student Health Services. Each of these auxiliary enterprises makes its own unique contribution to the overall Montana Tech community. Key services provided by each of these auxiliary services include:

### **Residence Halls and Apartment Housing**

Residence Halls and Apartment Housing, fall under the direction of the Office of Residence Life, which is dedicated to assisting students in all facets of residential living and is committed to furthering college students' development outside the classroom. Here, its priority is to promote and foster growth in other areas of our students' lives. These areas include social, emotional, physical, cultural, and ethical issues.

#### **Residence Halls**

Montana Tech's residence halls provide a safe, clean, and orderly environment in which students are enabled to develop and grow. The housing staff includes four full-time employees. The Director oversees all operations of the program and is a member of the Association of College and University Housing Officers-International (ACUHO-I) and the Association of Intermountain Housing Officers (AIMHO). An administrative associate aids the Director with day-to-day operations and office paperwork, and two professional custodians maintain our two residence halls. Students are also employed as desk workers and custodians to provide additional services to residents.

Each floor in the residence halls is staffed by a Resident Assistant (RA), an upper-class student who lives in the residence halls and is primarily concerned with the welfare of the students on that floor. RAs enforce university policies, disseminate campus information, and plan educational and social programs/activities. RA training is typically 10 days in duration and is focused on educating the RA to meet student needs by developing communication skills as well as skills to use in confrontational situations. In addition, our RAs are provided with an increased knowledge of our campus and are provided with access to community resources. All RAs also attend CPR, First-Aid, and emergency response training. Additionally, the Director is assisted by a student Resident Assistant Director (RAD) to help enhance the student experience in the residence halls. The RAD position includes supervising all aspects of the residence hall desk operations as well as developing building-wide educational programs.

The RAs, RAD, and the Director develop a full calendar of programs that address student learning, engagement, and personal growth/development in the residence halls. RA programming gives students in the residence halls an opportunity to connect with other students, whether they live in university housing or they reside off campus. Each RA is required to plan at least three educational programs, three passive educational programs (for example, a floor bulletin board), and 14 activities per semester. Activities include organizing students from a given floor to go as a group to campus-wide events, such as sporting events, movies, and guest speakers.

The Residence Hall Association (RHA), a student-led organization for residence hall students, also plans programs. Traditional RHA programs include Laser Tag events, bowling, movie nights, and various holiday celebrations. RHA also supports the Butte community by providing a warm and safe trick-or-treat environment on Halloween. Typically, over 600 children from the community attend this event with their parents.

#### **Apartment Housing**

Montana Tech's Apartment Housing is made up of 60 apartment units located approximately one mile north of the main campus. Apartments are rented to university-related tenants according to a priority list. Priority is given to students with dependents and to upper-class students, followed by faculty/staff.

A student apartment manager lives on-site and is available to assist with tenant needs, perform routine maintenance, and to report any necessary repairs to the Physical Plant office.

### **Student Union/Student Activities**

The Student Union and Activities Office provides the support and leadership for the operation of student clubs and organizations. The Student Union Building, located in the middle of the campus, houses many of Montana Tech's auxiliary enterprises and is a center for activities and services for the entire Montana Tech community. This building is home to the auxiliary enterprises of Dining Services, the Bookstore, and Student Health Services. Montana Tech's Student Union also provides space for other campus services and facilities that include conference rooms (used by both on-campus and off campus entities), study areas, a computer lab, a mail shipping center, Central Duplicating, the Digger Card Center, KMSM Radio Station, ASMT offices, and the Student Activities offices. The Mill Building, managed by the Student Union Director, houses the recently renovated game room, Alumni lounge, Chancellor's Room, and the Coffee Mill.

### **Dining Services**

Campus Dining Services include the Marcus Deli, Main Dining Hall, Fire House Grill, Digger Subs, and a convenience store, which are all centrally located in the Student Union Building. The dining hall atmosphere allows all of the campus population to have a meal in the same facility, thus encouraging greater interaction and a strong sense of community. Montana Tech Dining Services also provides two satellite operations: the Coffee Mill located in the Mill Building, and the Highlands View Cafe, located at the Highlands College. These entities provide additional food services to our students on both campuses. The Marcus Deli Buffet provides a variety of nutritious, buffet-style meals including an ever-changing choice of entrees, homemade soups, an extensive salad bar, fresh fruits, baked desserts, and traditional fast-food favorites. The Fire House Grill features traditional favorites, including hearty burgers, fries, breakfast items, fresh subs, and much more. The convenience store carries a wide variety of grab-and-go products for those on the run. The Coffee Mill provides a cozy atmosphere, featuring Starbucks® gourmet coffee and espresso as well as a fast and efficient grab-and-go menu which includes fresh-baked pastries. At the South Campus, the Highlands College Grill features traditional fast food favorites that include burgers, sandwiches, made-to-order subs, salads, fries, and of course, breakfast items. This operation also carries a variety of grab-and-go selections which include beverages, baked goods, snacks, and chips.

All Dining Services staff are trained through the Serve-Safe program. This comprehensive program, provided by the National Restaurant Association, includes training in the proper handling of food products for public consumption and is approved by Montana's State Health Department. In this regard, all employees of dining services are required to be Serve-Safe certified, or become certified within one year of hire. Montana Tech provides training annually to ensure that all food service products and practices follow nationally recognized standards for nutrition, health, and safety.

### **Bookstore**

Montana Tech provides a full service, on-campus bookstore that has a textbook support system, a full array of academic/office supplies, computer supplies, candy/snacks, and college logo clothing and gift items. These items are available for purchase both in the store and online through the bookstore website. In an effort to help students keep the cost of their course materials down, all required materials are posted in a timely manner in accordance with the Higher Education Affordability Act. To

stay competitive in the market and to offer the students a lower price option for their course materials, the bookstore offers both new and used textbooks, book rentals by semester, and digital books. Specialized items can be special ordered for customer convenience. The store is conveniently located in the lower level of the Student Union Building. Hours of operation are favorable to both students and faculty/staff.

### [HPER Complex](#)

The HPER Complex, home to Oredigger men's and women's basketball, women's volleyball, and student recreational opportunities recently underwent a \$3.6 million overhaul. The expansion/remodel project includes upgraded cardio-fitness and weight room facilities; additional locker room space; a complete swimming pool overhaul; and updated heating, ventilation, air conditioning, and lighting systems.

### [Student Health Services](#)

Montana Tech also provides medical services to our students through the Student Health Center. Located on the first level of the Student Union Building, the Student Health Center provides services to North Campus students who are registered for seven or more credits and to Highlands College students who have opted to pay the Health-Center Fee. The Health Center is open Monday through Friday from 10 a.m. to 2 p.m., and a physician and nurse are available between 11 a.m. and 1 p.m. Health-Center professionals administer throat cultures, give allergy shots, offer health care counseling, treat sprains, give and remove stitches, and aid with other health problems.

### **Feedback on Auxiliary Services**

Montana Tech's students, faculty, staff, and administrators have a variety of avenues and opportunities to provide input and feedback on auxiliary services. We formally evaluate all student services, including auxiliary services, by using surveys and advisory groups. Montana Tech administers the National Student Satisfaction Inventory (SSI) to North and South Campus students every other year. SSI survey results have driven programmatic changes, and survey results have consistently improved. To improve student satisfaction and address concerns, satisfaction item gaps of one or greater are identified each assessment year. A performance gap is simply the importance score, minus the satisfaction score. The larger the performance gap, the greater the discrepancy between what students expect and their current level of satisfaction. Therefore, the smaller the performance gap, the better the institution is at meeting student expectations.

Thirteen of the eighty-three survey items had a performance gap of one or greater. The item program area is prompted to develop a plan to improve the low satisfaction. For example, Item 38. *There is adequate selection of food available in the cafeteria* gap is 1.76. Montana Tech hired a new Dining Services Director in spring 2016. As we enter the 2016–2017 school year, Dining Services is committed to quantifiable improvements in guest satisfaction ratings.

In general, the plan calls for and provides pathways to the continuous improvement of product, service and the overall guest experience. The plan also addresses purchasing strategies; preparation methods; enhanced levels of transparency regarding food content, recognition of preference issues espoused by various constituent groups, including demand-based access to allergen, nutrition facts, and general departmental information; improvement of on- and off-premise catering offerings and request for proposal (RFP) response times; balancing pricing structures vis-a-vis payment type; and an examination of the effectiveness of various communications platforms in the dissemination of daily menus, features, events, and dietary information.



Key to the concept of a fresh, choice-driven menu is the ability of the guest to see food being prepared, carved or finished *a la minute*. The existing installation allows for at least two opportunities each meal period to prepare items in front of the guest, and in the past these opportunities have been missed or simply disregarded.

Currently, the budget can accommodate this type of program five hours per day, five days per week. Reorganization of the evening menu and workflow could allow for another ten hours per week of exhibition cooking without the need to add labor to the existing framework. Full use of this program will begin in Fall 2016.

Ten of the eleven [SSI composite scale scores](#) on both the North and South campus are above the National Average, and eight of the eleven scaled scores on the [campus-specific surveys](#) of Montana Tech residents also have historically shown an above average level of satisfaction related to residence hall living.

Input on bookstore policies is acquired by the Bookstore Advisory Committee, chaired by the Bookstore Director. Representatives from ASMT, Faculty Senate, and RHA meet as needed with the Bookstore Advisory Committee.

Montana Tech also utilizes [advisory groups](#), such as the Campus Access Committee, the Bookstore Advisory Board, Strategic Planning Committee, and the Chancellor's Cabinet to provide on-going feedback for auxiliary services.

### **Standard 2.D.13**

**Intercollegiate athletic and other co-curricular programs (if offered) and related financial operations are consistent with the institution's mission and conducted with appropriate institutional oversight. Admission requirements and procedures, academic standards, degree requirements, and financial aid awards for students participating in co-curricular programs are consistent with those for other students.**

The Montana Tech Athletic Department has a clear mission and sense of vision which enables us to stay focused on our overall goals and objectives.

#### **MISSION**

*The Athletic Department is committed to the campus's main institutional mission in which Montana Tech, through exemplary undergraduate and graduate education, workforce development, research, and service builds on a strong heritage in engineering, in science, and in technology to blend theory with practice in meeting the changing needs of society and the responsible development and use of natural resources.*

More specifically, the Athletic Department's mission focuses on three interrelated communities:

- 1. Student-Athlete Community**—The goal is to provide the student-athlete with opportunities and support that will enable the student-athlete to have success both academically and athletically.
- 2. University Community**—The goal is to promote school identity and spirit through the action of student-athletes within both their respective athletic arena and within the general university community.
- 3. Butte Community**—The goal is to enhance and engage with the local community of Butte and southwest Montana through public service.

## **Performance**

At the end of the year, the coach and his/her respective program is reviewed. The annual performance reviews are completed by the Athletic Director and provided to the athletic staff. The areas of review include, but are not limited to, recruiting, coaching effectiveness, scheduling, preparation, public relations, student-athlete development, and budget-to-actual fiscal performance.

Montana Tech's Athletic Committee is made up of faculty, staff, and administration. This committee meets quarterly and reviews coaches' evaluations and sets policy for athletics. The committee's priority is to update the student-athlete handbook to better communicate what Montana Tech expects from its student athletes. At Montana Tech, student comes before athlete, and our goal is to compete for championships with students that graduate. The motto created for our student athletes is *students, leaders, champions*.

## **Oversight**

The Athletic Director reports directly to the Chancellor so that both agree on how the entire athletic program can best enhance the overall mission of the institution. The Athletic Department's policies and procedures are evaluated by the Chancellor every year. The Chancellor reviews each coaches' performance, graduation rates, community involvement, student athlete experience, and fiscal prudence. The Athletic Director is responsible for the management and fiscal operations of the Athletic Department. Accounting for the financial activities of the Athletic Department is done through the Business Office, which reports to the Vice Chancellor of Administration and Finance, who, in turn, reports to the Chancellor. In addition to athletic fees, Athletics is supported by the Digger Athletics Association (DAA). Financial investments made by Montana Tech alumni, fans, and friends to the DAA Annual Fund are directly invested in the academic expenses awarded to those deserving student athletes who have chosen to compete in intercollegiate athletics at Montana Tech. These expenses are the direct responsibility of the DAA and its members.

## **Academic Integrity and Fairness**

Montana Tech is an active and contributory member of the Frontier Conference of the National Association of Intercollegiate Athletics (NAIA) and fully complies with the rules, regulations, and policies of both governing bodies.

Montana Tech treats student athletes and non-athletes exactly alike. A prospective student athlete must complete all of the admission, registration, and academic standards requirements of Montana Tech.

For the purpose of admissions, all student-athletes must meet NAIA eligibility standards and Montana Tech admission standards. Admission of student athletes is evaluated by Enrollment Services using the same process and standards as for all Montana Tech students. Athletic eligibility is verified at the beginning of each season by the Office of Enrollment Services, Athletic Director, coach, and a faculty representative. Privately-funded athletic scholarships and state-awarded waivers are chosen by recommendation of the coaching staff.

## **Financial Aid**

In terms of financial aid, student-athletes apply for all state, federal, and non-athletic department scholarships through Enrollment Services as do non-athletes. The Athletic Department's privately-funded scholarships are chosen from the recommendations of the respective coaching staff, and

Montana Tech abides by the NAIA rules as to the number of scholarships allowed for each athletic program. Montana Tech does not provide the full level of scholastic aid allowed by the NAIA. A report is filed each Fall with the NAIA outlining Montana Tech's Institutional Financial Aid.

Academic standing is evaluated for all students by the Enrollment Services Office each sports season. Additionally, for student athletes, eligibility is verified at the beginning of each season by Enrollment Services and signed by the Director of Enrollment Services, Athletic Director, coach, and by the faculty representative. Finally, graduation and degree requirements for all students are handled by the academic departments and Enrollment Services who both use the same process and criteria for athletes as for non-athletes ([see Montana Tech Catalog](#)).

## **Standard 2.D.14**

**The institution maintains an effective identity verification process for students enrolled in distance education courses and programs to establish that the student enrolled in the distance education course or program is the same person whose achievements are evaluated and credentialed. The institution ensures the identity verification process for distance education students protects student privacy and that students are informed, in writing at the time of enrollment, of current and projected charges associated with the identity verification process.**

### **Policies**

Authentication credentials for students are created within 24 hours of registering for classes. These credentials allow student access to Office 365, Oredigger Web, MyMtech (the campus portal), and to the learning management system (Moodle).

Upon retrieving their username and password for the first time, students are required to set a user-defined question and answer. If students forget their password, then their Student ID, their Last Name, Question, Answer, and date of birth are required to retrieve the information again.

Authentication credentials are validated by Microsoft Active Directory. The Central Authentication Service (CAS) interfaces with the Active Directory in order to provide single-sign-on capability for web applications that include MyMtech, Moodle, and Oredigger Web.

All of Montana Tech computer systems are covered by [policies](#) found on the web. Students are also held accountable to the Montana Tech [Student Conduct Code](#).

Faculty, staff, and teaching assistants are required to take a FERPA course before being allowed access to any student information. Additional security practices vary from course to course, and from instructor to instructor.

### **Distance Learning**

For example, a professor is delivering an Auditing 1 course to students at Montana Tech and to students at Helena College. They meet on Wednesday nights at 6:00 p.m. Helena has a portable Tandberg which is used to call our classroom, located in the Natural Resource Building (NRB), Room 226. Because the students can see each other in real time, they need to be in attendance when class is held. The Helena students are registered at Montana Tech and therefore have authentication credentials which allow them to access their homework assignments and to upload the answers back into Moodle. In this way, the lectures are recorded, but the students cannot access the recordings unless they first sign into Moodle.

Another example is a distance statistics class. The professor requires that both the three midterm exams and the final exam be proctored. If a student is unable to attend the exam on campus, then the student needs to apply for a proctor within the first two weeks of school. After the proctor application is received, a proctor is contacted by the professor to ensure that person understands and agrees to carry out the responsibilities of an examination proctor and is not related or otherwise close to the student(s) being proctored. Each exam package includes a proctor agreement to be signed and instructions for administering the exam; moreover, details regarding this process are posted in the course syllabus and announced on the course website.

Yet another example is Montana Tech's Nursing Program. The majority of assessments and assignments within this program require the student to write several papers in APA format and to participate in discussion groups. This extensive communication allows the instructor to get a feel for the level of quality and use of language the student provides.

In spring 2016, Montana Tech hired a Director of Distance Learning to advise and strengthen the institution's position on all facets of distance learning. In accordance with this position, compliance is a major responsibility. Compliance for the Director includes monitoring and advising the school on new and emerging technologies, trends, regulations, as well as educational technologies. This position also provides technical support to faculty and aids our Information Technology team in monitoring emerging distance learning technologies

## **Standard 2.E–Library and Information Resources**

### **Standard 2.E.1**

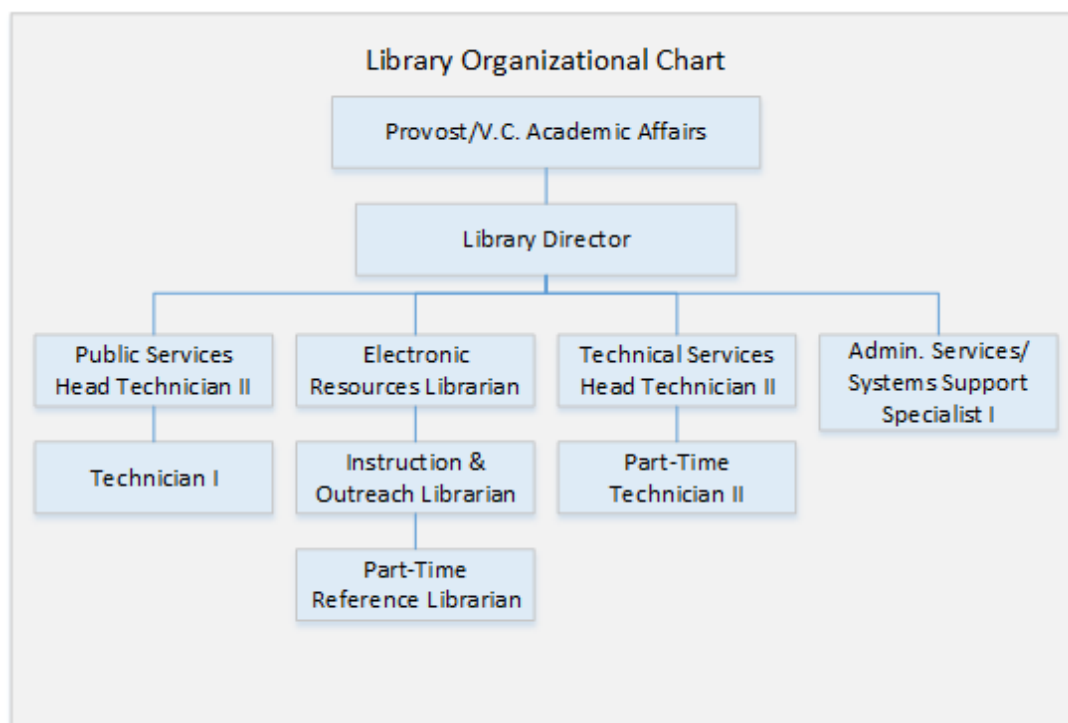
**Consistent with its mission and core themes, the institution holds or provides access to library and information resources with an appropriate level of currency, depth, and breadth to support the institution's mission, core themes, programs, and services, wherever offered and however delivered.**

#### **Library Mission Statement**

The Montana Tech Library's mission is consistent with [Montana Tech's mission](#), core themes, programs, and services. The Library is an integral part of Montana Tech because of its highly trained staff, which

*“advances knowledge creation within the Montana Tech community through services supporting the curation, promotion, and preservation of diverse resources and services essential for the scholarship and creativity of students, staff, and faculty.”*

The Library Organizational Chart in Figure 2.E.1 illustrates that the library staff includes a tenured director, two full-time and one part-time library faculty, and four full-time and one part-time support staff.



**Figure 2.E.1 Library Organizational Chart**

Montana Tech’s Library provides access to extensive scholarly collections for students in the 4-year and graduate programs on the North Campus and for students in the 2-year, certificate, and workforce-development programs at Highlands College. In addition, a small collection is located at ACES to support Highland College’s AS, certificate programs, and workforce-development programs.

### **Holdings**

The Montana Tech Library owns or provides access to a broad range of current academic resources that support all academic programs. These resources include both electronic and print journals and books, special collections, archives, technical reports, patents, and maps. The Library participates in the Federal Depository Library Program and holds U.S. Government publications related to mining and natural resources dating from the 19<sup>th</sup> century. The Library owns and receives regular updates to its large, unique collection of Federal Superfund Documents related to the remediation and clean-up of mine waste in Butte, Montana, located at the headwaters of the largest superfund site in the U.S. Other collections include documents from the State of Montana, the MBMG, other U.S. states, and foreign countries. Moreover, the Library is the only designated Patent and Trademark Resource Center in Montana. The Library has the support of the institution to facilitate programs and offer dynamic services in response to changing departmental conditions.

### **Electronic Collections**

Most of the Library’s resources are in electronic format. The extensive breadth of its e-collections are evident not only in the Library’s [150 scholarly databases](#), which contain 240,000 electronic serials, but also in its [340,000 e-books](#), which support all programs, academic disciplines, and research areas (see [Collection Development Policy, p.3](#)). Most databases contain full-text information and are searchable from the [Library Homepage](#) in a single search box called Digger

Search. As Montana's only Patent and Trademark Resource Center, the Library provides access to PubWEST and PubEAST, the internal U.S. Patent and Trademark Office databases for use by patent examiners, professional patent searchers, and the public.

### **Print Collections**

The Library owns 135,000 books arranged by the Library of Congress Collection Classification system, with all titles searchable via [the Library search tool](#). The Library's print materials include a large collection of historical mining resources and extensive documents from the U.S. Bureau of Mines and the U.S. Geological Survey. The print serials collection currently includes over 1,900 titles, 180 of them current. Historical serials in science, mining, and chemistry date from as early as 1827. Special Collections contain approximately 1,800 volumes including Montana history, works by Montana authors, and historic works in mining, geology, and metallurgy. The Library archives contain 60 linear feet of Montana Tech records as well as historical photographs, student newspapers, and course catalogs. The map collection contains over 80,000 items. For details, see [Collection Development Policy, p.10](#).

### **Expanding Holdings**

In February 2015, the Montana Tech Library hosted a meeting for Deans and Directors of Montana's academic libraries to explore a state-wide consortium. As a result, the Treasure State Academic Information & Library Services (TRAILS) consortium was created. In March 2016, library deans at the state's two largest academic libraries, UM-Missoula and MSU-Bozeman, negotiated a deal for all academic libraries in the state to jointly purchase software capable of simultaneously searching each library's resources. This is the beginning of future collaborative efforts enabling the Library to continue expanding its resources.

### **Access**

All of Montana Tech's electronic resources are accessible to students, staff, and faculty 24-hours per day, seven days a week, through the Library's website via proxy server. Community users are provided access within the Library building, which is open 79.5 hours per week during fall and spring semesters, with extended hours during final exams. The Library is open 42.5 hours a week during summer and winter breaks.

The Library uses Voyager and Primo software for searching, cataloging, and circulation. The Electronic Resources Librarian and the Library Systems Support staff monitor and maintain these systems. Technical Services staff ensure access to non-electronic resources through timely processing and shelving of print and media resources. Public Services staff members use and maintain the ILLiad software system for [interlibrary loans](#), providing students and faculty access to materials not owned by the Library. Given a citation, Public Services staff members are able to obtain a physical book when requested, and when an individual article is needed, the Library is often able to obtain an electronic copy and deliver it to the patron directly. Resources typically arrive within two to seven business days for physical item requests, and within three days for article requests.

To help undergraduates navigate the abundance of online and print resources and locate relevant resources quickly, the librarians collaborate with teaching faculty and create online [Subject Guides](#). The guides identify books, databases, journals, and websites that are directly related to specific disciplines or courses. Librarians offer one-on-one research consultations to all students and faculty on a scheduled and walk-in basis, in addition to email support. Librarians collaborate with faculty to provide in-class library instruction sessions on how to effectively access, navigate, and select resources. When it is

appropriate, they attend departmental and Library Committee meetings to update teaching faculty on new additions to the library's collection.

The Library provides global access to campus research through [Digital Commons @ Montana Tech](#), Montana Tech's open-access repository for publishing faculty and student research and scholarship. Since its launch in May 2012, this site's content has grown to 1,300 items that have been downloaded more than 65,000 times from such diverse places as India, Poland, Peru, Vietnam, and South Africa.

### **Currency, Depth, and Breadth**

Currency, depth, and breadth of the electronic and print collections is ensured by the Collection Development Team. Members are responsible for developing and implementing policies and for analyzing and evaluating all collections. They use defined criteria to evaluate the currency, depth, and breadth of Montana Tech's library collections. ([Collection Development Policy, Selection Criteria, p. 5](#), and [Collection Depth Indicators, Appendix E](#)).

### **Standard 2.E.2**

**Planning for library and information resources is guided by data that include feedback from affected users and appropriate library and information resources faculty, staff, and administrators.**

#### **Planning Feedback**

Planning for resources is based on both the expertise of the librarians and on the feedback received from faculty, students, and staff. Librarians also get feedback by serving on the CRC, Faculty Senate, and Graduate Council. Other components of planning data include budget analysis (see [Collection Development Policy, Appendix A](#)) and usage statistics.

Feedback is systematically received through the CRC's required Curriculum Change Request Form. (See Figure 2.E.2.)

I have consulted with \_\_\_\_\_, faculty member and librarian, and discussed the online and print resources needed to support the *academic content* in a new course or change(s) in the *academic content* of an existing course, including existing resources and possible acquisitions.

\_\_\_ No consultation is required since changes are only in the course number, course name, or course pre-requisites.

**Figure 2.E.2 Curriculum Change Request Form**

This valuable feedback enables the Library to plan for and acquire resources needed to support new courses and content. It also provides an opportunity to remind faculty of existing library resources.

Faculty from all campus departments serve on Montana Tech's Library Committee. At regular committee meetings, they provide specific feedback and make key recommendations about library programs, initiatives, policies, and collections. As a result, all faculty are encouraged to suggest titles.



The Library also provides a [Suggest Items](#) link on its website and a suggestion box located in the Library, which are both reviewed regularly for feedback.

### **Responsiveness to Users**

In Fall 2013, Montana Tech librarians developed and conducted a Library Student Satisfaction Survey, which included open-ended questions that asked students what services and resources they would like the Library to offer. The Library revised and re-administered this survey in Spring 2015 and Spring 2016. The library staff regularly reviews the survey results and uses this feedback for planning purposes. For example, [Spring 2016 results](#) indicate that 27% of students received library instruction, and 94% found that instruction to be helpful.

Communication is encouraged among the library staff and occurs informally on a daily basis and formally at the bi-weekly staff meetings. This responsive environment fosters innovative ideas that expand services and enhance the users' experience.

### **Standard 2.E.3**

**Consistent with its mission and core themes, the institution provides appropriate instruction and support for students, faculty, staff, administrators, and others (as appropriate) to enhance their efficiency and effectiveness in obtaining, evaluating, and using library and information resources that support its programs and services, wherever offered and however delivered.**

#### **Instruction and Support**

The Library advances Montana Tech's mission to provide "exemplary undergraduate and graduate education" by providing instruction and support for access and use of library resources.

Librarians seek to build relationships with faculty and integrate library and information literacy instruction sessions within Montana Tech courses. These sessions generally provide students with guidance necessary for accessing, navigating, evaluating, using, and citing information found within the specific library collections. In addition, emphasis is placed on sound research methods and information evaluation skills applicable to any information environment, scholarly or otherwise. Through collaboration with faculty, library instruction is directly embedded into several Montana Tech courses. Librarians teach subject and assignment specific sessions and provide ongoing research assistance tailored to these projects.

In addition to services provided to North campus students, library faculty teach in-person instruction sessions at the Highlands College campus and provide in-person and remote services to those students as well.

Librarians currently teach credit-bearing Chemical Literature and Montana Tech Success courses. The Chemical Literature class is co-taught with a chemistry faculty member. In the past, librarians have taught Research Methods courses and Honors Seminars.

Between instruction sessions and credited courses, librarians taught 70 classes in the 2015-2016 fiscal year, with an overall attendance of 1,051 students. Librarians also support students with on-demand reference services, helping them with any questions they may have regarding library resources, services, and information in general. During the same fiscal year, librarians answered 1,275 reference questions in person and a further 81 inquiries received via email.

To support and instruct distance learners, librarians offer several online instruction options. These include [Subject Guides](#), [Tutorials](#), and the [Ask a Librarian](#) service.

To inform faculty about library resources and services, librarians are assigned subject areas and act as [liaisons](#) to specific departments. An online [Library Instruction Request form](#) has been developed for faculty convenience.

Teaching and training workshops are developed by librarians for both the campus and the local community. For example, the library consistently offers a seminar to introduce and train campus and community users on the Library's [Core Collections](#) for the Foundation Center's [Funding Information Network \(FIN\)](#). FIN targets under-funded and underserved populations who need specific information and training to become successful grant seekers.

Moving forward, the Library seeks to design and implement tools and strategies for the assessment of library instruction during the 2016-2017 fiscal year. By doing so, the Library seeks not only to improve the effectiveness of existing instruction methods but also to solicit feedback necessary to expand and develop instruction services.

#### **Standard 2.E.4**

**The institution regularly and systematically evaluates the quality, adequacy, utilization, and security of library and information resources and services, including those provided through cooperative arrangements, wherever offered and however delivered.**

#### **Resource Evaluation**

Library evaluation methods are defined by the Collection Development Team, as mentioned earlier in 2.E.1. The team uses numerous professional tools and methods to evaluate the quality, adequacy, use, and security of resources.

##### **Quality**

To evaluate overall resource quality, Montana Tech's librarians consult the Association of College and Research Libraries publication, *Choice* – the premier library source for reviews and recommendations in higher education. Also used are the *American Journal of Nursing*, *Book List*, and the *Library Journal*, all of which provide recommendations for academic libraries. Librarians generate Journal Citation Reports through Thomson Reuters; these indicate the top-cited journals in specific disciplines. Librarians also use Google Scholar Metrics, which provide reports on recent citations in publications that are useful to faculty who need to know where to publish new research.

To further enhance evaluation of resources, Montana Tech librarians started an initiative to develop "Program Profiles" for all disciplines. Each profile incorporates information from departmental faculty and contains a program description, teaching and research areas, and collection focus and analysis. This outreach gives the librarians a thorough understanding of individual programs and specific resources needed to support them. For examples, see the Chemistry and Nursing profiles in the [Collection Development Policy, pp.15 & 27](#).

Montana Tech Library's principal partner in cooperative arrangements for joint purchasing is the UM's Mansfield Library. In addition, when Mansfield Library considers purchases or cancellations in STEM program resources, Montana Tech is given access to test databases and consulted about cancellations.

## **Adequacy**

Adequacy of the collection is measured by using standards developed at Cornell University called Collection Depth Indicators and widely used by academic libraries. These indicators are numerical values (0-5) that indicate the scope of those materials that libraries intentionally need to collect. These resources identify the scope of the collection and ensure that the Library collects the appropriate resources to support Montana Tech's programs. Most of the Library's collections are in the 3b and 3c ranges, indicating support for upper division undergraduate courses and master's degree programs. The Library has added materials at level 4 and continues to review collection depth in support of the Materials Science doctorate program. For all indicators, see [Collection Development Policy, Appendix E](#).

Librarians consult impact factor rankings for journals in specific subject areas to determine adequacy of serials in Montana Tech's designated fields of study. This type of information, combined with usage statistics and faculty needs, is used to analyze and make determinations about database contract renewals and cancellations.

Shared purchasing with the UM Mansfield Library greatly enhances the Montana Tech Library's ability to provide adequate resources that it could not afford otherwise. The Library is asked by Mansfield Library to critique proposed purchases and to make recommendations. The Library jointly purchases 17 databases with UM-Missoula. The Mansfield Library also negotiates contracts that offer resources to The Montana Tech Library at no additional cost. For example, the Library receives access to 103 additional databases through partnership with Mansfield Library.

Librarians also monitor trends in vendor policies to ensure adequate resources at affordable prices. The Library purchased Lexis/Nexis (a law database) and SciFinder (a chemical structure database) at a dramatically reduced price, especially for a school of Montana Tech's size. In this instance, shared purchasing with UM-Missoula offered no advantage.

The Library also has cooperative agreements with the membership organization, Lyris, to purchase Springer resources and MathSciNet. Each of these operates on an "opt-in or opt-out" purchasing model.

## **Utilization**

Use of the Library's collections is determined by gathering and analyzing statistics. Electronic resources are evaluated through library website visits, full-text articles retrieved, library guide views, and Digital Commons downloads. Print use is determined by circulation and interlibrary loan transactions.

Google Analytics "Page Views" statistics indicate how often a web page is visited. In academic year 2015-16, the [Library Homepage](#) ranked fifth highest at Montana Tech in page views – preceded by the Montana Tech Homepage, Campus Email, News Page, and Events Page. The Library homepage received 53,485 views, which illustrate a strong interest in and reliance on the its online resources and services.

Certain statistics prove helpful with budget allocations. Table 2.E.I demonstrates selected examples in which a librarian examined the "cost-per-use" of print-only journals. Subscriptions are evaluated using in-house usage statistics (determined by journals removed from the shelves) and circulation statistics. Using this data, librarians evaluate print journals that might be considered for cancellation or for purchase in electronic format only. The latter option would necessitate shifting funds from the print to the electronic budget.

**TABLE 2.E.I PRINT SERIALS, COST-PER-USE**

<b>Print Serials, Cost-Per-Use, Fiscal Year 2015</b>			
<b>Title</b>	<b>Cost</b>	<b>Times Used</b>	<b>Cost Per Use</b>
American Journal of Nursing	\$588	6	\$98.00
Consumer Reports	\$33	6	\$5.50
Journal of Geotechnical and Geoenvironmental Engineering	\$1,576	2	\$788.00
Science	\$1,397	3	\$465.67

Each fiscal year, the Electronic Resources Librarian runs standard reports from database vendors. Table 2.E.II below illustrates the number of full-text articles downloaded from specific databases, which indicates that Academic Search Complete and ScienceDirect are by far the most-used databases on campus.

**TABLE 2.E.II FULL-TEXT ARTICLES DOWNLOADED**

<b>Database</b>	<b>Full-Text Downloads Fiscal Year 2016</b>
EBSCO Academic Search Complete	21,108
ScienceDirect	15,216
EBSCO Business Source Complete	7,318
EBSCO CINAHL	6,153
Wiley Online	3,186

**Security**

Campus Network Services maintains firewall and virus detection software that safeguard all computers, servers, and online resources. The Library inserts magnetic security strips in print resources that are detected by the security gate and set off an alarm when materials have not been checked out and desensitized. In addition, seven security cameras are in place throughout the library building to deter theft.

**Service Evaluation**

The Library uses several methods to evaluate the quality, adequacy, and use of its services. Methods include user surveys and statistical analyses to identify strengths and weaknesses.

## Surveys

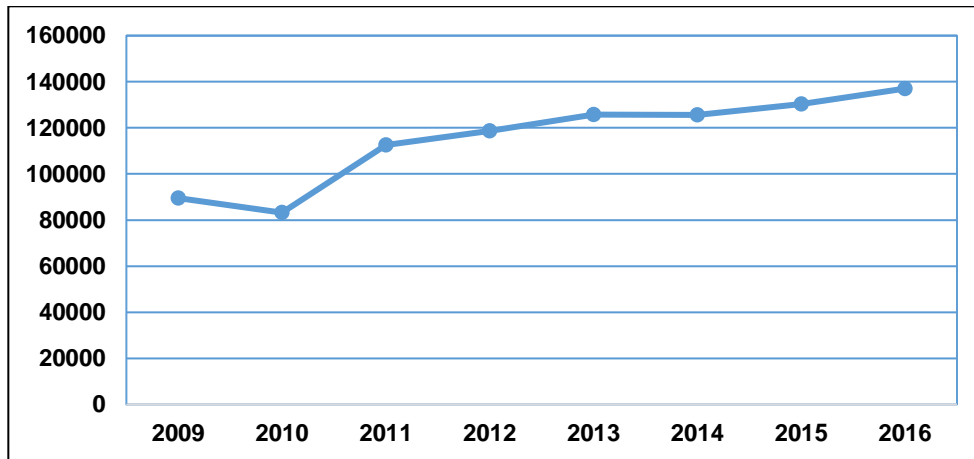
Montana Tech librarians developed a [Library Student Satisfaction Survey](#) that is administered every year to evaluate services over time. This survey includes questions on the quality, adequacy, and usage of library services. These data identify both areas of strength and areas for improvement.

Montana Tech uses the Noel-Levitz Student Satisfaction Inventory that includes two library questions. One assesses student satisfaction with the [library staff](#), while the other gauges satisfaction with [library resources and services](#). Student satisfaction levels in both areas are above the national average.

Each year Montana Tech's Faculty Senate develops and administers a Faculty Opinion and Satisfaction Survey. [Survey results](#) indicate the Library is well-regarded by faculty because it continues to score highly on this survey.

## Statistical Analyses

The Library keeps track of physical use of its facilities. Gate count statistics from the last seven years show a steady increase in the use of the library building (See Figure 2.E.3).



**Figure 2.E.3 2015-2016 Gate Count Statistics**

The Library tracks reference consultations, instruction sessions, interlibrary loans, circulation, document delivery, and library [subject guide](#) use, as summarized Table 2.E.III.

**TABLE 2.E.III SERVICE USE FY-2016**

<b>Service</b>	<b>Use</b>
Interlibrary loans	3,609
Circulation	10,960
Document delivery	297
Subject guides visits	6,732
Reference consultations	1,356
Instruction sessions	70
Instruction attendance	1,051

**Standard 2.F–Financial Resources**

**Standard 2.F.1**

**The institution demonstrates financial stability with sufficient cash flow and reserves to support its programs and services. Financial planning reflects available funds, realistic development of financial resources, and appropriate risk management to ensure short-term solvency and anticipate long-term obligations, including payment of future liabilities.**

The FY16 Montana Tech annual operating budget for all fund types is \$83,937,876. This operating budget is comprised of \$34,781,170 in general funds, \$18,484,000 in restricted funds, \$7,556,181 in designated funds, \$5,774,464 in auxiliary funds, \$21,000 in loan and endowment funds and \$17,321,061 in plant funds. ([All Funds Summary](#))

Historically, Montana Tech’s financial practice is to incorporate an enrollment reserve (contingency) into the current unrestricted operating budget of 2%-5.5% of estimated revenues. If enrollment targets are met or all contingency funds are not committed, the Vice Chancellor for Administration and Finance (VCAF) invites the campus stakeholders to submit One-Time-Only proposals. Approved requests are funded by using the remaining contingency based upon a prioritization process which incorporates input from the Executive Council, the deans, and department heads. This enrollment reserve budget ensures that even if enrollment targets are not met, basic campus programs will be insulated from funding cuts in the current fiscal year.

In addition to the contingency, Montana Tech maintains a Reserve Revolving account pursuant to [BOR Policy 901.15](#). This policy allows each unit of the Montana University System to establish a designated reserve revolving account to specifically manage and mitigate the impacts of unanticipated revenue shortfalls and/or unanticipated and unavoidable increases in expenditures. This policy allows Montana Tech to maintain up to 5% of the prior year’s revenue in this designated reserve account to meet these needs. Current unrestricted revenues in FY15 were \$33,396,031, which would translate to a maximum allowable reserve of \$1,669,801. Montana Tech’s actual balance in the reserve account at the end of

FY15 was \$1,641,231. To date, Montana Tech has not had to rely on using the reserve account balance to meet any of its obligations.

Auxiliary building projects are often funded by proceeds from the issuance of bonds. Montana Tech is one of the affiliated campuses of the University of Montana. These campuses collectively issue bond instruments which are cross-pledged and administered by The University of Montana – Missoula campus and the debt management group. This Debt Management Oversight Committee includes members from each of the affiliated campuses of the University of Montana and meets on a regular basis to review the outstanding debt load, to review the revenues pledged to meet that debt load, and to ensure that if any one of the campuses needs help in meeting its obligations, then the rest of the affiliated campuses are able to help out. The collective Debt Management Oversight Committee also explores different options to acquire financing for future capital projects for all of the affiliated campuses of the University of Montana. ([Debt Management Policy](#))

Bond payments are typically funded by revenue from auxiliary enterprises, land grant income, and from building fees. A debt-service plan is first created for the life of the bonds prior to their issuance in order to ensure that the campus involved can meet its future repayment obligation. Excess auxiliary funds are deposited into individual plant funds to pay for renovation and maintenance of auxiliary buildings or to purchase equipment. These bond obligations most often represent the majority of outstanding debt the institution carries. On an annual basis, each of the campuses of the University of Montana affiliation undergo a [bond audit](#) to ensure that appropriate debt coverage is maintained among the various stakeholders.

Another funding mechanism available to the agencies of the State of Montana is the INTERCAP Loan Program which is jointly administered through both the Montana Department of Commerce and the Montana State Board of Investments. This program allows state and local government agencies to borrow funds to deal with temporary cash flow issues, as well as to fund capital and real property improvements. While Montana Tech has not needed to utilize loans to cover shortfalls, it has on occasion used INTERCAP Loan funds to finance projects such as campus internet/intranet infrastructure improvements, HPER renovations and energy projects.

## **Standard 2.F.2**

### **Resource planning and development include realistic budgeting, enrollment management, and responsible projections of grants, donations, and other non-tuition revenue sources.**

Montana Tech develops a budget on an annual basis for all fund types that includes the following: Current Unrestricted Funds, Auxiliary, Designated, Loan, Endowment, Restricted, Plant, and Agency (Montana Bureau of Mines and Geology). These various budgets are submitted to the Board of Regents (BOR) for approval each September, and the budgets for all campuses of the Montana University System (MUS) are published to the MUS website and are referenced throughout the year. The Montana Tech VCAF and the Director of Purchasing and Budgeting monitor the budgets and prepare forecasts of where each fund type will end the year versus the actual budget. Any material budget variances must be explained and submitted to the Office of the Commissioner of Higher Education (OCHE), the central administrative unit of the MUS. A report of the prior year's material variances (in excess of 10%) for both revenue and expenses for all fund types is included in the [Operating Budget Checklist](#) that is signed by the VCAF and submitted to OCHE with the annual operating budget submission.



### Standard 2.F.3

**The institution clearly defines and follows its policies, guidelines, and processes for financial planning and budget development that include appropriate opportunities for participation by its constituencies.**

Financial planning and budget development follows an eight-step process. In response to a request made by the Dean's Council, the budget guidelines were updated and approved by the Chancellor for the FY2016 budgeting process ([Montana Tech Budget Guidelines](#)). Once the state allocation of funds to the campus is determined, the process of allocating internal resources begins.

Prior to presenting to the Executive Council (Chancellor, Provost, Vice Chancellor for Administration and Finance, Vice Chancellor for Research, and Vice Chancellor for Development and University Relations) the deans and vice chancellors meet with direct report department heads and directors to present and discuss budget requests. The meetings are an opportunity to talk about current and future needs of the department. The Director of Purchasing and Budgeting provides each department head and director with a [Budget Planning Template](#). The template is designed so that it can incorporate funding from all available sources that an individual department has access to or control over; included here are state current unrestricted funds, auxiliary funds, designated funds (including indirect cost reimbursement accounts, sales and services accounts, and class/lab fee accounts), foundation accounts, and program tuition accounts. One-time-only (OTO) proposals are presented as part of the budget request.

Budget presentations by the deans and vice chancellors are then scheduled with the Executive Council to present prioritized requests. These are public meetings and members of the campus are invited to attend.

Overall, any information gathered from these meetings leads to better decisions on allocating available resources during the budget development process. In addition, every two years, departments are asked to assess any need for increases in course/program fees. All fee increases, such as tuition, course, and program fees, are subject to approval by the BOR and are only reviewed once every two years. As part of this process, the student government is asked to vote to support or not support proposed fee increases. However, these fee increases may be further subject to legislative freezes or may be limited by legislative agreement.

Throughout the entire budget process, every effort is made to maximize input, enhance communication, and increase efficiency. This collegial approach not only assures fiscal control and responsibility but also promotes transparency and accountability.

Once budget presentations are complete, Montana Tech's Executive Council approves a balanced Internal Operating Budget. Here, budget allocations are made to each department's various responsibility centers or indexes. The Director of Purchasing and Budgeting distributes copies of the appropriate section of the budget to each manager. All managers have access to the UM Data Warehouse (UMDW) to track budget allocations, expenditures, and revenues. The Director of Purchasing and Budgeting makes every attempt to get managers trained and using the UMDW. A variety of reports available through the UMDW assist managers in monitoring and managing operating expenditures and revenues. All Vice Chancellors, Deans, Department Heads, Department Chairs, Program Managers, and Directors are responsible for managing the operating expenditures within their area of responsibility.

In addition, the Director of Purchasing and Budgeting produces a series of management reports which cover the usage and balance of various key operating and fee accounts. These reports are distributed to key stakeholders on the Montana Tech campus to ensure balances remain positive. Additionally, all

operating accounts are queried regularly in the last half of the fiscal year and managers are alerted if their balance is over or is anticipated to be over.

Montana Tech's approved internal operating budget and other fund-group budgets are submitted annually to OCHE for its approval at the September BOR meeting. OCHE also publishes annual operating budgets for all campuses on the system website ([Montana University System Operating Budgets](#)), and the BOR approves the individual campus operating budgets. In addition to the campus budget, the current unrestricted portion of Montana Tech's budget is published in [The University of Montana Budget Book](#). This budget book includes State appropriated, auxiliary, and designated budgets for all affiliated campuses and agencies.

As noted earlier, throughout the year, budget control and variance reports incorporating projected revenues and expenditures are prepared by the VCAF. Any problems or issues identified in these reports are shared with the Executive Council. The Executive Council normally approves any additions, deletions, and modifications to Tech's operating budget. The BOR or its designee approves increased spending authority due to excess tuition and other revenue. As a follow-up, the VCAF takes appropriate action to ensure that the budget is amended and balanced in a manner consistent with formal policies and procedures.

#### **Standard 2.F.4**

**The institution ensures timely and accurate financial information through its use of an appropriate accounting system that follows generally accepted accounting principles and through its reliance on an effective system of internal controls.**

All units of the Montana University System, including Montana Tech, use Banner by Ellucian, an integrated suite of applications, as their accounting system. Thus, all major administrative systems (Human Resources, Payroll, and Finance) belong to the Banner suite, which is a comprehensive, highly integrated, and complex set of systems specifically designed for the higher education environment. This software was designed to follow generally accepted principles of accounting. Currently, Montana Tech runs and manages its own separate Banner student information system from which some financial information is fed to the Banner finance module. The Banner finance and human resource modules used by the University of Montana affiliation are housed and maintained at the Missoula campus.

The Internal Audit Office of The University of Montana performs financial, operational, electronic data processing, and compliance reviews of departments, colleges, and processes throughout the University of Montana affiliation – including Montana Tech. The Internal Audit Office is independent from the finance function and reports directly to the President of the University of Montana to maintain the integrity of internal controls.

As part of implementing the Statement on Auditing Standards (SAS) 112 – *Communicating Internal Control Related Matters Identified in an Audit*, which has since been replaced by SAS 115 – *Communication of Internal Control Related Matters Identified in an Audit*, the Legislative Audit Division of the State of Montana requested that The University of Montana affiliation create an Inventory of Specific Internal Control Activities. This [Internal Control Inventory](#) contains a comprehensive assessment of the control activities of Montana Tech and is periodically reviewed and updated.

## Standard 2.F.5

**Capital budgets reflect the institution's mission and core theme objectives and relate to its plans for physical facilities and acquisition of equipment. Long-range capital plans support the institution's mission and goals and reflect projections of the total cost of ownership, equipment, furnishing, and operation of new or renovated facilities. Debt for capital outlay purposes is periodically reviewed, carefully controlled, and justified, so as not to create an unreasonable drain on resources available for educational purposes.**

Montana Tech's capital planning is essential to fulfilling the core themes identified by Montana Tech in its [Strategic Plan](#) and is funded primarily through the following five sources: (1) the State of Montana Long Range Building Program (LRBP), (2) Auxiliary funds (3) student fees, (4) Grants and Contracts, and (5) Foundation.

### **State of Montana Long Range Building Program**

The LRBP focuses on major building projects, renovation projects, and on maintenance projects and is submitted as a part of the biennial budget process. It is the primary mechanism through which the Montana University System and all other state agencies request state-funded building projects from the Montana Legislature. Requests for the Montana Tech campus are compiled by the Director of Physical Facilities who works in collaboration with the Chancellor, the Vice Chancellor for Administration and Finance, and with the Provost. In this process, careful consideration is given to the needs identified through input from the campus and community at a campus open forum. The Commissioner of Higher Education and the area legislative delegation are invited to this meeting. Eventually, a prioritized campus list is submitted to the University of Montana (UM) long range building committee for prioritization with all four affiliated campuses. Representatives from each campus are involved in the prioritization process and the final list is submitted to the UM President for approval or modification. The approved list for the UM affiliation is integrated or prioritized with those of the Montana State University campuses. This is accomplished through a meeting of the two system presidents and the commissioner. The final prioritized list is submitted to the BOR for review and approval prior to being submitted as part of the system budget request.

All Montana University System building projects are combined with those of other state agencies and submitted to the legislature. The Montana Legislature approves, changes, or disapproves the LRBP and the associated funding for approved projects. This funding may come from a variety of sources including cash appropriations, campus contributions (e.g. donor funding, allocation of campus reserves), or the issuance of bonds.

During the last biennium, Montana Tech received state funding for additional classroom and laboratory space known as the Natural Resources Research Center. The new space is to be added to the existing Engineering Laboratory Classroom (ELC) building. Five million in funding was [approved from the legislature](#), with an additional \$5 million in spending authority for Montana Tech to raise through donor contributions. This project will support both undergraduate and graduate level research and instruction, and is directly tied to [Montana Tech's Strategic Plan](#), to grow the Graduate School and Graduate Program through creating and implementing doctoral programs in a small number of niche strategic areas. The construction of this building addition is currently underway and is expected to be completed by January, 2017.

## **Auxiliary Funds**

Auxiliary building projects are often funded by proceeds from the issuance of bonds or through the INTERCAP loan program. The UM affiliated campuses collectively issue bond instruments which are cross-pledged and accounted for through the UM – Missoula campus. The Debt Management Committee is comprised of representatives from each of the four affiliated campuses and works together to manage the debt.

Bond payments are typically funded by revenue from auxiliary enterprises, land grant income, and from building fees. A debt-service plan is first created for the life of the bonds prior to their issuance to ensure that the campus affiliation can meet its future repayment obligation. Excess auxiliary funds are deposited into plant funds to pay for renovation and maintenance of auxiliary buildings or to purchase equipment. Montana Tech maintains an Auxiliary Projects Plan for both short and long term goals for capital improvements to auxiliary facilities.

The campus is currently working with the Montana Tech Foundation to raise money towards the construction of a living and learning center. This facility will be a bonded project for the living or dorm portion and privately funded to cover the cost of the learning portion. The project is now in the design phase and will likely be approved by the BOR and started sometime in 2017.

## **Student Fees**

In addition to supporting bond payments, student fees are also used to pay for capital classroom equipment. Montana Tech's Student Equipment Fee accounts at both the North and South campuses are designated to purchase capital equipment. Every year, the Provost contacts the academic deans who work with the department heads to submit capital equipment requests. Based on estimated revenue projections, these requests are compiled and prioritized by the Deans. Those campuses affiliated with the University of Montana have in the past issued bonds for educational and general classroom and laboratory improvements on campus. To pay this debt, students are assessed an academic facilities fee. For the record, this student fee was originally implemented with the understanding that any fee revenues generated would be used to repay the debt associated with classroom and laboratory renovations, and that any annual excess revenues would be dedicated to further classroom/laboratory improvements at the campus where the revenue was generated. This process has been very effective in maintaining financial resources for educational purposes.

Student Fees have also been used to support renovation and expansion of the HPER complex. Most recently, the HPER was renovated and expanded to include new weight and cardio workout equipment. Prior to the fees being assessed, Tech's student body voted overwhelmingly to approve the addition of this fee for renovation of the HPER (see [BOR Agenda Item 144-1504](#)).

Other student fees also support the following: ongoing replacement and maintenance of student computer labs and networking equipment; life cycle accounts for the repair and replacement of campus equipment and parking lots; licensing of student software; and finally replacement of campus technology.

## **Grants and Contracts**

Capital equipment items and facilities construction and modification are also funded by grants or contracts. This funding source is commonly used for high-dollar-value research equipment, such as an NMR spectrometer, electron microscope, and similar specialized equipment. In FY2016, for example, research grants and contracts provided over \$500,000 of funding that was used to purchase capital

equipment and instrumentation, which are used in faculty and student research, and to provide students with valuable experience in instructional laboratories. In 2013 the campus was awarded a Major Research Instrumentation grant from the National Science Foundation funding for a carbon isotope analyzer useful for chemical, hydrogeological, and environmental research. In 2015 another NSF MRI proposal was funded for an instrumented shake table to use in research and education, primarily in geological and civil engineering. Building construction and modifications have also been funded using grant or contract revenues. The most recent large example is a Department of Energy grant, which provided about \$1 million to build a geothermal heating and cooling system for the Natural Resources Building. The system uses a heat exchanger to tap the constant-temperature flooded mine waters under campus to keep the building warm in winter and cool in summer.

When Montana Tech has a need for new high-priced state-of-the-art research instrumentation, it looks to see whether there are grant opportunities to obtain all or part of the funding. Similarly, the campus scans grant announcements to take advantage of opportunities to acquire funding for capital construction project(s) that are in the plans.

### **Foundation**

The Montana Tech Foundation is a separate 501(c)(3) organization that serves as Montana Tech's development office. The Montana Tech Foundation has led several successful capital campaigns for projects designed to specifically achieve Montana Tech's strategic goals. For example, the Foundation secured major donations and contributed towards the construction of the Natural Resources Building that currently houses the Petroleum Engineering Department and the Montana Bureau of Mines and Geology. Also, the Foundation raised all the funding for the Frank and Ann Gilmore University Relations Center, which is owned by the Foundation and currently occupied by the Montana Tech Foundation, Career Services, Public Relations, and Alumni Affairs.

The Foundation also administers individual accounts for academic and administrative departments of Montana Tech; these accounts are often used to fund capital equipment which is then donated to the campus for classrooms and laboratories. The President of the Montana Tech Foundation is employed as the Vice Chancellor for Development and University Relations. This position has a dual role to ensure that the philanthropic activities of the Foundation are kept in perfect alignment with the strategic goals of Montana Tech.

Additionally, a formal [operating agreement](#) exists between the Foundation and Montana Tech. It clearly specifies that at least annually Montana Tech's Chancellor will present to the Foundation Board of Directors his fund raising priorities to be considered by the Foundation. The board is not only responsible for reviewing and approving the operating and capital budgets of the Foundation, but they are also responsible for independently leading and directing the fundraising activities for the mutual benefit of the Foundation and the Montana Tech campus.

### **Standard 2.F.6**

**The institution defines the financial relationship between its general operations and its auxiliary enterprises, including any use of general operations funds to support auxiliary enterprises or the use of funds from auxiliary services to support general operations.**

The educational and general funds and the auxiliary funds are operated separately and independently of each other at Montana Tech. Tech's general operating account is used to support the institution's primary objective: instruction, research, academic affairs, student affairs, institutional support,

operation and maintenance of plant, and waivers. This financial distinction ensures that all of the revenues and expenditures are spent as appropriated by the legislature and as approved by the BOR. Finally, the institution ensures that there is no deficit spending.

Auxiliaries are budgeted and accounted for separately. However, there is a yearly administrative charge assessed to auxiliaries for the services which the institution provides to the auxiliaries. That assessment amounts to \$15,000 annually. This assessment includes the cost incurred by the campus to provide administrative overhead services, such as accounting, billing, purchasing, payables, and human resources. As noted previously, any excess revenue is allocated to make bond payments or transferred to a plant fund for repair and maintenance of the auxiliary facilities.

### **Standard 2.F.7**

**For each year of operation, the institution undergoes an annual external financial audit by professionally qualified personnel in accordance with generally accepted auditing standards. The audit is to be completed no later than nine months after the end of the fiscal year. Results from the audit, including findings and management letter recommendations, are considered annually in an appropriate and comprehensive manner by the administration and the governing board.**

[Annual Consolidated Financial Audits](#) and [Biennial Consolidated Financial-Related Audits](#) for the four affiliated campuses of the University of Montana are done by the Legislative Audit Division. Funding for this legislative audit is a line item in the general fund legislative appropriation at the system level. The University of Montana affiliation receives an allocation as part of the biennium budget, and Montana Tech pays its prorated share of the audit costs.

Financial statements are prepared to conform to standards recommended both by the National Association of College and University Business Officers and by the Industry Audit Guide of the American Institute of Certified Public Accounts. The Legislative Audit Division audits Montana Tech and the resulting two year [Financial—Compliance Audit](#) is presented to the Legislative Audit Committee of the Montana State Legislature. Audit results of all four affiliated campuses are combined into one document under the University of Montana affiliation. Audit recommendations are addressed to the University of Montana but may relate back to each of the affiliated campuses.

The Legislative Audit Division prepares an [Audit Recommendation](#), and each campus prepares an [Action Plan](#) in response to any audit findings. This report specifies an action for each recommendation, and the action plan on all past recommendations pertaining to Montana Tech have been implemented and completed. The independent auditor's report has consistently included an unqualified opinion for the institution.

### **Standard 2.F.8**

**All institutional fundraising activities are conducted in a professional and ethical manner and comply with governmental requirements. If the institution has a relationship with a fundraising organization that bears its name and whose major purpose is to raise funds to support its mission, the institution has a written agreement that clearly defines its relationship with that organization.**

Montana Tech is a unit of the State of Montana. Financial statements for Montana Tech include only the activities, funds, and accounts of the institution and the Bureau of Mines and Geology. Private nonprofit organizations affiliated with the institution include the Montana Tech Foundation, the Digger Athletic Association, and the Montana Tech Alumni Association. The Foundation and the two Associations



operate exclusively to encourage, promote, and support programs, research, scholarly pursuits, and athletics at or in connection with Montana Tech.

The institutional policy governing foundations and fundraising activities is found in [BOR Policy 901.9 – Campus-Affiliated Foundations: Montana University System](#). This policy promulgates foundation compliance with local, state, and federal laws in terms of fund raising, separately accounted for and audited financial statements, and requires a written operating agreement between the foundation and campus. These requirements are all designed to maintain the public’s confidence in the professional and ethical manner in which funds are raised for the Tech campus.

Montana Tech is very fortunate to receive strong and enduring support from its alumni, local government, local businesses, and from national and international business and industry. Tech fosters active, ongoing, and genuine interaction and communication linkages between its academic programs and constituencies from all sectors of society. These mutually beneficial relationships are enhanced by the fact that Montana Tech has a well understood academic, research, and public service mission. Montana Tech clearly demonstrates to all concerned its commitment to these purposes.

Montana Tech has always had in place an appropriate contractual relationship with its Foundation. Montana Tech and the Montana Tech Foundation have a formal operating agreement that delineates the rights and responsibilities of both parties. This operating agreement recognizes the independent nature of the Foundation, but at the same time clarifies the partnership that exists between the two parties. Protected in this operating agreement are the interests of the Foundation, Montana Tech, and the donors who contribute to Montana Tech.

In January, 2015, the BOR adopted more stringent guidelines in these operating agreements for fundraising and development services with the campus affiliated foundations. These guidelines, delineated in [Policy 901.9 – Campus Affiliated Foundations](#), discuss how foundations should most properly represent the school and work on activities for the benefit of the associated institution. This BOR policy assures proper accounting and use of funds.

Qualified officers and staff in the Foundation administer all Foundation funds. A Foundation Board of Directors provides general policy and oversight with appropriate involvement of the Chancellor. The operating agreement between Montana Tech and the Foundation authorizes the Foundation to manage endowments and transfer funds to the institution in accordance with terms and conditions of the gift instrument. The Foundation’s records are reviewed annually through an Independent Audit. A copy of this audit report is submitted to the Business Office and to OCHE after the close of the fiscal year (typically in September), and then made available to state auditors for review to substantiate Montana Tech’s related parties footnote.

In exchange for services provided by the Foundation, Montana Tech provides the Foundation with support services that include operational maintenance of the Frank and Ann Gilmore University Relations Center. These services include, but are not limited to, housekeeping, landscaping, utilities, and telecommunications/computer support (see [Foundation Operating Agreement](#)).

Montana Tech also has an operating agreement with the Montana Tech Alumni Association. This agreement provides for mutually beneficial activities related to Montana Tech alumni and Montana Tech as outlined in the agreement (see [Operating Agreement – Alumni Association](#)). One important benefit listed under Montana Tech’s responsibilities to the Association is that Montana Tech agrees to employ a Director of Alumni Affairs who shall function as the Association’s Executive Director. The responsibilities of the Executive Director are to organize meetings, take notes and perform tasks requested by the Alumni Association Board. This individual is not a voting member of the Board.



In addition to the two operating agreements mentioned above, Montana Tech also has an operating agreement with the Digger Athletic Association (DAA). The purpose of DAA is to perform the duties and responsibilities of a booster club. DAA provides Montana Tech athletics with financial support through various means such as scholarships and operation funds ([Operating Agreement – Digger Athletic Association](#)). The DAA works closely with the Chancellor and campus athletic committee on issues which may arise. In addition, the DAA commits to covering mutually agreed to items such as athletics trainers through cost reimbursement.

## **Standard 2.G–Physical and Technological Infrastructure**

### **Physical Facilities**

#### **Standard 2.G.1**

**Consistent with its mission, core themes, and characteristics, the institution creates and maintains physical facilities that are accessible, safe, secure, and sufficient in quantity and quality to ensure healthful learning and working environments that support the institution’s mission, programs, and services.**

In 1896, the original Montana School of Mines laid the cornerstone for its first building, Main Hall. Today, after several name changes and many campus improvements, Montana Tech comprises two campus sites: North Campus and South Campus. North Campus is approximately 121 acres and is home to the bachelor’s, master’s, and PhD academic programs. The South Campus housed on two separate sites: Highlands College and the Mineral Research Center (MRC), approximately 41 acres and 9 acres, respectively. Overall, a total of 42 buildings occupy these three sites, along with associated utility infrastructure; parking facilities; and athletic, intramural, and campus recreation fields, a golf course and biking and hiking trails. The gross square footage (GSF) area of all the 42 buildings is just under 891,000 GSF.

A map of North Campus along with links for Highlands College and parking facilities is available on the Montana Tech website ([Interactive Maps](#)). Note that Tech is in the process of updating its [Campus Master Plan](#) (CMP), along with building and space inventories, as well as the campus boundaries and maps.

The physical facilities at Montana Tech have always been planned, designed, and constructed to support the academic mission. Each facility was originally conceived with a specific purpose that depended on the existing institution mission, goals, and program needs. Over the years, the mission has expanded and goals have changed, but facilities planning for updates, renovations, and new construction have kept pace. Strategic planning of facilities has been a consistent theme at Montana Tech, and those plans have been generally followed as academic, student, and facility needs were confirmed.

#### **Regulatory Changes**

Facilities are consistently designed and constructed according to existing codes, regulations, and accepted standard practice. However, these codes, regulations, and practice are subject to change as knowledge increases, regulatory policy is updated, and as new technologies emerge. Major facility renovation work always includes code and regulation updates for systems and building areas in the project scope. Areas of special attention in new construction and major renovations include energy use and efficiency efforts, life safety systems, accessibility requirements and solutions, security analysis and solutions, and architectural design adherence to the Montana Tech facility themes.

In 2008, the North Campus participated in an accessibility audit performed by the Seattle office of the U.S. Department of Health and Human Services Office for Civil Rights (OCR). Findings from the audit were reviewed within the Montana Tech community, and a plan of action was established between Montana Tech and OCR. As a result, OCR issued a letter of acceptance of work performed by Montana Tech on September 12, 2012, and specified that OCR was closing review of the agreement.

In the spring 2015, the State of Montana OCHE compliance staff, performed a comprehensive Vocational Education Methods of Administration (MOA) civil rights compliance review of facilities and programs of Highlands College. Very few items were noted in the compliance report, and all items noted have been successfully addressed by Physical Facilities.

Similar to any campus with some older facilities, not all of the campus spaces are accessible according to current code. However, Montana Tech always includes accessible design requirements in programming, planning, and designing for facility renovation and new construction. Montana Tech also has an excellent record of working one-on-one with disabled students, faculty, and staff to solve their specific needs when identified.

### **Facilities Management**

Facilities are maintained and operated according to current standard practice methods and procedures. Montana Tech is a member of APPA: Leadership in Educational Facilities, and the National Association of College and University Business Officers (NACUBO) professional organizations. Montana Tech subscribes to APPA and NACUBO for training programs and materials, information resources for best practices in facilities management, and participates in key performance indicator studies and peer review and benchmarking. [APPA](#) and [NACUBO](#) are recognized internationally as leading organizations in the higher education business, facilities management, and environmental compliance fields.

Response priorities are governed by modern facilities management principles that include identifying highest priority systems and classifying systems and buildings according to mission, goals, and assigned use. Life safety concerns are always given highest priority, followed by life quality concerns such as indoor air quality, accessibility, temperature control, and lighting. For example, high infrastructure density research space receives more maintenance effort comparatively than does an outdoor stand-alone storage shed. Similarly, high frequency use lecture halls and computer labs see more maintenance effort than infrequently used departmental general areas.

Montana Tech Facilities staff are always looking for ways to improve operations and maintenance process and systems, including financing options. Current examples include executing energy performance contracts that pay for system improvement costs, while addressing deferred maintenance needs by designing and constructing projects that pay for themselves with annual energy expense savings.

Maintenance of building envelopes and systems is imperative to protecting the institution's facility and equipment assets and helps ensure availability of the facility for its intended use. The Physical Facilities Department uses a computer-based maintenance management system (CMMS) to log and track customer requests and maintenance and repair response. CMMS reports are routinely reviewed to analyze the effectiveness of assigned work. An example of report review would be the quantity of open work orders by shop and the time period any given work order was open. The department is currently investigating ways to use the CMMS to improve preventive maintenance of facilities and systems and in turn increase customer satisfaction. Exploration and implementation of best practices in the field of facilities management are encouraged across the entire facilities organization.

## Space Planning

The quantity of facilities and assigned space for most of the existing mission and goals of the institution is currently adequate. As an illustration, many states have adopted assignable space standards that Montana institutions can be compared with. National publications are available for reference to space type and assignment along with utilization studies. The Post-Secondary Education Facilities Inventory and Classification Manual (FICM), published by the National Center for Education Statistics, is a recognized higher education space standard referenced by many state standards. These standards typically recommend 15 to 20 net assignable square feet (NASF) per student station for general classrooms. Montana Tech's general classrooms usually have just over 20 NASF per student station. The recommended standard for general student computer labs is 30 to 35 NASF per station; Montana Tech labs typically see almost 35 NASF per station. The number of classrooms and many other space types are considered adequate on the basis of utilization numbers related to both student contact hours and student population numbers. Montana Tech is in the process of updating its CMP, along with building and space inventories, as well as the campus boundaries and maps.

Among other resources, Montana Tech maintains a broad-based campus space planning committee, which is engaged in space programming review and in suggesting proposed space use changes. Increases in student program demand and the resulting increase in student population, along with increased campus research activity, has mandated the institution add new facilities and different types of space.

In 2013, Montana Tech received approval for its first PhD degree program and immediately went to work on funding to design and construct research space for this new program. Five million dollars of state funds were appropriated for what would eventually become a new \$10 million campus research facility. Montana Tech engaged a top-notch design team that conducted a thorough, specific program review for this new instructional and research space. Programming efforts have guided facility design choices that were quickly converted to specific design components of a brand-new, state of the art facility. This new facility is now under construction because of a process of highly successful private fundraising in an amazingly short time frame. The facility is known as the Natural Resources Research Center (NRRRC).

The completion of the NRRRC in January 2017, will bring new laboratory and research space to the growing fields of strength and composites engineering, fluid mechanics and energy studies, nanotechnology, petroleum engineering, and occupational health and safety. This 30,000 GSF addition to the Engineering Laboratory Classroom Building (ELC) will not only provide additional space for expanding programs but will also provide state-of-the-art research areas that will replace existing outdated laboratories, greatly enhancing the ability to engage undergraduates in science and technology research opportunities.

Some existing space will be vacated as various research programs move into the new facility. Programming and planning design for renovation of this vacated space is a component of the new facility design scope. In addition, Montana Tech has committed to a review of the existing CMP as a result of the impact of the new facility and the potential change of existing facility use. This process illustrates the continuing theme of planning and space analysis that Montana Tech embraces. All stakeholders partake in the planning process by stages, and their requirements are either included in the current project or are recorded and then assigned new priorities in the next project.

In Spring 2016, Montana Tech partnered with the State of Montana Department of Architectural and Engineering Services (A&E) to fund a comprehensive review of the existing CMP. A local design firm with knowledge of the campus and Butte community was hired for general management and review, OZ

Architects from Missoula has the primary contract. In turn OZ, with the input of A&E and Montana Tech, has hired a national master planning expert firm, Paulien Associates, of Denver, Colorado. Paulien has begun data gathering and preliminary space analysis, and their work will continue into Spring 2017. (See [Montana Tech Facilities Master Plan -February 2017](#))

### **Campus Safety and Security**

Safety and security of students, faculty, staff, and visitors are always first priority. A vital part of the Physical Facilities Department is an in-house security group that is on campus 24 hours per day, 7 days per week; as a result, security and maintenance staff are available around the clock for assistance. Campus Security ensures all doors are locked at a predetermined schedule according to the academic calendar. Safety and security checks are performed multiple times per shift during closed periods. Entrance to a locked facility is granted according to predetermined policy and authorization; students must show a Montana TechID in order to access computer labs or other spaces after hours. Students, faculty, and staff are encouraged to call Campus Security anytime they are uncomfortable with a situation or need assistance. Security's phone number spells HELP (4357) and is advertised across campus as such.

Life safety systems for fire detection, alarm, and necessary evacuation procedures from any facility are in place and are inspected, tested, and exercised regularly. Also, Montana Tech maintains a strong relationship with local and state emergency responders. Butte-Silver Bow (BSB) city/county police, fire, and ambulance departments are familiar with the campus and are typically included in Montana Tech emergency response planning and drills.

The Physical Facilities Department and Montana Tech's Environmental Health and Safety Office (EH&S) routinely perform campus assessments for security, safety, and for accessibility deficiencies. The campus has an active, broad spectrum Safety and Health Committee that meets regularly to review concerns and to make recommendations for corrective action as necessary. An example of recent Safety and Health Committee [meeting minutes](#) illustrates breadth of committee involvement.

### **Emergency Response**

Montana Tech is located on the northern Rocky Mountain Continental Divide where weather is highly varied and changes rapidly that could create emergency conditions with little warning. During its history, Montana Tech has understood first-hand the need for emergency planning according to weather conditions and natural disasters. As a theme, Montana Tech has taken its weather emergency planning to all levels of emergency response planning. Earthquakes, fires, severe weather, and of course newer threats of internal or external terrorism are consistently on the minds of campus officials, and these issues are addressed by response planning groups and policy makers.

In 2013, Montana Tech was involved with several state agencies and specialty consultants in updating our [Pre-Disaster Mitigation Plan \(PDM\)](#). This plan identifies risks from possible disaster emergencies and outlines procedure and physical actions that should be taken to potentially mitigate extent of damage, injury, and loss of life on campus during disasters. On January 13, 2014, the Denver office of the Federal Emergency Management Agency (FEMA) approved Montana Tech's updated plan.

Another example of pro-active emergency response planning at Montana Tech is the ability to enroll community members in wireless emergency communication notifications. Montana Tech currently utilizes a system called Regroup® in which all faculty, staff and students are automatically enrolled to receive, at a minimum, an emergency notification via their Montana Tech email account. Each person is

instructed to add his/her cell phone number if he/she wishes to receive emergency text messages and phone notifications when an emergency message is sent. This system is in compliance with the Clery Act that requires timely notification in the event of an emergency situation.

In addition to the local planning and drills with BSB units, university staff have access to resources from the UM-Missoula, the MUS, and other state and regional regulatory and response resources. The following state agencies are all heavily connected with Montana Tech business operations and serve partnership roles in the success of the university: Department of Environmental Quality (DEQ), Department of Administration (DOA), A&E, and the Risk Management and Tort Defense Division (RMTD). Examples of joint agency practice drills on the Montana Tech campus include Residence Hall fire/evacuation drills each semester, annual fire/evacuation drills for all office/classroom facilities, annual earthquake drills, and periodic active shooter exercises.

## **Standard 2.G.2**

**The institution adopts, publishes, reviews regularly, and adheres to policies and procedures regarding the safe use, storage, and disposal of hazardous or toxic materials.**

### **Hazardous Materials Management**

With the various academic and research programs that use chemicals on the campuses, including the North Campus, Highlands College, and the MRC, Montana Tech maintains a fairly large inventory of chemicals. The EH&S Director oversees the management of the hazardous materials program. The following information covers the Montana Tech hazardous materials and hazardous waste management programs and the radiation safety program.

As stated in the Montana Tech [Hazard Communication Program](#), all laboratories that use and/or store chemicals are required to have a copy of the [Chemical Hygiene Plan](#) readily accessible, along with copies of the Safety Data Sheets (SDSs) for each chemical in the lab or storeroom.

In general, flammable and corrosive chemicals are stored in appropriate cabinets, and other chemicals are stored on shelves by compatibility, with a lip to prevent them from falling off the shelves if they are not stored in a cabinet.

As required by the OSHA Hazard Communication Standard, chemicals are managed and tracked through an online chemical software management program called the Vertere Inventory Management System (VIMS). Each department that maintains a chemical inventory at Montana Tech has a chemical acquisition manager (CAM) who is the "gatekeeper" for all chemical acquisitions. Everyone (faculty, staff, and students) must go through a designated CAM to acquire chemicals. The CAM's duties are outlined in the [Chemical Hygiene Plan](#).

The VIMS program allows easy access to our entire chemical inventory. Information can be retrieved by campus, building, department, or room. Chemicals can be looked up by bar code number or name. Currently, all CAMs and the EH&S Director have access to the VIMS system. However, limited access is granted to other individuals on an as-needed basis.

Laboratory spaces on campus are inspected annually during spring semester by members of the Safety Committee using lab-specific checklists. Beginning Fall Semester 2016, each lab will be inspected monthly by the lab director, PI, or a designated person using a shortened inspection checklist. The completed inspection checklists are to be sent to the EH&S Office.

## **Training**

All students who are enrolled in a lab where hazardous materials are used or where a hazardous environment exists are required to do an online lab safety training every semester. The program is run through Moodle, a software e-learning platform, also known as a Learning Management System, or Virtual Learning Environment. Instructors require the students to complete the training and pass a test with a minimum 90% score before they are allowed to work in the laboratory. Records are maintained in the EH&S office. If a faculty member chooses not to participate in the online lab safety program, he/she is responsible for documenting the safety training they conduct and for maintaining the records.

## **Hazardous Waste**

Montana Tech's hazardous waste program is also managed by the EH&S Director according to the campus [Hazardous Materials Management Plan](#). When departments or individuals have generated hazardous waste, the EH&S Office is contacted, a Montana Tech internal manifest is completed, and the materials are transferred to the hazardous waste storage room located in the Chemistry/Biology Building. Here, the materials are labeled as hazardous waste and are added to the inventory of hazardous waste. The containers are stored in cabinets appropriate for the waste until shipping time. The storage room maintains 10 air exchanges per hour for ventilation and is under negative pressure in the event of a chemical release or spill. Note: A shipment of hazardous waste was picked up July 28, 2016.

Veolia is Montana Tech's current vendor for hazardous waste disposal. When preparing to do a hazardous waste shipment, a list of the hazardous waste is sent to the provider, who then comes in and characterizes, sorts, and packs the waste, and provides all the labeling and paperwork.

Montana Tech is currently classified as a conditionally exempt small quantity generator of hazardous waste. Overall, the Montana Tech waste minimization program is well designed and has been very effective in maintaining the conditionally exempt small generator status.

However, because Montana Tech occasionally becomes a large generator of waste because of the type and quantity of waste generated, the required [Hazardous Materials Management Plan](#) and an EPA identification number are in place.

## **Radioactive Materials**

The EH&S Director serves as the Montana Tech Radiation Safety Officer. The campus has been able to dispose of all of the instrumentation that utilized radioactive sources except for one well-logging instrument that contains an Am/Be-241 source. Montana Tech is currently working with another group to transfer that source as well. We also have two departments that use x-ray machines. Employees who work in the areas with the x-ray machines are required to wear radiation badges that are sent in for analysis every three months.

Montana Tech does not have any faculty who are working with radioisotopes at this time and is not aware of any faculty who have plans to do so in the near future.

## **Standard 2.G.3**

**The institution develops, implements, and reviews regularly a master plan for its physical development that is consistent with its mission, core themes, and long-range educational and financial plans.**

Montana Tech was originally established with strong consideration of local needs, but those local desires and plans eventually proved global in nature. Thus, long-range vision and planning has been built into Montana Tech's fabric as an institution of higher learning since its very beginning.

As introduced in 2.G.1, physical facilities at Montana Tech have always been planned, designed, and constructed with its mission in mind. Each facility was originally conceived with a specific purpose that depended on the existing institution mission and goals and program needs. As the campus mission has expanded and goals changed, facilities planning for updates, renovations, and new construction have always kept pace. Strategic planning for new buildings and renovation of existing space, connected to financial possibilities have been a consistent theme at Montana Tech and generally followed as facility needs were confirmed and as funding sources were available.

In recent years, the institution has been engaged in long-range strategic planning in cooperation with other higher education entities in the state such that all could best deliver the required services in the most efficient and effective way possible for Montanans and for regional, national, and international students. Montana Tech produced a CMP that involved many stakeholders and has continued a process of updating that master plan at adequate intervals and engagement of new stakeholders.

Within the past year, Montana Tech has focused not only on a general upgrade to its [CMP](#) but also on the development of specific components of that plan. Producing more specified sub-plans as a part of the overall master plan will make it more likely to succeed. Sub-plans, or components of the CMP, include design requirements and process for putting together a Campus Landscape and Lighting Plan, (CLP), a Campus Parking Plan (CPP), and a Campus Land Use and Acquisition Plan (LAP).

As facilities and system technologies continually evolve in our evermore digital world, the Information Technology (IT) physical network has become a crucial campus infrastructure utility. Building automation systems, fire alarm and safety communication systems, individual and departmental telephones, and building security notifications are all moving to the physical IT fiber network and off of the conventional copper wire phone system. Master planning for this IT fiber network is a primary responsibility of Montana Tech's Network Services department, which in turn works in very close collaboration with Physical Facilities for infrastructure master planning. See Standard 2.G.5.

Montana Tech's department of Physical Facilities is responsible for maintaining the CMP and its sub-plans and supporting data and records. Physical Facilities works closely not only with local and state agencies but also with the UM-Missoula and the MUS in producing and reviewing campus facility assessments used in both short and long range planning.

Long-term capital construction of new facilities, capital maintenance or renovation of existing facility needs, and the master planning effort connected to state funding, are addressed through the state process known as Long Range Building Plan (LRBP). Here, Montana Tech develops and maintains its own CMP and deferred maintenance list used for prioritizing funding requests. Montana Tech's funding requests are combined with the other UM affiliates, and the President of UM makes the final choice on UM priorities. UM priorities are combined with requests from MSU and are assembled as a singularly prioritized funding request of the entire MUS. Eventually the MUS funding request list is reviewed and included in budget information submitted for final review and acceptance into the governor's overall LRBP proposed budget, see [LRBP Overview](#).

Review of the LRBP, the CMP and its sub-plans, and the funding needs and budget impact are accomplished through a series of meetings, presentations, and feedback-negotiation sessions that take place throughout the MUS and state communities. Consistent with the core theme "Tech Community," faculty, staff, and students are greatly encouraged to actively participate in planning sessions and to closely review the plans. Likewise, the local Butte community and government officials, alumni, and the



Montana Tech Foundation and its members are very involved in proposing ideas, participating in planning sessions, and design plan review.

#### **Standard 2.G.4**

**Equipment is sufficient in quantity and quality and managed appropriately to support institutional functions and fulfillment of the institution's mission, accomplishment of core theme objectives, and achievement of goals or intended outcomes of its programs and services.**

The general mechanical and electrical equipment associated with basic facilities systems, such as heating, ventilating, air conditioning (HVAC), electrical power distribution, and general purpose task lighting are maintained and managed by the Physical Facilities Department and are considered adequate to support institutional functions and to accomplish goals. These are long lifespan and capital-intensive systems and equipment and are generally chosen as the best available for the requirements at the time of installation. New technology and different program demands have made some facilities equipment less than ideal before its intended lifespan was achieved. However, the institution has been successful in modifying some equipment or its operational use in order to provide satisfactory service.

General academic classroom and laboratory equipment and furnishings are adequate in quantity and quality and are maintained properly to support institutional functions. The department of Physical Facilities works closely with academic units, the administration, and the Registrar to review general classroom and laboratory equipment needs and to plan necessary additions or changes. Funding for equipment replacement or additions is provided through a variety of means. Major classroom renovation and new equipment installation planning are part of the Montana Tech budget request cycle.

Each year an equipment fee is assessed on students, which in the 2015-16 academic year, raised just over \$400,000 for the North Campus and over \$200,000 for Highlands College. Departments are asked annually to prepare a prioritized list of equipment needs for purchase from these funds. With input from the departments, the deans further prioritize and distribute these funds across the department requests. These monies help departments and programs purchase, for example, everything from microscopes costing a few hundred dollars each to a humanoid robot costing \$16,000, and beyond. Here, the guiding principle in allocating these funds is to spend them where they will bring the greatest educational benefit and return on investment.

Additionally, students pay an academic facility fee each semester. Monies from this fee are controlled and prioritized by the Provost with input from the deans and are primarily used for general classroom and laboratories, and related equipment upgrades.

Research laboratory equipment is usually funded by grant money. The grant process involves multiple on-campus reviews prior to request submission to help ensure adherence to the Montana Tech mission and intended goals. The grant may be federal, state, local, or private funds. Access to research equipment is often tightly controlled because it is considered highly specialized, very sensitive, and very expensive. It is not unusual for research equipment to include dedicated installation and maintenance plans performed by manufacturer trained technicians.

Equipment maintenance is performed according to procedures and timelines recommended by the manufacturer. Equipment operation and safety training prior to operation is again performed according to manufacturer recommendations and university safety policies and procedures. Each department that has laboratories assigns specific personnel with the duties of Lab Director. The Lab Director has responsibility for safety and maintenance oversight of the equipment as well as recommending new equipment as needs arise.

## Technological Infrastructure

### Standard 2.G.5

**Consistent with its mission, core themes, and characteristics, Montana Tech has appropriate and adequate technology systems and infrastructure to support its management and operational functions, academic programs, and support services, wherever offered and however delivered.**

Montana Tech's Campus Technology Services (CTS) provides the campus with a multitude of computing resources and technology to support the campus mission and core themes. Three service areas comprise CTS: Network Services, Information Services, and Telephone Services. Additionally, because the number of students in online learning is constantly increasing, a new Director of Distance Learning has been hired, and the Distance Learning Coordinator reports directly to him. Reporting directly to the Provost and Vice Chancellor for Academic Affairs, this new Director, along with the Coordinator, provide Montana Tech faculty with a resource for best practices in course design, instructional technology, pedagogy, accessibility, web conferencing, and all aspects of the online learning environment.

### Infrastructure

For wide area connectivity (beyond Montana Tech's borders), the campus is networked via a 10 Gb/s transport to UM-Missoula for Internet service and network visibility. For local area connectivity (within Montana Tech's borders), all buildings on the North Campus now interconnect via a new fully redundant single-mode fiber backbone. Two central routers operate simultaneously in the Data Center providing automatic failover and a combined bandwidth of 20 Gb/s to each campus building. Additionally, the Campus Data Center is now equipped with top-of-rack switches allowing all servers to connect to the core routers at a combined bandwidth of 80 Gb/s.

Much of what is reflected in the yearly monitoring examples that follow represent information averaged under operation of the older, 1 Gb/s backbone. All building distribution interfaces tied to the older network were 1 Gb/s and, in some cases, self-regulated throughput. That said, a compelling reason for building the new network backbone was the need for redundancy, resilience, and automatic failover. Included as part of the new backbone was allowance to upgrade the building distribution switches and transceivers to activate the new backbone at 10 Gb/s on each redundant leg. Combining the throughput of each leg results in 20 Gb/s to each building. The roll-over to the new backbone was a phased project over the summer in 2016.

Campus desktop computing consists of more than 1,000 workstations supported by four computer support specialists. Separately, the MBMG has information resources that are supported by its own computer support specialist. The MBMG collects and disseminates information about Montana's geologic, groundwater, energy, and mineral resources. For the record, Montana and the nation are reliant on the data the MBMG collects, maintains, and produces. With the new fiber backbone, backup power, and power protection, the MBMG can achieve more reliable data access.

In support of campus video conferencing, a dedicated conferencing room, located in the Health Sciences Building, is in place to specifically address any conferencing not directly related to classroom instruction.

All campus core computing services are environmentally, physically, and electrically protected in the central Data Center to ensure 24-hour, 7 days per week, year-round availability in meeting the information technology (IT) needs of Montana Tech's entire community. The Data Center supports 39 physical servers and 85 virtual servers. These servers deliver the following IT resources: Banner, web, email, file, print services, and VoIP.

In addition, the Data Center houses a 22-node (352 core) High Performance Computing (HPC) cluster; each node of the HPC system includes dual Intel Xeon E5-2660 processors and either 64 or 128 GB of memory. Two of these nodes are graphics processing unit (GPU) nodes that contain three NVIDIA Tesla K20 accelerators. The cluster includes 91 TB of storage. The HPC system supports collaborative research and instruction within Montana and the MUS.

On the North Campus, five instructional computer labs and 13 departmental or student-use computer labs are maintained. In addition, four general purpose multi-media conference rooms in the Student Union Building and various other conference rooms on campus offer audio/video multimedia capability. All classrooms of 24 seats or more are equipped with audio/video presentation capabilities, and lower capacity classrooms are currently being equipped with audio/visual capabilities as budgets allow. Classroom video conferencing can be scheduled into any one of three high-tech classrooms that are equipped with integrated video conferencing capabilities. These classrooms integrate the latest technology to support audio, video conferencing, and presentation capabilities.

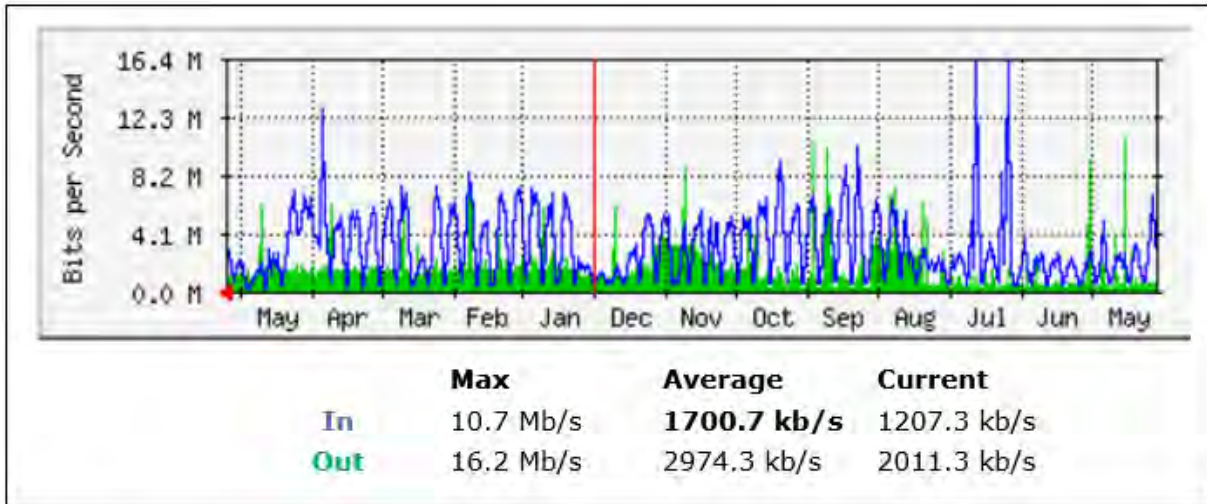
Highlands College sustains 15 physical servers and 25 virtual servers. The virtual servers provide a dynamic number of hosts depending upon student and faculty use at any given time. Highlands College has eight instructional labs with 25 computers each and the ACES with 19 computers. Additionally, located at Highlands College is a new state-of-the-art Pearson VUE computerized 24-seat Testing Center. The Testing Center offers 170 Microsoft exams for certification. Moreover, graduate students, medical technologists, and engineering students can take exams for various certifications and degree requirements. The Testing Center is equipped with microphones and cameras at most cubicles whereby certified test administrators monitor testing. Faculty and professionals can use the center to keep certifications up-to-date.

## **Technology Systems**

Montana Tech operates an enterprise wireless system. The system uses Aruba wireless controllers and thin access points to provide dual band concurrent 802.11a/b/g/n access. The wireless system has, over the years, grown from a convenience network to now a fully relied upon resource. The system delivers extensive integrated security by providing physical layer security, data encryption, virtual private networks, and firewall protection to users on the network.

Overall, the wireless system provides access to students, faculty, staff, and special events at Montana Tech via 164 access points. Demand on the wireless system has grown steadily over the years, and plans are now in place to transition to a newer, high-performance system. The new wireless system will greatly improve quality and coverage delivering up to 1.3 Gb/s, supporting legacy 802.11 a/b/g/n technologies and the new, very high throughput 802.11 ac. The new system will support 3X3 simultaneous spatial streams at data rates up to 450 Mb/s for each client. Implementation of this new system is dependent upon funding.

Montana Tech has two remote sites, Highlands College and Campus Apartment Housing. Connectivity to both sites is served via separate 500 Mb/s point-to-point licensed microwaves. Monitoring demonstrates the microwaves effectively serve both remote sites. For example, referring to Figure 2.G.1 the aggregate yearly average bandwidth at Highlands College is 1700.7 Kb/s (1.7 Mb/s) and, though not shown here, the aggregate yearly average at the Campus Apartment Housing is 18.8 Mb/s. The aggregate yearly average is a yearly span of averaged daily use.



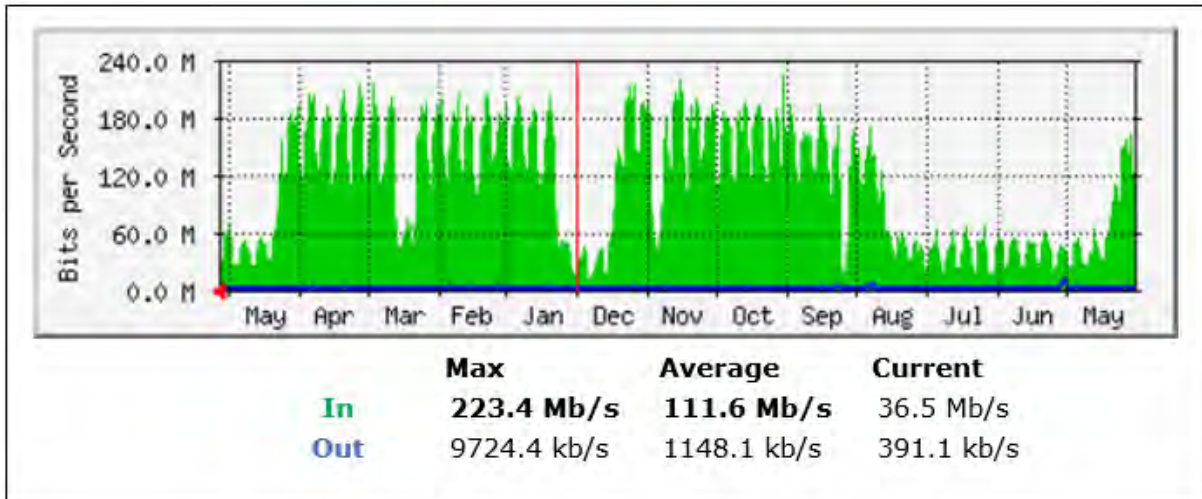
**Figure 2.G.1, Highlands Yearly Span 1-Day Average**

When monitoring demonstrates observable demand, Network Services foresees replacing the microwave circuits with fiber. Network Services is well informed of various commercial or community initiatives for provisioning fiber as the need arises.

**Operational Functions**

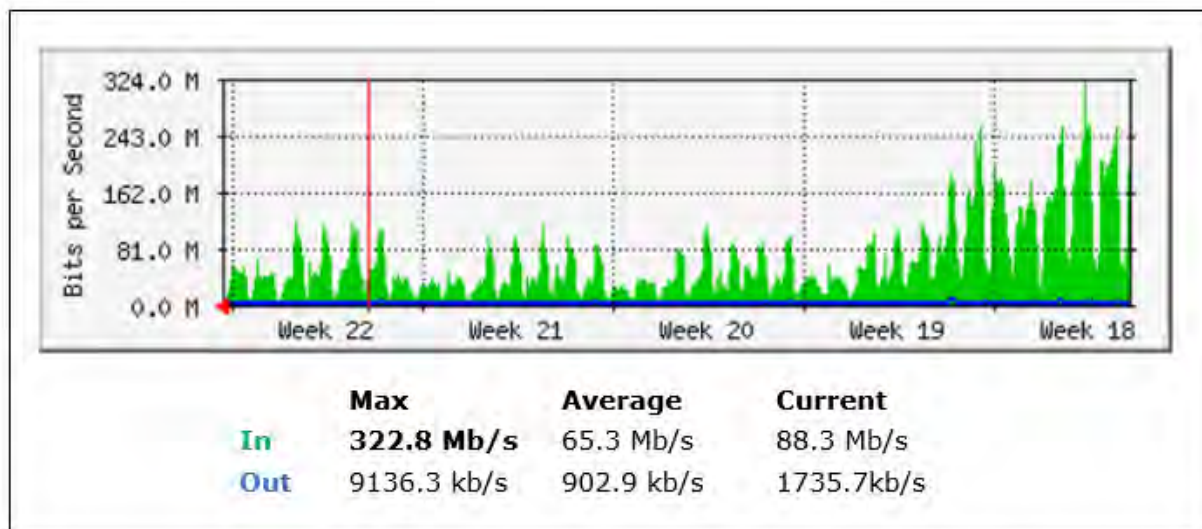
Network Services regularly monitors bandwidth utilization to determine adequacy of both the wide area link and local area network. On the wide area link, the UM-Tech transport is now provisioned at 10 Gb/s (10,000 Mb/s). As this technology scales, provisioning typically moves in set increments. Our most recent link upgrade moved from 1 Gb/s to 10 Gb/s, with the cost actually now less than what we were paying for the 1 Gb/s link.

Following is a snapshot of a yearly span of averaged daily utilizations on the UM-Tech transport. This instance shows the yearly average to be 111.6 Mb/s. The highest daily average, in this span, was 223.4 Mb/s (see Figure 2.G.2). Of interest, the extended periods of lower bandwidth use are related to the summer, Christmas, and spring breaks.



**Figure 2.G.2, Yearly Span 1-Day Average**

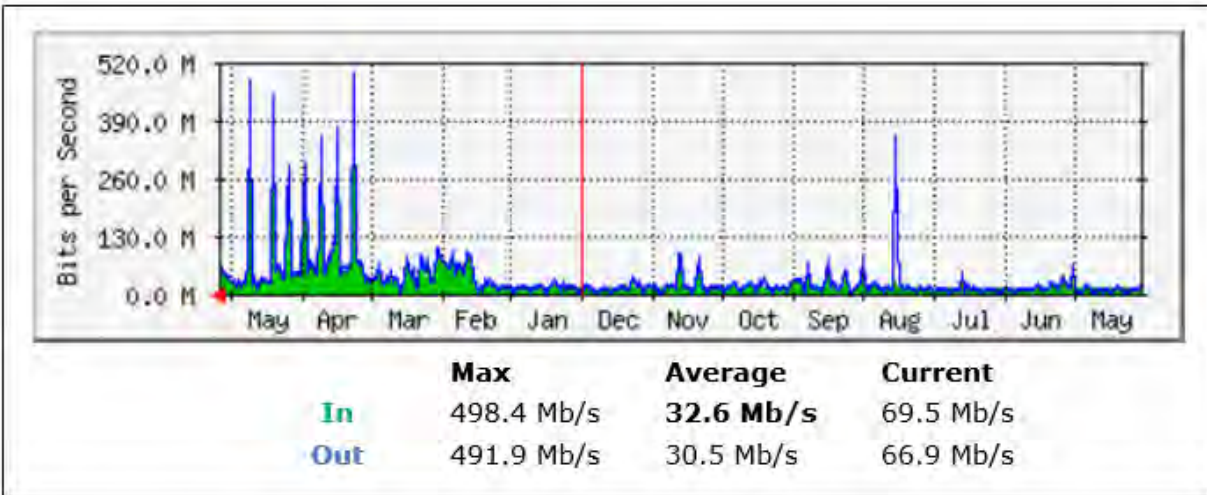
Note, by averaging daily use, instantaneous usage spikes are not reflected. For example, a monthly graph, within the same yearly span made up of averaged 2-hour use is shown in Figure 2.G.3. The graph reveals a 322.8 Mb/s spike. The 18<sup>th</sup> week designation in the graph represents mid-April; 18 weeks into the year. Instantaneous utilizations are not available.



**Figure 2.G.3, Monthly Span 2-Hour Average**

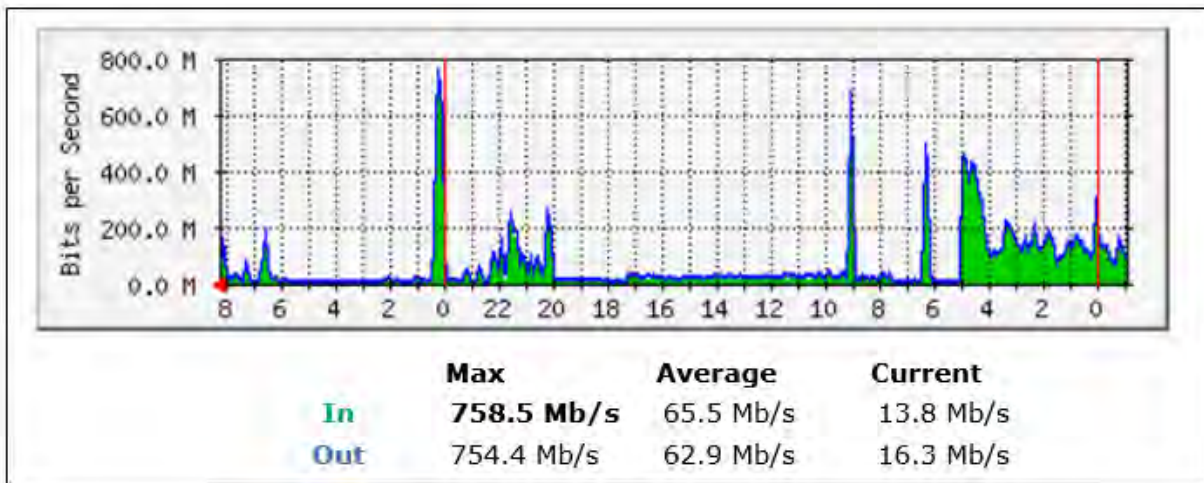
The following discussion relates to monitoring on the local area network. It is beyond the scope of this report to show every building's bandwidth usage; however, it is relevant to show use from one of the higher usage buildings, the NRB. This example illustrates capacity of the backbone to handle network traffic, such that, if it easily supports the higher usage of the NRB, it likewise will support the lower bandwidth buildings. The NRB is occupied by the MBMG, the Petroleum Department, and two student use computer labs. A yearly span of averaged daily use from the NRB is shown in Figure 2.G.4. The average is shown to be 32.6 Mb/s.





**Figure 2.G.4 NRB Yearly Span 1-Day Averages**

Instantaneous spikes are not reflected with a yearly graph; however, by representing a daily span with averaged 5-minute segments it is possible to see usage spikes. Note the 758 Mb/s spike in Figure 2.G.5. Both the yearly and daily graphs show the new backbone easily supports network activity for the NRB and other campus buildings.



**Figure 2.G.5 NRB Daily Span 5-Minute Average**

All buildings on campus connect with redundant routes to the core routers. Each route connects at 10 Gb/s (10,000 Mb/s), combining the two provides 20 Gb/s of load balanced throughput to each building. Redundancy builds resilience into the network. If any segment is ever disrupted or cut, the system seamlessly fails over without interruption. As the campus moves to VoIP, uninterruptible/high-quality voice is an expectation, as is high-speed data access. Network Services stays ahead of the curve by attentive monitoring coinciding with planning, designing, and budgeting for upgrades well in advance of anticipated demands.

## Support Services

The Montana Tech network is an extension of the UM's network and travels regionally, nationally, and internationally via the following:

- Commodity internet to non-university endpoints
- Subsidized/restricted Internet2 network to member university endpoints
- Subsidized/restricted extreme National Lambda Rail (NLR) and Northern Tier Networks between selected member endpoints

Through the Northern Tier Network, the UM-Missoula has a 10 Gb/s network connecting in Seattle for Commodity Internet service. The UM-Missoula also has a 100 Gb/s Internet 2 connection to Seattle. The UM-Missoula serves as the only Internet 2 "Connector" in the State of Montana. Because of the arrangement in the network architecture, benefits of network connectivity derived at UM-Missoula ultimately extend to Montana Tech's campus.

Montana Tech is covered with a tiered network/computer use policy structure. At the highest level are BOR IT policies covering UM and MSU and their affiliates. At the next level, each campus can define specifics relevant to unique operational IT practices. Many specifics are parallel and because of this, Montana Tech references UM IT Policies as well. The compliance structure starts at the top BOR level and follows a most restrictive application where rules may parallel. These policy sets are located at the publicly accessible website, [Network/Computer Use Policies](#).

Montana Tech is enrolled in a Microsoft Campus Agreement for all of its Microsoft software needs. Most desktop operating system upgrades and core software are licensed through this Campus Agreement. Other centralized software, such as Adobe has changed to cloud based licensing. Licensing is either "per-user" or "per-device". Per-user allows the license to be assigned to a user's email address, the user can install the software on several devices. Per-device allows the software to be installed on one device (lab machine). We currently have 58 device licenses for lab machines and nine per user licenses.

Montana Tech subscribes to the McAfee security suite of software which includes McAfee total endpoint protection, a student option for residence halls, e-policy orchestrator (provides unified management of endpoint, network and data security), and various other network security tools. In addition, Montana Tech benefits from the availability of a full-time IT Security Officer on the UM-Missoula campus who recommends industry standard best practices, provides incident advice, and works with the affiliated campuses on policy development.

To support its management, operational functions, academic programs, and its support services, Montana Tech Information Services provides access to the following:

- **Moodle**—a learning management system which is used for face-to-face, blended and distance only teaching modalities; here faculty manage course content, facilitate class discussions, and assess topics learned.
- **Skype for Business**—a conferencing tool which allows faculty and students the use of an online whiteboard as well as video conferencing, recording, content sharing and chat capabilities.
- **Zoom**—a cloud based web conferencing tool which allows recording, chat, and content sharing. ZOOM can connect all platforms.
- **MyMtech**—Montana Tech's portal system, which allows easy access to classes, important links and announcements, and to campus news.



- **Banner**—the campus Student Information System which allows students to register, pay tuition, and fees; the system also allows staff to maintain course catalog, faculty assignments, and the financial databases.
- **Blackboard Transact**—an Ecard system which allows students to purchase on campus items, print, and to access designated electronic locks.
- **UM Data Warehouse**—a large store of data which allows faculty and staff to monitor budgets and expenditures.
- **Office 365**—Provides faculty, staff and students with Microsoft Office (Word, Excel, PowerPoint, OneDrive, Skype, Outlook E-mail). Each user receives 5 personal licenses and access to Online web apps.

## **Standard 2.G.6**

**The institution provides appropriate instruction and support for faculty, staff, students, and administrators in the effective use of technology and technology systems related to its programs, services, and institutional operations.**

Training sessions are offered to faculty, staff, and students the week prior to the start of each new semester, but at different days and times in order to accommodate the schedules of users. Classes offered follow:

- Technology Orientation (Basic Computer Skills)
- Introduction to Moodle
- Advanced Moodle training
- UM training

All students are automatically enrolled in the training course Student 101; faculty are automatically enrolled in the training course Faculty 101. These courses are self-paced online tutorials regarding Moodle. A video of the Faculty 101 contents can be seen at <http://media.mtech.edu/cts/Fac101.mp4>, the Student 101 video can be seen at [http://media.mtech.edu/cts/Student101\\_Final\\_Draft.mp4](http://media.mtech.edu/cts/Student101_Final_Draft.mp4).

One-on-one training sessions are also available to faculty, staff, and to students upon request throughout the year.

The CTS Helpdesk is available to all faculty, staff, and to all students. The CTS Helpdesk is open 7:30 a.m. to 7:00 p.m., Monday through Friday. The publicly accessible website <http://www.mtech.edu/cts> is available 24 hours per day, 7 days per week, to assist those who need help during off hours. The CTS Helpdesk primarily answers questions related to campus email, Moodle, and MyMTech (campus portal).

## **Standard 2.G.7**

**Technological infrastructure planning provides opportunities for input from its technology support staff and constituencies who rely on technology for institutional operations, programs, and services.**

CTS is structured to facilitate support and is under the direction of the Vice Chancellor for Administration and Finance. The directors and managers from Telephone Services, Network Services, and Information Services comprise the Directors Council, which advises Montana Tech's administration on technical issues, developments, and direction. The Directors Council receives planning input from the deans, desktop computer support specialists, faculty, students, and the Computer and Telecommunications Advisory Committee. Customized support is distributed to the CLSPS, the School of Mines & Engineering, and Highlands College. Computer Support Specialists are linked to CTS for

technical direction but are managed by the deans of each respective college. Network Services regularly meets with the Computer Support Specialists to solicit input, hear problems, and to provide direction and consistency.

One very strategic planning process is via the Computer and Telecommunications Advisory Committee. This committee is made up of representatives from across the campus, includes student representation, and advises Montana Tech's administration. Decisions on computer replacement schedules, software purchases, and on network expansion (such as wireless, multi-media expansion to classrooms, and OS platform) are some of the decisions discussed and recommendations rendered. Moreover, this committee has oversight for the computer use fee assessed to all students each semester. Finally, guests are always welcomed to committee meetings, so they can represent or voice an area of concern or expertise pertinent to a particular subject or academic area/department not directly represented by committee membership.

### **Standard 2.G.8**

**The institution develops, implements, and reviews regularly a technology update and replacement plan to ensure its technology infrastructure is adequate to support its operations, programs, and services.**

Several designated fee accounts are dedicated to laboratory and computing equipment. An important account is the Computer Use Fee, which is used for equipment, software, maintenance, or for related items that will benefit a particular instructional program. Here, the use of this fee is determined through annual meetings of the Computer and Telecommunications Advisory Committee, which typically develops a computer use plan for the following five years. This plan looks at replacing all workstations in the campus computer labs at least once every four years and contains allocations for workstations, network/departmental servers, software, paper/toner, and lab printers. See the [Computer Use Plan](#).

Major laboratory and educational equipment purchases are funded through the Equipment Fee. Both the North and South Campuses have separate equipment fees, and on an annual basis, the deans contact department heads on their equipment needs for the upcoming fiscal year. Here the Deans Council reviews the compiled list of requests and allocates funding for the upcoming year based on projected fee revenues. The Provost and Vice Chancellor for Academic Affairs oversee this process and regularly reviews the spending throughout the year.

The Montana Tech campus also uses a Technology Fee to support the technology infrastructure for academic and administrative systems. On an annual basis, the workstation needs of both faculty and staff are assessed, and replacement workstations are purchased from this account. Typically, faculty and staff computers are replaced on a four-year replacement schedule. In addition, Network Services is planning to upgrade and improve the wireless network and has just completed a new redundant fiber backbone. For a list of projects establishing our directions and accomplishments, see [IT Strategic Planning](#).

An Academic Facility Fee is also assessed to students and is used primarily as a classroom improvement account. Faculty or staff members who recognize a need for classroom improvements submit a request to the Provost and Vice Chancellor for Academic Affairs. Usually, these requests include classroom furniture (such as tables, desks, chairs, and podiums) and classroom fixtures (such as white boards, overhead projectors, Smart Boards, and Smart Podiums). Table 2.G.I summarizes fund expenditures from FY 2012 through FY 2016. For a multi-year delineation of the accounts, see [Operating Accounts](#).

**TABLE 2.G.I DESIGNATED FEE ACCOUNT EQUIPMENT EXPENDITURES**

<b>Montana Tech</b>					
<b>Designated Fee Account Equipment Expenditures</b>					
<b>Fee Account</b>	<b>FY12</b>	<b>FY13</b>	<b>FY14</b>	<b>FY15</b>	<b>FY16</b>
Equipment Fee (BEQMTF)	\$ 368,900	\$ 419,100	\$ 333,230	\$ 344,354	\$ 321,546
Computer Fee (BCOMPU)	\$ 242,904	\$ 373,428	\$ 230,768	\$ 339,868	\$ 338,602
Academic Facilities Fee (BAFMGB)	\$ 153,403	\$ 164,250	\$ 78,165	\$ 33,488	\$ 62,512
Technology Fee (BTECFE)(BWWWEB)	\$ 364,072	\$ 337,834	\$ 368,429	\$ 365,902	\$ 289,514
Highlands College Equipment Fee (BCEQPF)	\$ 46,882	\$ 85,868	\$ 154,080	\$ 125,659	\$ 53,828
Highlands College Computer Fee (BCCMPF)	\$ 73,140	\$ 68,555	\$ 86,663	\$ 115,156	\$ 96,816
<b>Total</b>	<b>\$ 1,249,301</b>	<b>\$ 1,449,035</b>	<b>\$ 1,251,335</b>	<b>\$ 1,324,427</b>	<b>\$ 1,162,818</b>

The Computer Support Specialists and IT staff are often in the best position to recognize the educational and administrative requirement of the campus; they frequently bring recommendations to the Computer and Telecommunications Advisory Committee for consideration. These recommendations include which workstations and servers to replace, recommendations for software and support, and any individual departmental needs to be addressed by planning.



# STANDARD 3A

## Institutional Planning



## **Institutional Planning**

### **Standard 3.A—Institutional Planning**

#### **Standard 3.A.1**

**The institution engages in ongoing, purposeful, systematic, integrated, and comprehensive planning that leads to fulfillment of its mission. Its plans are implemented and made available to appropriate constituencies.**

Institutional planning at Montana Tech is a continual process that occurs at all levels of the campus. Whether it is planning that will impact the entire campus (Strategic Planning) or more tactical planning that will affect a specific academic department (Academic Program Planning), the campus strives to employ a culture of transparency and inclusiveness.

#### **Strategic Planning**

Montana Tech's strategic planning is focused on its mission and structured around the core themes. The Strategic Planning process at Montana Tech is initiated by the Chancellor. The four Vice Chancellors also provide input and direction to the Chancellor in the framing of the Strategic Plan.

Once the draft Strategic Plan is developed, a dean is charged with stewarding the draft plan through an iterative process of review by all constituencies of the campus. For example, the Strategic Plan is vetted by the following groups: Executive Committee, Deans Council, Chancellor's Cabinet, Faculty Senate, Staff Senate, and Associated Students of Montana Tech (ASMT). Each group is given the opportunity to provide feedback and recommendations to improve the Strategic Plan. One tangible outcome of this vetting process was the decision to incorporate our NWCCU core themes into the institution's Strategic Plan.

Strategic planning is a continuing participatory process led by an overall planning coordinator-leader (a dean), who chairs the strategic planning committee, consisting of faculty, staff, and administrators from across the institution. Subcommittees focus on each theme or strategic priority to formulate objectives and strategies and to facilitate shared ownership of the resulting plan. Allowing for natural turnover in various positions, the strategic planning committee membership and leadership has been stable since 2011. The mission and core themes were reviewed and approved by the Montana University System (MUS) Board of Regents (BOR) in November 2014 ([see Action Item B of the Academic, Research, & Student Affairs Committee](#)).

Strategic planning involves committee meetings, along with outreach to and engagement of many stakeholders by the coordinator-leader and committee members. Stakeholder groups engaged include academic and administrative departments, the Chancellor's Cabinet, Staff Senate, Faculty Senate, student government, alumni, campus-wide forums, and the local community. Drafts are distributed widely and posted on the website with an invitation for comments and suggestions. This input is assembled, shared, and discussed at meetings of the Strategic Planning Committee. After the current plan was developed, a consultant was engaged in 2015–16 to facilitate meetings involving the Executive Council and Chancellor's Cabinet to review, optimize, streamline, and wordsmith the strategic plan to ensure that its goals are specific, measurable, achievable, realistic, and time-bound, and engaged (SMARTER).

The annual performance goals of the Vice Chancellors and deans link to the themes and objectives of the strategic plan. Annually the campus' progress on the objectives and strategies is reviewed and reported. The strategic plan, [A Commitment to Excellence](#), is posted on the Montana Tech website.

### **Standard 3.A.2**

**The institution's comprehensive planning process is broad-based and offers opportunities for input by appropriate constituencies.**

Montana Tech makes the campus planning process as transparent and participatory as possible. The campus values input to its plans from a diverse constituency. For example, when Montana Tech reviewed and revised its Strategic Plan in 2016, the following entities (among others) provided comments, suggestions, criticisms, revisions, etc., to the plan:

- ASMT
- Faculty Senate
- Staff Senate
- Deans Council
- Chancellor's Cabinet
- Executive Committee
- Strategic Planning Committee
- Executive Committee

While the list provided above is not meant to be all-inclusive, it does demonstrate that shared governance is important and invited in the planning process. In addition, the level of planning influences the amount of participation. For example, campus-wide planning involves a much broader group of constituencies than planning that occurs at the department or program level. At the more focused levels, planning typically involves the faculty, students, alumni, employers, and external advisory boards of the department or program.

### **Standard 3.A.3**

**The institution's comprehensive planning process is informed by the collection of appropriately defined data that are analyzed and used to evaluate fulfillment of its mission.**

The collection of appropriately defined data at Montana Tech starts with the Office of Institutional Research (IR). The Director of IR works in concert with diverse constituencies, which include the Office of the Commissioner of Higher Education (OCHE), Montana Tech's Provost/Vice Chancellor for Academic Affairs and the Vice Chancellor of Administration and Finance, and campus-to-campus peers to ensure that accurate data are available to evaluate fulfillment of our institutional mission.

The [Institutional Research website](#) provides access to a central repository for mission-specific data that different campus constituencies (and the public) can access. Data is collected from a number of sources that include, but are not limited to:

- The Student Satisfaction Inventory (SSI)
- The National Survey of Student Engagement (NSSE)



- The Community College Survey of Student Engagement (CCSSE)
- ETS® Proficiency Profile
- Complete College America (CCA) data through the Office of the Commissioner of Higher Education
- Academic Department Alumni surveys
- Academic Department Outcomes surveys
- Employment/Graduate surveys from the Career Services office

### **Standard 3.A.4**

**The institution’s comprehensive plan articulates priorities and guides decisions on resource allocation and application of institutional capacity.**

Montana Tech’s comprehensive plans, which include our [Strategic Plan](#), [Master Plan](#), [Vision 2025](#), and [Academic Program plans](#), articulate the campus’ priorities and guide decisions on resource allocation and application of institutional capacity. These plans, in addition to the campus planning process, illustrate how the college mission as well as strategic goals guides both strategic directions and the allocation of resources to carry out those directions.

The iterative planning process begins at the department or program level, tied to the institution’s core themes and the core-theme supporting strategic goals. The first level of prioritization of unit-level requests rests with the appropriate dean or director. The next level of scrutiny occurs at the Executive Council where the Vice Chancellors review requests and prioritize them for consideration by the Chancellor. Ultimately, the Chancellor is responsible for approving the allocation of campus resources.

Beginning in 2017, Montana Tech will undertake a campus-wide Program-Prioritization process. The methodology developed by Robert Dickeson will be used to guide the campus through this process. All programs, defined as anything that consumes resources (time, personnel, financial, etc.) will be evaluated for relevance, quality, productivity, and efficiency. Potential outcomes of this process may include, but are not limited to, consolidation of departments, movement of academic departments from one college to another, elimination of programs, and the shift of resources from one program to another. This Program Prioritization endeavor will be inclusive and transparent. Representatives from all of the constituent groups affected—faculty, staff, students, and administration—will serve on the prioritization working group.

### **Standard 3.A.5**

**The institution’s planning includes emergency preparedness and contingency planning for continuity and recovery of operations should catastrophic events significantly interrupt normal institutional operations.**

Montana Tech’s office of Environmental Health and Safety (EH&S) administers and supports the policies and procedures in the areas of emergency preparedness and contingency planning. The mission of the EH&S office is as follows:

- To provide for the health and safety of the campus community
- To assist in preventing or reducing accidents



- To identify and eliminate safety and environmental hazards and unsafe conditions
- To ensure proper disposal of hazardous wastes

Montana Tech has several policies and procedures developed by the EH&S office that address the continuity and recovery of operations should catastrophic event significantly interrupt normal institutional operations. The campus emergency procedures include, but are not limited to:

- [Emergency Notification Plan](#)
- [Emergency Plan Instructions](#)
- [Emergency Notification System](#)
- [Emergency Action and Crisis Protocol Manual](#)
- [Emergency Phone Number Calling List](#)
- [Assembly areas for evacuation of buildings](#)

The campus also has a number of policies in place to help ensure a safe and emergency-responsive culture. The Montana Tech Health and Safety Committee is responsible for the review and maintenance of all safety procedures on campus. These policies include, but are not limited to:

- [Montana Tech Safety Policy](#)
- [Student Travel Policy](#)
- [Lab Checkout Policy](#)
- [Vehicle Use Policy](#).

EH&S is also responsible for the oversight of the full suite of related [safety programs](#) on campus. These safety programs include, but are not limited to:

- Blood-borne Pathogens
- Fire Protection and Prevention
- Electrical Safety
- Fall Protection
- Hazardous Communication
- Hot work
- Lockout/Tagout
- Pandemic
- Personal Protective Equipment
- Radiation Safety
- Respiratory Protection Program.

In order to guard against catastrophic failures to information technology (IT) systems, Campus Technology Services (CTS) implements several safeguards. All campus core computing services are environmentally, physically, and electrically protected in the central Data Center to ensure 24-hour, 7 days per week, year-round availability. The Data Center is equipped with a state-of-the-art fire

detection/suppression system. Critical systems are constantly monitored and alerts are sent to Network Services' personnel without exception. The Data Center is electrically backed with a 125 KVA backup diesel powered generator. Additionally, the network backbone now provides two independent and redundant 10 Gb/s loops, providing failover in the event of a catastrophic incident or failure. Network Services is currently investigating the feasibility of diverting the Data Center's heat load to the Mining Geology (MG) Building's high capacity chiller, if ever necessary. This would allow maintenance or a failure backup of the Data Center chiller without a shutdown of core services.

Telephone Services is halfway through transition from legacy telephone equipment to Voice-over-IP (VoIP) telecommunications. The legacy equipment is protected from power outage by means of a direct current battery bank. VoIP equipment also uses dual power systems that draw from both the commercial power buss and the battery bank. In the near future, VoIP switching will be from a new HP Blade System located in the protected environment of the Data Center described above. Nightly backups are made from both legacy and VoIP systems and are preserved for up to 10 days. Replications are taken every 15 minutes and stored offsite for the soon to be utilized HP Blade system.

Critical System Backups for our Student Information System (SIS) Content Management System and other critical enterprise systems are created nightly in the MG Building's data center and replicated to the Centennial Hall building. The SIS has several different types of backups that occur on a nightly basis. These backups include copying virtual hard drives, copying database files, exporting the database, and the traditional Oracle RMAN backup process. The entire virtual machine is backed up on a weekly basis. All daily transactions are also held for 24 hours to protect against user error. Other systems, including the Content Management System have the entire virtual machine copied nightly.



# CORE THEME 1

Education and Knowledge



## **Core Theme Planning, Assessment, and Improvement**

### **Executive Summary of Eligibility Requirements 22 through 23**

#### **Student Achievement**

Student learning outcomes for each degree and certificate, as well as general education outcomes are published in the [Montana Tech Catalog](#). Student learning outcomes are assessed within the annual [academic program reviews](#). Program specific accreditation reviews provide an additional level of regular and systematic assessment.

#### **Institutional Effectiveness**

As is documented throughout this self-study, Montana Tech systematically applies clearly defined evaluation and planning procedures. The campus assesses the extent to which it achieves its mission and core themes, and information regarding institutional effectiveness is regularly published on campus websites and in materials sent to the Montana BOR as well as students, faculty, staff, alumni, and friends of Montana Tech. These assessment activities occur at every level of the campus (department, program, college, and university). Internal and external environments are regularly monitored, and Montana Tech constituencies continue to provide data and recommendations to ensure that the campus remains viable and sustainable into the future.

### **Core Theme 1: Education and Knowledge**

#### **Standard 3.B—Core Theme Planning**

##### **Standard 3.B.1**

**Planning for each core theme is consistent with the institution’s comprehensive plan and guides the selection of programs and services to ensure they are aligned with and contribute to accomplishment of the core theme’s objectives.**

##### **Standard 3.B.2**

**Planning for core theme programs and services guides the selection of contributing components of those programs and services to ensure they are aligned with and contribute to achievement of the goals or intended outcomes of the respective programs and services.**

The cornerstone of all planning and decision-making at Montana Tech is our institutional Mission, and its associated Core Themes and Strategic Plan. Planning has evolved over the years and institutional planning is in an ongoing state of transition due to the new focus on mission fulfillment through the core-theme objectives.

Montana Tech’s Strategic Plan is evolving with a plan structured on the core themes and objectives. Major actions/activities being considered are evaluated against the Mission, Core Themes, and Strategic Plan. Planning at Montana Tech has involved careful consideration of the impact of any course of action on students, faculty, staff, budgets, and facilities. In addition to soliciting input from these stakeholders, planners often solicit feedback from parents, graduates, and employers. Annual Program Reviews are

being used to help programs improve and to help administrators assess the effectiveness of their resource allocations.

## **Mission**

[Montana Tech's Mission](#) is:

*Montana Tech, through exemplary undergraduate and graduate education, workforce development, research, and service, builds on a strong heritage in engineering, science, and technology that blends theory with practice in meeting the changing needs of society and the responsible development and use of natural resources.*

As part of its planning, Montana Tech cultivates an academic environment in which the highest standards of intellectual integrity and scholarship are practiced. Students at Montana Tech learn from and collaborate with faculty who are at the forefront of their disciplines. Montana Tech faculty and staff are committed to helping students excel and learn. We preserve academic freedom, promote diversity and equal opportunity, and respect individual beliefs. We advance rigorous interdisciplinary inquiry, international involvement, and social responsibility.

## **Teaching**

In its role as a public university, Montana Tech offers instruction in certificate, associate, baccalaureate, masters, and doctoral degree programs. Its four schools/colleges have a distinct science, technology, engineering, and math (STEM) focus. In its academic planning, Montana Tech commits itself to providing challenging instruction for all its students, from Montana and both other states and nations, and encourages interdisciplinary work and the integration of instruction and research opportunities. It expects and rewards superior teaching and academic excellence among its faculty. Notwithstanding its STEM focus, Montana Tech seeks the broad education of all its students and their familiarity with a changing world.

## **Research**

Rigorous assessment and review are central to planning and advancing Montana Tech's research programs and creative activities, as are participation and leadership in national and international academic disciplines. Montana Tech also cooperates in research and creative activities with other agencies and institutions of higher education, with the community, and with private enterprise. The quintessential example of the above is the location on campus of the vitally important state agency, the Montana Bureau of Mines and Geology.

## **The Community**

In its role as a contributor to public life, Montana Tech augments its own programs and enriches the larger community with its library, radio station, public lectures, continuing education programs, alumni programs, athletics, recreational opportunities, and other public events. Montana Tech's faculty, staff, and students are encouraged to contribute time and expertise to community and professional service, to national and international affairs and governance, and to matters of civic dialogue.



## Planning Generally

Major actions/activities being considered are evaluated against the Mission, Core Themes, and Strategic Plan. Planning at Montana Tech has involved careful consideration of the impact of any course of action on students, faculty, staff, budgets, and facilities.

Planning for Core Theme 1—Education and Knowledge centers on the five objectives of the theme:

Objective 1: Create and sustain strong graduate, baccalaureate, associate, and certificate programs.

Objective 2: Facilitate student learning through diverse delivery and educational experiences.

Objective 3: Prepare students for successful careers.

Objective 4: Provide students a gateway for transfer education.

Objective 5: Provide students with a general education.

The planning for Core Theme 1 is done at the macro and micro level. The planning for each objective, which culminates in core theme planning, is discussed below.

### **Objective 1: Create and sustain strong graduate, baccalaureate, associate, and certificate programs.**

Montana Tech strives to be a national leader in STEM education. Each academic program is responsible for submitting annual program reviews that detail education objectives (EO) and student learning outcomes (SLO) of each program, and assess if SLO benchmarks were achieved. The reviews are evaluated by a dean and a member of the campus Assessment Committee. Feedback is provided on how to improve the program review for the next year.

### **Objective 2: Facilitate student learning through diverse delivery and educational experiences.**

Academic departments are encouraged to use assessment proactively to improve teaching and student learning. Using diverse delivery methods (online courses, flipped classrooms, interactive classroom technologies, use of Moodle for homework and lab safety training) and offering diverse educational experiences (hands-on laboratories, field trips, professional development opportunities, conferences, on-campus educational activities, workshops) all contribute to increased student engagement and learning.

Montana Tech currently offers as online programs two master's degrees (Project Engineering & Management and Industrial Hygiene), one graduate certificate (Health Care Informatics), one undergraduate certificate, and the BSN completion degree. Additionally, a wide variety of online courses are offered each semester that fulfill undergraduate general education requirements and/or undergraduate degree requirements.

Non-academic programs that specialize in facilitating student learning include the Academic Center for Excellence (North-ACE and South-ACES), College Success course (MT1016), and academic advising. The Director of Student Success is responsible for the program reviews for the ACE, MT1016, and academic advising for the university. The department chair of general studies creates the program review for ACES. The director of freshman engineering creates the program review for the Freshman Engineering Program.

Montana Tech has created a new position entitled the Director of Distance Learning. This position has the responsibility of encouraging and supporting new and existing diverse delivery and educational experiences. For example, the Director facilitated an arrangement between Highlands College and



Helena College by which the Highlands College students took courses from Helena College while located at Highlands College, and thereby eliminated the inconvenient travel for the Highlands College students.

**Objective 3: Prepare students for successful careers.**

One of Montana Tech's greatest strengths is the institution's ability to provide students hands-on experience that will directly benefit them in the employment sector. Many of our academic programs allow students to earn academic credit for internships. Some of our programs include interactive laboratory components. Montana Tech's Career Services office works diligently to offer career fairs with internship and job opportunities as well as online resume assistance, workshops, and etiquette dinners.

As part of its academic planning, most academic programs have organized an industrial advisory board (IAB) from which advice and counsel can be solicited about knowledge and skills needed by our students to be successful in their careers after graduation. In the School of Mines and Engineering (SME), the Freshman Engineering (FE) Program exposes students to the many and varied areas of engineering.

**Objective 4: Provide students a gateway for transfer education.**

The Associate of Science (AS) program was created in 2011 to "...facilitate transfer from Highlands College to related degree programs at Montana Tech or other Baccalaureate granting institutions of Montana." Montana Tech also has other academic programs, such as pre-surgical tech, that require transfer to Missoula College after completion of the first year.

MUS uses a common core general education pathway that allows students to transfer lower-level (100 or 200) courses by doing one of the following: (1) complete all lower-division general education requirements for one specific campus, (2) complete the MUS Core transferrable general education curriculum, or (3) obtain an Associate of Arts (AA) or AS transferrable degree. The intent of this system is to reduce the cost of higher education by reducing time spent obtaining a degree.

**Objective 5: Provide students with a general education.**

Montana Tech uses multiple assessment tools to ensure that high-quality general education courses are offered to students. The Curriculum Review Committee (CRC) functions in an oversight and review capacity to either approve or reject curriculum proposals submitted by departments. The CRC ensures that all curriculum changes coming from an individual department are coordinated with the curricula of other departments and do not impact negatively other curricula and that academic standards are upheld. The CRC is composed of a faculty member from each department, one student member, the Registrar, a library faculty member, the Provost, and a faculty senate representative. The chair of the committee is elected by the committee. This committee meets regularly during the fall and spring term.

Once a course is approved by the CRC, the matter is referred to the Faculty Senate for their review and approval. Once the course has been offered for one term, faculty can submit the course to the General Education Committee to be considered for inclusion as an approved general education course. Montana Tech has five core areas (Communication, Humanities, Fine Arts, Mathematics, Physical and Life Sciences, and Social Sciences) in general education. Courses seeking a general education designation need to identify which core area it would belong to and demonstrate how the course will meet at least one of the eight learning outcomes associated with that core. The General Education Committee is comprised of faculty and staff and the chair is nominated and elected by the committee. The General Education Committee meets twice a semester to review applications.

The logistics of requests moving from the CRC to the Faculty Senate and the General Education Committee has been problematic in recent times. The logistical problems have focused on the tracking and archiving of proposals. As a result of these issues, the three groups have agreed to meet and work together toward a better understood and streamlined process.

### **Standard 3.B.3**

**Core theme planning is informed by the collection of appropriately defined data that are analyzed and used to evaluate accomplishment of core theme objectives. Planning for programs and services is informed by the collection of appropriately defined data that are used to evaluate achievement of the goals or intended outcomes of those programs and services.**

It is a given that data-driven decision-making is a best practice. A foundational concept underlying data-driven decision-making is the collection of appropriately defined data. Montana Tech's Institutional Researcher collects and collates extensive amounts of data for use by the Montana Tech leadership in decision making.

An example of planning under Core Theme 1 was the initiative to split the General Engineering bachelor's degree into the separate Civil Engineering and Mechanical Engineering bachelor's degrees. Enrollment data indicated that the numbers in the GE Program were beginning to fall off and in 2014 did not meet its Indicator of Achievement (CT1-01b). It was further noted by employers, industrial advisory boards, alumni, faculty, and students that there was a disconnect between the degree name and the actual education being offered. The disconnect difficulty was that General Engineering was too broad a descriptor and so was often interpreted as being neither Civil Engineering nor Mechanical Engineering.

The General Engineering faculty started the process of splitting the General Engineering degree into Civil Engineering and Mechanical Engineering degrees. Each degree was thought through and separate curricula were developed by the faculty. With the approval of the General Engineering departmental faculty and Dean, the initiative was reviewed by the institutional CRC and Faculty Senate. The initiative was then presented to the President of the University of Montana–Missoula (UM-Missoula). The initiative underwent significant discussion with both the UM–Missoula and Montana State University - Bozeman (MSU-Bozeman), especially the MSU Engineering Department. The initiative then went for the approval of the Commissioner of Higher Education. Subsequently, the initiative was submitted for consideration by the Montana BOR. The initiative finally passed.

This process is an ideal example of accomplishment of Objectives 1 and 3.

An example of the accomplishment of Objective 4 is the development of the AS Program. At one time, Montana Tech's embedded two-year school, Highlands College, only had career technical education (CTE) degrees and no transfer degree. The Montana BOR mandated that all of Montana's two-year schools evolve to become more comprehensive, including having a two-year transfer degree. As a result, Montana Tech's Highlands College developed the AS Program. Subsequent to that time, the AS Program has become the largest program at Highlands College and one of the largest programs at Montana Tech.

## **Standard 4.A–Assessment**

### **Standard 4.A.1**

**The institution engages in ongoing systematic collection and analysis of meaningful, assessable, and verifiable data—quantitative and/or qualitative, as appropriate to its indicators of achievement—as the basis for evaluating the accomplishment of its core theme objectives.**

#### **Standard 4.A.2**

**The institution engages in an effective system of evaluation of its programs and services, wherever offered and however delivered, to evaluate achievement of clearly identified program goals or intended outcomes. Faculty have a primary role in the evaluation of educational programs and services.**

#### **Standard 4.A.3**

**The institution documents, through an effective, regular, and comprehensive system of assessment of student achievement, that students who complete its educational courses, programs, and degrees, wherever offered and however delivered, achieve identified course, program, and degree learning outcomes. Faculty with teaching responsibilities are responsible for evaluating student achievement of clearly identified learning outcomes.**

#### **Standard 4.A.4**

**The institution evaluates holistically the alignment, correlation, and integration of programs and services with respect to accomplishment of core theme objectives.**

#### **Standard 4.A.5**

**The institution evaluates holistically the alignment, correlation, and integration of planning, resources, capacity, practices, and assessment with respect to achievement of the goals or intended outcomes of its programs or services, wherever offered and however delivered.**

#### **Standard 4.A.6**

**The institution regularly reviews its assessment processes to ensure they appraise authentic achievements and yield meaningful results that lead to improvement.**

#### **Objective 1: Create and sustain strong graduate, baccalaureate, associate, and certificate programs.**

One of the foundations of an academic institution is the creation and sustainability of strong graduate, baccalaureate, associate, and certificate programs. To appropriately sustain strong programs, it is essential that the programs be honestly and comprehensively reviewed and that includes an identification of and an understanding of the programs' strengths and weaknesses. In their reviews, all academic programs identified strengths and weaknesses, summaries of program-specific measures of student learning occurred in 83% of the reviews, and 98% of the program reviews identified ways to maintain strengths and address weaknesses. Enrollment and awards were greater than our three-year average. See Table 4.A.1.I.

**Table 4.A.1.I Core Theme 1 Objective 1 Indicators Of Achievement A, C, AND D**

Percent of Programs Addressing Indicators of Achievement in 14-15 Program Reviews			
	Identification of both program strengths and weaknesses.	Summary of the results of program-specific measures of student learning	Programs will identify ways to maintain current strengths and to address weaknesses
Benchmark	70%	70%	70%
School of Mines & Engineering	100%	78%	100%
College of Letters Science & Professional Studies	100%	100%	100%
Highlands	100%	75%	94%
Graduate School	100%	0%*	100%
Montana Tech	100%	83%	98%

\*Referring to the Graduate Program Review for 14-15, it is notable that there was only one program under consideration for the calculation of this data point.

Because of [OCHE Performance Based Funding](#) (PBF) initiative, the 3-year average was used as a benchmark. Enrollment and the number of certificates and degrees awarded met the benchmark for School of Mines & Engineering, Highlands College, Graduate School, and Non-Degree student. The College of Letters Science & Professional Studies did not meet the benchmark and is assessing this data to determine an appropriate course of action to address this benchmark issue. See Table 4.A.1.II.

**Table 4.A.1.II Core Theme 1 Objective 1 Indicator Of Achievement B**

	Enrollment			Graduates		
	Fall 2014	3-year average	Difference	2014-2015	3-year average	Difference
Benchmark	> 3-year average			> 3-year average		
School of Mines & Engineering	1201	1127.3	74	194	187.7	6
College of Letters Science & Professional Studies	693	774.7	(82)	138	161.7	(24)
Highlands	543	526.7	16	123	112.0	11
Graduate School	192	158.3	34	58	48.7	9
Non-Degree	316	260.3	56			
Montana Tech	2945	2847.3	98	513	510.0	3

**Objective 2: Facilitate student learning through diverse delivery and educational experiences**

Departmental program reviews are used to assess educational opportunities and participation rate of students. As indicated in Table 4.A.1.III, three out of four of our colleges did not meet this benchmark

(70%) because departments did not list participation rates. Many activities, such as public presentations, conferences, and on-campus events are problematic when it comes to capturing data related to participation rate of students. All of this was noted in the internal assessments of the program reviews and in instructions for the future program reviews.

**Table 4.A.1.III Core Theme 1 Objective 1 Indicator of Achievement A**

Percent of Programs Addressing Indicators of Achievement in 2014-2015 Program Reviews	
	Educational Opportunities and Participation rate of students
Benchmark	70%
School of Mines & Engineering	44%
College of Letters Science & Professional Studies	87%
Highlands College	6%
Graduate School	0%
Montana Tech	44%

Online degree and certificate programs available, degrees and certificates awarded, courses, and student credit hours all achieved their benchmarks as indicated in Table 4.A.1.IV. The number of online certificates awarded has decreased over the past four years, and the number master's degrees awarded has remained approximately the same. The growth has been in the BSN completion program. The BSN completion program is open admission to all Licensed Registered Nurses, and students can complete the program within two academic semesters. In March 2015, the BOR approved the creation of a BS Nursing program and the phasing out of the AS Nursing degree. Montana Tech is scheduled to graduate the last class of AS Nursing students in Spring 2017. The proposal details the professional expectation of a bachelor's level nursing education rather than associate, and the need for this program is expected to continue and grow.

**Table 4.A.1.IV Core Theme 1 Objective 2 Indicators Of Achievement B**

Number of Online Degrees and Certificates Awarded				
	2011-2012	2012-2013	2013-2014	2014-2015
<b>Undergraduate Certificate</b>				
Health Care Informatics	7	5	3	2
<b>Bachelor's Degree</b>				
BSN Nursing Completion	7	7	25	16
<b>Graduation Certificate</b>				
Health Care Informatics	6	3	1	2
<b>Master's Degree</b>				
Industrial Hygiene (Professional Track)	6	11	6	13
Project Engineering Management	7	2	6	1

It is important to highlight that the number of students' credit hours is at a record high for our institution. There were new online courses offered such as ANTY 122-Race and Minorities, and long standing online courses experiencing growth, such as Anatomy and Physiology.

All of the programs that are geared towards assisting students met the benchmark requirements. Many of these programs saw substantial changes in measures and benchmarks when compared to [previous versions](#) noted in the NWCCU Year 3 Report. For example, Montana Tech dissolved the Foundations of Engineering and Science Program and started a Freshman Engineering Program in Fall 2014.

**Objective 3: Prepare students for successful careers.**

This benchmark was not met primarily because academic departments within Highlands College and the graduate school did not explicitly state the ways they prepared their graduates for successful careers. One of the reasons why this was the case is that many of those students already have successful careers, and their enrollment is only part-time as they strive to better their careers.

In preparing students for successful careers, many programs noted their use of internships, preparation for licensing exam, and training in specialized software within the curriculum. For example, in the Program Review for Geophysical Engineering, it is noted that the students learn industry specialized software packages such as Matlab, Petrel, VISTA, OMNI, Kingdom Suite, and RES3D. Internship and experiential learning information is collected by Career Services in the [Experiential Learning Questionnaire](#) and reported in the [Experiential Learning Survey](#). The engineering programs noted the coursework in preparation for the Fundamentals of Engineering (FE) exam and information on the important feedback from industrial advisory boards in curricular preparation for careers. Specialty software was identified by many programs; for example, math noted SAS, Minitab, Maple, Matlab, and LaTeX. Chemistry recently added a course, Computational Methods in Chemistry, to train students on digital tools used in the profession.

**Objective 4: Provide students a gateway for Transfer Education.**

The 2014-2015 AS cohort resulted in 11% of the students transferring to another institution, and 15% entering a bachelor's program at Montana Tech. However, the overall transfer rate of the AS program is low. General Engineering had 22 freshman students, averaging 36 credits transfer to MSU-Bozeman, and Liberal Studies had 17 students, averaging 17 credits transfer to UM-Missoula. For the 2009-2013 cohorts, an average of 37 credits were earned prior to transferring to another institution. MUS schools are the primary destination of the students transferring.

**Objective 5: Provide students with a General Education.**

Montana Tech understands the value of providing students with a strong and broad general education. It is important for students to realize how skills learned in one class can apply to an entirely different subject matter, and, furthermore, situations that can be encountered during their careers. By taking general education courses, students receive a necessary foundation for the kind of critical thinking, problem solving, effective communication, information analysis, and knowledge base necessary to succeed in college and beyond.

The objective benchmark was met, but our general education did not meet the internal benchmarks for the following: students will be able to reason analytically and quantitatively at an algebraic level (core area: mathematics and physical and life sciences), students will be able to use an understanding of the physical and natural world to identify and solve problems (core area: mathematics and physical and life sciences, and students will be able to demonstrate proficient critical thinking skills (maps to each core area). Montana Tech's General Education Committee plans to review these matters to attempt to understand the issues related to the internal benchmarks.

## **Standard 4.B–Improvement**

### **Standard 4.B.1**

**Results of core theme assessments and results of assessments of programs and services are: a) based on meaningful institutionally identified indicators of achievement; b) used for improvement by informing planning, decision making, and allocation of resources and capacity; and c) made available to appropriate constituencies in a timely manner.**

### **Standard 4.B.2**

**The institution uses the results of its assessment of student learning to inform academic and learning-support planning and practices that lead to enhancement of student learning achievements. Results of student learning assessments are made available to appropriate constituencies in a timely manner.**

Based upon the data, Montana Tech is meeting or exceeding almost all of the objectives within Core Theme 1. Notwithstanding this fact, the Montana Tech aspires to have more refined systems of assessment and stronger metrics indicating a supportive environment for learning.

As noted in response to Standard 1.A.2, Montana Tech must meet three of the five Objectives under Core Theme 1 to be able to legitimately claim “mission fulfillment.” It is notable that Montana Tech has met all of its five Objectives for Core Theme 1–Education and Knowledge, as noted in the [Montana Tech 14-15 Scorecard](#). As a result, Montana Tech can legitimately and appropriately declare mission fulfillment of Core Theme 1–Education and Knowledge.

Improvements in the Core Theme 1–Education and Knowledge are addressed at the objective level, as follows.

#### **Objective 1: Create and sustain strong graduate, baccalaureate, associate, and certificate programs.**

It was noticed that many departments had one set of SLOs listed in their program review, but these did not always match the SLOs listed in the catalog. Departments that had this discrepancy were encouraged to work with the registrar to ensure that their SLOs were consistent. Some departments needed to better identify how the assessment tool used to determine the benchmark was a reliable measure.

Objective 1 had five Indicators of Achievement:

**CT1-01a:** Identify program strengths and weaknesses

**CT1-01b:** Graduate, baccalaureate, associate, and certificate programs tracked by enrollment and number of graduates

**CT1-01c:** A summary of the results of program-specific measures of student learning

**CT1-01d:** Programs will identify ways to maintain current strengths and to address weaknesses

As noted in response to Standard 1.A.2, Montana Tech must meet two of the four Indicators of Achievement to maintain that Objective 1 has been met. Referencing the [Montana Tech 14-15 Scorecard](#) under Objective 1, it is notable that all four of the Indicators of Achievement have been met.

An example of the above is Indicator of Achievement CT1-01a: Identify program strengths and weaknesses. The Montana Tech Assessment Committee reviewed the Program Reviews of all of the



Montana Tech programs and calculated that one hundred percent (100%) of the Program Reviews identified program strengths and weaknesses, which exceeds the 70% benchmark.

Another example of the above is Indicator of Achievement CT1-01b: Graduate, baccalaureate, associate, and certificate programs tracked by enrollment and number of graduates. A review and compilation of the academic Program Reviews revealed that in the Fall 2014, Montana Tech exceeded or equaled the 3-year average for both enrollment and graduates.

### **Objective 2: Facilitate student learning through diverse delivery and educational experiences**

The current online degrees and certificate programs are beneficial to the professional development of the graduate students; however, there are no completely online undergraduate degrees at Montana Tech. Approximately 70% of the AAS and BS in Healthcare Informatics degree courses can be completed online; however, 80% of the program must be delivered online to be recognized as an online program by the MUS eLearning Advisory Committee. While all of the HCI courses are online, this is an interdisciplinary degree. Collaboration with the Dean of CLSPS and department heads is required to increase online offerings in general education, business, and information technology courses in order for the programs to be fully online. The number of courses offered unrelated to the existing degree programs is minimal. Based on student enrollment, Montana Tech should offer more online courses. In 2010, Montana Tech began a [virtual mentor program](#) within the Enrollment Services Office. The campus is considering improving academic advising, as indicated in the Strategic Plan either by providing a professional advising center or mandating professional development for all faculty, who provide academic advising.

Objective 2 had three indicators of achievement:

**CT1-02a:** A summary of the educational opportunities (and participation rate) available to students in the program

**CT1-02b:** Number of degrees, courses, and enrollment in courses offered through distance education

**CT1-02c:** Assessment of programs to help students be successful, Tech Success, Freshman Engineering, ACE, ACES, and Advising

As noted in response to Standard 1.A.2, Montana Tech must meet two of the three Indicators of Achievement to maintain that Objective 2 has been met. Referencing the [Montana Tech 14-15 Scorecard](#) under Objective 2, it is notable that two of the three Indicators of Achievement have been met.

One example is Indicator of Achievement CT1-01b: Number of degrees, courses and enrollment in courses offered through distance education. A review and compilation of the academic Program Reviews, as noted in the [Montana Tech 14-15 Scorecard](#), revealed that in the Fall 2014, Montana Tech exceeded or equaled the three-year average for Degree and Certificate Programs, Degrees and Certificates Awarded, Courses, and Student Credit Hours.

### **Objective 3: Prepare students for successful careers.**

This benchmark was not met primarily because academic departments within Highlands College and the graduate school did not explicitly state the ways they prepared their graduates for successful careers. One of the reasons why this was the case is that many of those students already have successful careers, and their enrollment is only part-time as they strive to better their careers.

Objective 3 had one indicator of achievement:

**CT1-03a:** A summary of the ways in which the program prepares graduates for a successful career

As noted in response to Standard 1.A.2, Montana Tech must meet the single Indicator of Achievement to maintain that Objective 3 has been met. Referencing the [Montana Tech 14-15 Scorecard](#) under Objective 3, it is notable that the Indicator of Achievement was not met.

A review and compilation of the academic Program Reviews, as noted in the [Montana Tech 14-15 Scorecard](#), revealed that in the Fall 2014, Montana Tech did not meet the one Indicator of Achievement CT1-03a: A summary of the ways in which the program prepares graduates for a successful career in that only sixty-three percent (63%) of the Program Reviews provided such summaries, thereby not meeting the benchmark of seventy percent (70%).

All of the departments have been advised as follows: to reflect on ways they help prepare students for successful careers, develop ways to measure their efforts, and include this information in their 2015-2016 program reviews.

**Objective 4: Provide students a gateway for Transfer Education.**

General Engineering has recently added civil and mechanical engineering degree, and this will likely result in an increase in students who elect to remain at Montana Tech rather than transfer. The AS program, located in the Department of General Studies at Highlands College, will be striving to determine ways to increase its transfer rate, both to the north campus and to other institutions. Liberal Studies often loses students because they decide to major in psychology, anthropology, history, etc., and efforts should be made to create minors to retain students who are considering transferring.

Objective 4 had two Indicators of Achievement:

**CT1-04a:** The institution will track and monitor the number of each freshman cohort that transfer per semester to another institution for each receiving institution.

**CT1-04b:** The institution will track and monitor the average number of credits of each freshman cohort that transfer per semester to another institution for each receiving institution.

As noted in response to Standard 1.A.2, Montana Tech must meet one of the two Indicators of Achievement to maintain that Objective 4 has been met. Referencing the [Montana Tech 14-15 Scorecard](#) under Objective 4, it is notable that both of the two Indicators of Achievement have been met. [See Core Theme 1 Objective 4.](#)

**Objective 5: Provide students with a General Education.**

Objective 5 had one Indicator of Achievement:

**CT1-05a:** Detailed program review of quality of general education program, including benchmarks and appropriate responses to data

As noted in response to Standard 1.A.2, Montana Tech must meet the single Indicator of Achievement to maintain that Objective 5 has been met. Referencing the [Montana Tech 14-15 Scorecard](#) under Objective 5, it is notable that the single Indicator of Achievement was met.

Notwithstanding the fact that Montana Tech met its benchmark for this indicator of achievement, it is notable that under our own internal review, some of our internal benchmarks were not met. Montana Tech's General Education Committee plans to review these matters to attempt to understand the issues

related to the internal benchmarks. For example, knowing the number of courses that apply and are approved or rejected as general education courses should be included in the annual program review.

One of the possible considerations is to use the ETS® Proficiency Profile level 3 critical thinking score to assess the student's ability to demonstrate proficient critical thinking skills. CHMY 141 has a high fail rate (33%) compared to BIOB 160/161, which has an 18% fail rate. BIOB 101/102 should be included in this benchmark because the current courses exclude non-STEM majors.





# CORE THEME 2

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## Student Achievement

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## **Core Theme 2: Student Achievement**

### **Standard 3.B—Core Theme Planning**

#### **Standard 3.B.1**

Planning for each core theme is consistent with the institution's comprehensive plan and guides the selection of programs and services to ensure they are aligned with and contribute to accomplishment of the core theme's objectives.

#### **Standard 3.B.2**

Planning for core theme programs and services guides the selection of contributing components of those programs and services to ensure they are aligned with and contribute to achievement of the goals or intended outcomes of the respective programs and services.

#### **Standard 3.B.3**

Core theme planning is informed by the collection of appropriately defined data that are analyzed and used to evaluate accomplishment of core theme objectives. Planning for programs and services is informed by the collection of appropriately defined data that are used to evaluate achievement of the goals or intended outcomes of those programs and services.

#### **Objective 1: Students make acceptable progress towards their Montana Tech degree.**

Montana Tech's Strategic Plan identifies goals to affect student retention and graduation rates. Core Theme 2 outlines goals to achieve the following:

1. Improve retention and learning in introductory math, science, and writing courses
2. Ensure that students have a high-quality experience in introductory courses
3. Develop an advising model for freshman and sophomore students that ensures we can identify potential problems early and in a timely manner
4. Recruit qualified students who need few or no remedial courses

Analysis of the indicators of achievement illustrated that the goals for retention of full-time, first-time freshman were achieved. However, assessment also signaled that the benchmarks for North and South campus graduation rates were not met (see [Montana Tech 14-15 Scorecard](#)). A number of new programs were initiated since the review of the 2008 cohort to positively affect this outcome. Future assessment of subsequent cohorts will help Montana Tech identify if these programs are having a positive effect on graduation rates.

All students at Montana Tech are assigned to an academic advisor within their department. Each department identifies how new advisees will be distributed and Enrollment Services makes these designations at the time of admittance. Students may choose a different advisor at a later time, if desired. Academic advisors work with students before registration and changes in enrollment. Advisors are also available to assist students with other matters related to academic success.

The Foundations of Engineering and Science Program (FESP) was initiated in 2010 for students with math and science skills below those required for the first semester of Montana Tech's STEM majors. The

intent was to provide a strong foundation to prepare students for successful advancement through these curricula. In 2014, FESP evolved into the Freshman Engineering (FE) program. This model allows all students in engineering programs to share a common curriculum for their freshman year. FE creates an opportunity for students to explore various engineering disciplines during their first year of study, thereby providing additional time to identify the best fit for their interests and abilities. FE students work with advisors unique to that program, one of whom is specifically assigned to those individuals requiring foundational coursework in math and science.

The AS program at Highlands College was initiated in 2008. This program provides an avenue for students to earn a transferable degree on a small campus with reduced tuition. In addition, applicants to Montana Tech's North Campus who do not meet admission standards for baccalaureate degrees are admitted as AS students. This program is built on an intrusive advising model that supports and encourages students toward successful academic progress.

The Director of Student Success registers most new students in the CLSPS into their first semester courses. (This excludes Nursing students because the Nursing Program conducts all their own advising.) If students attend a registration event, they are enrolled in advance of their arrival and counseled as a group about their courses, strategies for success, etc. They are encouraged to contact the Director of Student Success or a faculty member in their department with any questions or concerns. CSLPS students who are unable to participate in registration events make individual appointments with the Director of Student Success for personalized advising and registration. Additional measures for affecting retention target traditionally difficult courses offered within CLSPS. Supplemental Instruction (SI) is an academic support model that uses peer-assisted study sessions. SI was introduced to Calculus 2 (M 172) in 2012 and is now a component of all mathematics courses from College Algebra (M 121) through Calculus 2 (M 172). Chemistry recitation classes were established in 2010 and are required for all students enrolled in College Chemistry I (CHMY 141) and College Chemistry II (CHMY 142).

A Director of Student Success position was created in 2014. This individual supervises the ACE and grant-funded positions related to financial literacy. The Director of Student Success chairs Montana Tech's Retention Committee which includes faculty, staff, and students from across all colleges. The Retention Committee developed a [retention plan](#) that was approved for fall 2016 implementation. The director also supervises the Tech Success course required for all students enrolled in the AS program and those placed on academic probation.

Core Theme 1 specifically addresses ACE and ACES, the Academic Centers for Excellence. These offices provide many services to support students in their pursuit of making acceptable progress toward their degree. In addition, a web-based early warning module was introduced allowing instructors to create student referrals with reasons and recommended actions. This system, known as SAGE, is an example of the programs initiated to affect student retention.

**Objective 2: Students are prepared for employment, a four-year degree program, graduate school, or professional school after graduating from Montana Tech.**

In addition to the academic degree program curriculum addressed in Core Theme 1, Montana Tech students acquire skills outside of the classroom to become prepared for their career goals. The mission of Career Services is to serve Montana Tech students, alumni, and employers by assisting students and alumni with career exploration, preparation, implementation, and management, while at the same time assisting employers in connecting with students, alumni, faculty, and administration. The office works with all levels of students, from incoming freshmen to graduate students, as well as alumni, to help them achieve their career goals. The services provide by the office include an online career management



system, career fairs, on-campus recruiting, workshops, and presentations, in addition to individual appointments to assist with the career planning and job search process. Montana Tech takes seriously the role the entire college has in helping students gain the skills that will help them be successful in pursuing their degree, but also fulfilling their ambitions post-graduation.

Through an online career management system, DIGGERecruiting, Career Services manages student records to help make sure that students are moving along the career continuum from major exploration to services to help them prepare to meet with companies and gain the experience desired by companies. To meet the ever-changing needs of today's student, the kinds of companies and jobs posted within DIGGERecruiting are various and diverse. The main annual goal is to encourage students to create and maintain their online student account throughout their years at Montana Tech and beyond as alumni. This online system was implemented for the academic year beginning fall 2007 and has been used since then. During the 2014-2015 academic year, 1,226 students and alumni actively used their accounts.

The connection with employers is an integral part of the career success equation. Career Services has invited and hosted companies on campus through career fairs and on-campus recruiting. One-hundred and thirty (130) companies registered, with 123 attending, while more than 976 students participated in the Montana Tech Career Fair fall 2014. In spring 2015, the CareerSmart Fair had 60 employers register, 52 actually attended, and 478 students came to the fair. The reputation of our well-educated and hard-working student has allowed our career fairs to grow with the economy. Many times alumni will persuade their organization to return to campus to hire quality employees. This relationship of excellent customer service and goal of connecting students and employers has paid off with many recruiter evaluations commenting on the organization of the career fairs. This no doubt has contributed to more employers making time in their busy recruiting schedules to make a stop at Montana Tech. In 2014-2015, 3,844 jobs were posted online through DIGGERecruiting.

Career Services worked with the FE program to share and promote information about the services. Specifically, one assignment builds in an opportunity for students interested in a particular major, company, or job title to select and conduct an informational interview with an alumnus. There are 759 alumni interested in volunteering. From fall 2014 through spring 2015, 231 matches were made, with 380 since inception.

### **Objective 3: Students have the opportunity to obtain academic distinction while attending Montana Tech.**

Before students take their first class on campus, merit-based scholarship students are invited to [Montana Tech Scholars' Day](#) where they are recognized and honored for their scholastic high school achievement. Throughout a student's academic career, there are opportunities for academic distinction.

Montana Tech students are recognized and placed on the [Honor Roll](#), Dean's List, and Chancellor's Honor Roll in the fall and spring. A student who earns a 4.0 GPA is placed on the Chancellor's Honor Roll. The Chancellor sends congratulatory letters and certificates to the 4.0 students. Those earning a 3.5 GPA will receive recognition for being listed on the Dean's List. The Dean of the student's college sends a congratulatory letter and certificate. Graduate students are eligible for the Dean's List and for graduating with highest honors. In any term that a student is enrolled in 9 or more credits, if the student's term GPA is 4.0, the student is placed on the Dean's List and sent a certificate. Those who complete their program with a cumulative GPA of 4.0 receive highest honors. A full-time undergraduate student (enrolling in and completing a minimum of 12 credits) who earns a 3.25 GPA during the

semester is listed on the semester Honor Roll. The Honor Roll is submitted to Montana newspapers for publication. The Honor Roll distinction is also noted on the student's transcript.

Students have the opportunity to obtain academic distinction at [Techxpo](#), a premier event showcasing numerous student research design projects. Techxpo exhibits the innovative teamwork of Montana Tech students who have applied theoretically and academically acquired knowledge to solve many of the world's challenges. Exhibits and technical presentations include senior design projects and undergraduate research projects. There are numerous engineering, science, and mathematical booth displays and poster presentations. Montana Tech welcomes industry partners, alumni, future engineers, and professionals (elementary through high school students), and community members to come to the day-long event to learn about the exciting new research and designs developed by the students in the CLSPS, Highlands College, the School of Mines & Engineering, and the Graduate School.

In addition to Techxpo, most graduate students and those undergraduate students participating in the Undergraduate Research Program (URP) and the Summer Undergraduate Research Fellowship (SURF) present their research at regional, national, and/or international conferences in their disciplines at least once during their enrollment. For example, see some of the CLSPS [Presentations and Publications](#). In many cases, these conferences offer awards for "best student poster" or "best student presentation," and in any year, several Montana Tech graduate students receive these awards from a broad range of conferences, such as the Montana American Water Resources Association, the Montana Academy of Sciences, Society of Mining, Metallurgy, and Exploration, Society of Petroleum Engineers, The Minerals, Metals, and Materials Society, and others.

Montana Tech celebrates Commencement at the end of the students' studies. The Outstanding Graduate Awards recognize one student from each of the degree granting academic departments. The award is based on scholastic achievement, as well as the graduate's contribution to the school, to his or her academic department, to fellow students, and to the greater community, of which Montana Tech is a vital part. The highest Scholastic Standing in Arts and Sciences award is given to a graduating senior in the CLSPS who has achieved the highest grade point average. The Chester H. Steele Honor Award is given to recognize the outstanding graduating senior in Engineering with the highest scholastic achievement. Valedictorian Honors are awarded for academic excellence both for the attainment of the AAS Degree and BS Degree. In conjunction with Commencement, the Montana Tech Nursing Pinning Ceremony is a symbolic welcoming of newly graduated nurses into the nursing profession. The Order of the Engineering Ring Ceremony also takes place. Montana Tech engineering students, faculty, and staff participate.

## **Standard 4.A—Assessment**

### **Standard 4.A.1**

**The institution engages in ongoing systematic collection and analysis of meaningful, assessable, and verifiable data—quantitative and/or qualitative, as appropriate to its indicators of achievement—as the basis for evaluating the accomplishment of its core theme objectives.**

### **Standard 4.A.2**

**The institution engages in an effective system of evaluation of its programs and services, wherever offered and however delivered, to evaluate achievement of clearly identified program goals or intended outcomes. Faculty have a primary role in the evaluation of educational programs and services.**

### **Standard 4.A.3**

**The institution documents, through an effective, regular, and comprehensive system of assessment of student achievement, that students who complete its educational courses, programs, and degrees, wherever offered and however delivered, achieve identified course, program, and degree learning outcomes. Faculty with teaching responsibilities are responsible for evaluating student achievement of clearly identified learning outcomes.**

### **Standard 4.A.4**

**The institution evaluates holistically the alignment, correlation, and integration of programs and services with respect to accomplishment of core theme objectives.**

### **Standard 4.A.5**

**The institution evaluates holistically the alignment, correlation, and integration of planning, resources, capacity, practices, and assessment with respect to achievement of the goals or intended outcomes of its programs or services, wherever offered and however delivered.**

### **Standard 4.A.6**

**The institution regularly reviews its assessment processes to ensure they appraise authentic achievements and yield meaningful results that lead to improvement.**

**Objective 1: Students make acceptable progress towards their Montana Tech degree.**

While a 40<sup>th</sup> day midterm program was already in place, a 20<sup>th</sup> day assessment was added in 2009. The 20<sup>th</sup> and 40<sup>th</sup> day midterm intervention program targets students in the following categories:

- All Highlands College students
- All Freshmen (Students with under 30 credit hours earned).
- All students enrolled in Calculus I (M 171) and lower
- All students enrolled in College Chemistry II (CHMY 143) and lower

Students in the target area receive a SAT or UNSAT grade at the 20<sup>th</sup> day and advisors are directed to make a personal contact with advisees earning UNSAT grades. Departments receive lists of the traditional 40<sup>th</sup> day midterm grade for all students in the target group. Midterm grade distribution reports are reviewed by the deans and the Provost.

The indicators of achievement will continue to be assessed on a yearly basis. This includes both figures for graduation completion as well as retention. In addition, the graduation rates are reviewed for the [Student Right to Know Disclosure](#) and are published on the Montana Tech website. The Retention Committee has identified benchmarks for evaluating the success of the new retention plan and will continue to study and revise the plan accordingly.

**Objective 2: Students are prepared for employment, a four-year degree program, graduate school or professional school after graduating from Montana Tech.**

The 2014-2015 academic year marked an intentional effort to reach out to the students at Highlands College and increase awareness of our services to our North Campus students through a consistent

weekly presence at the Student Union. The primary goal is to proactively assist students with the career exploration, preparation, implementation, and management throughout their years at Montana Tech with the goal to develop solid relationships for future success. Annual tracking of student and alumni engagement along with career activity is monitored every month.

Individual student appointments continued to decrease in 2014-2015; 173 students had career-related appointments compared to 215 last year, down 19.5%. This is down 40% over the past two years (290). To accommodate for the remote location of our office, and to give students necessary feedback, 610 proactive “resume help” emails were sent to students, sharing tips and suggestions to help students improve their resume, as well as encouraging them to make an appointment. Each Wednesday during the semester Career Services hosted a table in the Student Union staffed by student employees and occasionally staff to help get the word out about our services and upcoming events; this was marginally successful.

Experiential Learning is an important factor in career exploration, and also demonstrates career implementation, both integral components of the mission. Career Services is responsible for tracking and reporting what Montana Tech students do to gain hands-on experience prior to graduation. Students self-report their experiences, and this data is compiled annually. In April 2014, the previous year’s data is reported. In the report covering summer 2012 through spring 2013, 306 students reported degree-related experience with 165 employers. Most of the students who shared information were seniors (41%) or juniors (32%), with 17% sophomores. More than half of the students who participated reported degree-related experience, with only 146 students registering for internship credit. The overall average hourly wage was \$19.88 across all colleges and academic levels. Final reports with specific statistics by major are available via the Montana Tech website at [Graduate & Internship Surveys](#).

Montana Tech Career Services became one of the “Partners in Innovation” in spring 2014 with the CSO Research/GradLeaders software platform [The Outcomes Survey®](#) (TOS®). Montana Tech was one of the first 15 universities using TOS® to capture and report outcomes data. Over an entire year, Montana Tech’s graduates were surveyed at specifically timed intervals. The first of these “snapshot” reports takes place at graduation, with opportunities to report at 3, 6, and 12 months after graduation. Each cohort is based upon the semester in which the student graduates, thus allowing for more timely responses and follow-up. TOS® has increased the amount of information gleaned, with questions that cover their primary status after graduation, their job search process, experiential learning prior to graduation, personal motivation, and satisfaction.

**Objective 3: Students have the opportunity to obtain academic distinction while attending Montana Tech.**

Eighty-five percent of the 2014-15 Program Reviews exceeded the 70% benchmark for summary of academic distinction opportunities available and what distinctions have been achieved (see [Montana Tech 14-15 Scorecard](#)).

Some of the 2014-2015 press releases highlighting Montana Tech student distinction are as follows:

- [Montana Tech's Environmental Design Team Wins Award at Environmental Design Contest](#) The 2015 Montana Tech Environmental Design Team recently competed at the 25th IEE/WERC Annual Environmental Design Contest in Las Cruces, New Mexico. ... [Read more](#)
- [Montana Tech Environmental Engineering and Petroleum Departments Bring Home Top Honors](#) On March 17th, Montana Tech's Environmental Engineering and Petroleum Departments

teamed up and competed in the first annual Society of Petroleum Engineers Health, Safety, Security and Environmental (HSSE) Competition in Denver, CO. [... Read more](#)

- [Highlands College Conducts Research, Creative & Scholarly Activity Celebration](#) Highlands College will hold its Spring Student Research, Creative and Scholarly Activity Celebration on Wednesday, April 1st. [... Read more](#)
- [Montana Tech Student Awarded Goldwater Scholarship Honorable Mention](#) Montana Tech student Macy Ricketts, a sophomore majoring in Cellular and Molecular Biology, has been awarded Honorable Mention by the Barry Goldwater Scholarship Foundation. [... Read more](#)
- [Montana Tech Engineering Students Excel at Competition](#) Montana Tech engineering students took home the first-place trophy for their hands-on ability to estimate a multimillion dollar project and produce a real-world bid in the heavy civil engineering category of the Associated Schools of Construction Competition (ASC) held in Reno, Nevada on February 4 through the 7. [... Read more](#)
- [Montana Tech Petroleum Students Receive Scholarships](#) The Dallas/Fort Worth chapter of the American Association of Drilling Engineers awarded scholarships to five Montana Tech students for the 2014-2015 school year. [... Read more](#)
- [Highlands College Machining Students Pass NIMS Test](#) Highlands College is excited to announce that 23 machining students have passed the National Institute for Metalworking Skills (NIMS) Measurements, Materials and Safety Test for the fall semester. [... Read more](#)
- [Montana Tech Student Veterans Receive Honor](#) Veterans making the transition back to students on college campuses can be difficult. [... Read more](#)
- [Montana Tech Environmental Engineering Students Earn Top Prize at PNWIS Conference](#) Montana Tech's Environmental Engineering students earned top prize among other awards at the Pacific Northwest International Section (PNWIS) of the Air & Waste Management Association. [... Read more](#)
- [Montana Tech Chemistry Student Receives Montana AWRA Student Award](#) At the Montana Section of the American Water Resources Association (AWRA) meeting recently in Kalispell, Bob West, a chemistry student at Montana Tech, was awarded first prize for his poster presentation, Organic carbon and sediment biogeochemistry: Georgetown Lake, MT. [... Read more](#)
- [Montana Tech SHIH Students Awarded Scholarships at Regional Conference](#) Seven Montana Tech Safety, Health and Industrial Hygiene students were each awarded \$1,000 scholarships at the Northwest Occupational Health Conference October 16th in Richland, Washington. [... Read more](#)
- [Montana Tech Teams Successful at ACM Programming Contest](#) Six student computer programming teams from Montana Tech competed in the 2014 Association for Computing Machinery (ACM) Montana Programming Contest this past weekend on the campus of Montana State University in Bozeman. [... Read more](#)

Montana Tech nursing students received a year-end result of 94.29% on the National Council Licensure Exam (NCLEX). NCLEX-RN is an examination for the licensing of registered nurses in the United States. Thirty-five Montana Tech students took the exam and thirty-three passed. Montana Tech once again has the highest pass rate in the state for both ASN and BSN programs. The Montana year-to-date (01/01/2014 – 12/31/2014) passing percentage for first time candidates was 84.93%.

Each year Montana Tech administers the [ETS Proficiency Profile Exam](#) to measure general education outcomes in critical thinking, reading, writing, and mathematics.

Listed below are the results for the 2014-2015 ETS Proficiency Profile Exam for students in bachelor’s programs at Montana Tech (28% of whom were seniors, when they took the exam). These results are based on the most competitive set of comparative data for Montana Tech with 124,588 seniors at 252 four-year Doctoral/Research I & II, Master’s Comprehensive I & II, and Liberal Arts I & II Institutions.

Table 4.A.2.I gives the percent of schools whose average scores for seniors were less than Montana Tech’s, i.e., 94% means that 94% of the 252 colleges in the selected comparative category had average scores lower than Montana Tech’s.

**Table 4.A.2.I Percent Of Schools With Average Scores Less Than Montana Tech**

Comparison to 124,588 Seniors from 252 Doctoral/Research I & II, Master’s Comprehensive I & II, and Liberal Arts I & II Institutions							
Total score	Critical Thinking score	Reading score	Writing score	Math score	Humanities score	Social Sciences score	Natural Sciences score
94%	97%	94%	77%	100%	94%	92%	98%

The National Association of Intercollegiate Athletics named Montana Tech a Silver Five-Star Award recipient the past 6 years. Montana Tech was measured on a demonstrated commitment to Champions of Character and earned points in character training, conduct in competition, academic focus, character recognition, and character promotion. Montana Tech earned points based on exceptional student-athlete grade point averages and by having minimal to no ejections during competition throughout the course of the academic year.

## **Standard 4.B– Improvement**

### **Standard 4.B.1**

**Results of core theme assessments and results of assessments of programs and services are: a) based on meaningful institutionally identified indicators of achievement; b) used for improvement by informing planning, decision making, and allocation of resources and capacity; and c) made available to appropriate constituencies in a timely manner.**

### **Standard 4.B.2**

**The institution uses the results of its assessment of student learning to inform academic and learning-support planning and practices that lead to enhancement of student learning achievements. Results of student learning assessments are made available to appropriate constituencies in a timely manner.**

**Objective 1: Students make acceptable progress towards their Montana Tech degree.**

The 6-year benchmark for graduation rates was not met for the 2008 cohort (see [Montana Tech 14-15 Scorecard](#)). Much of the programming outlined above was put into place beyond the point where it would positively affect the outcome of that group. The benchmark will continue to be assessed with the understanding that time must be allowed for change to take affect and be recognized for this group.

In the fall semester 2015, the failure rates for students that attended SI sessions were on average 7% lower than the failure rates for students who did not attend SI. The Math department evaluates the success of this program yearly for future development and implementation.

Increasing participation in the midterm intervention process is an area for improvement. During the 5-year period concluding in spring 2015, the average rate of faculty returning midterm intervention sheets to the Provost was 52.6%. The Provost and deans continue to assess these numbers and strategize about how to encourage faculty contribution to the process.

Highlands College established a number of programs with “stackable” credentials. For example, students who graduate with an AAS in Metals Fabrication will earn two professional certificates, two Certificates of Applied Science, and the AAS degree. This stackable degree may result in higher graduation rates for the Highlands College campus as students who are unable to complete the entire 2-year program will have an opportunity to leave Montana Tech with an academic credential.

**Objective 2: Students are prepared for employment, a four-year degree program, graduate school or professional school after graduating from Montana Tech.**

Montana Tech Strategic Plans have consistently referenced the ability of the institution to assist students in achieving career outcomes. Career Services is the primary office to coordinate the collection and reporting of student outcomes. Historically this has been cornerstone of Montana Tech. Implementing TOS® is one way to collect career outcomes information for the first year after graduation. The goal is to increase the response rate and knowledge rate to accurately report what graduates do. Increased responses will provide more information with regards to engagement, satisfaction, and motivation. Using this data-rich system can provide additional information for departments to understand their graduates better.

Career Services is driven by our mission to help students develop the skills to be able to navigate the changes inevitable in the job market throughout their lifetime. The economy definitely has an impact on how aggressively students are recruited and how competitive the job market has become recently. It is essential for students in today’s workplace to hone their “career-readiness” skills.

In spring 2014, the staff identified some key objectives and themes to build specific tactics for the office strategy. The priorities included concerted and intentional outreach to first-year students; market services to all customers; connect Career Services to Highlands College students, faculty, and staff; employer development and company partnerships, and assessment.

Additional ideas include to be available for students to quickly access information using technology. Extra services are constantly being added to assist students, employers, and alumni to reach more customers. Providing services in a variety of ways, through possible software options and online access, will help reach the expanding numbers of students with the limited staff resources available.

**Objective 3: Students have the opportunity to obtain academic distinction while attending Montana Tech.**

The mission of Montana Tech’s National Student Award Committee’s (NSAC) is “To create a campus community that fosters and supports outstanding students throughout their education and to nominate and assist our top students in the preparation of applications for prestigious National Awards.” The NSAC assists students during all stages of their scholarship application preparation process. The NSAC has supported students in applying for the Goldwater, NIAA Leroy Walker Award, Rhodes, Udall, and



National Science Foundation Graduate Fellowships, to name a few. Montana Tech's impressive success in this area includes four Goldwater Scholars and four Goldwater Honorable Mentions since 2006.

Enrolling high achieving students at Montana Tech inherently increases the opportunities for students to distinguish themselves. Specific measures for attracting high-caliber students to Montana Tech include increased enrollment of targeted high school students with an interest in STEM majors. In addition, the recruiting, athletic, and Foundation departments work together to maximize scholarship distribution and identify additional resources to increase monetary support for these students.

Academic programs will continue to be encouraged to identify academic distinction opportunities available to their students and what distinctions have been achieved over the last year. All departments received feedback in their Academic Program reviews, and academic distinction opportunities and distinctions will be evaluated in their Annual Program Review Assessment.

# CORE THEME 3

## Engaged Faculty



## Core Theme 3: Engaged Faculty

Core Theme 3 as defined in the NWCCU Year 3 Report is outlined below and consists of three objectives and three indicators of achievement. Standards 3.B, 4.A, and 4.B are addressed relative to Core Theme 3 in the following narratives.

Faculty who excel in teaching, research, and scholarship are essential to supplying knowledge and education through a strong curriculum augmented by research and service. Montana Tech promotes and retains faculty, who are not only excellent classroom instructors but who are also active in scholarship and service.

### Objective 1: Faculty engage in the pursuit of successful teaching

**Indicator of Achievement:** Summarized institutional, college, and department percentages of reviewed faculty meeting the departmental standards in successful teaching.

**Benchmark:** 90% of tenure-track faculty reviewed in an academic year meet departmental standards in teaching.

### Objective 2: Faculty engage in research, scholarly activity, and/or in professional development.

**Indicator of Achievement:** Summarized institutional, college, and department percentages of reviewed faculty meeting the departmental standards in research, scholarly activity, and/or in professional development.

**Benchmark:** 90% of tenure-track faculty reviewed in an academic meet departmental standards in research, scholarly activity, and/or in professional development.

### Objective 3: Faculty engage in service to their profession, the campus, and/or to the community.

**Indicator of Achievement:** Summarized institutional, college, and department percentages of reviewed faculty meeting the departmental standards in service to their profession, the campus, and/or the community.

**Benchmark:** 90% of tenure-track faculty reviewed in an academic year meet departmental standards in service to their profession, the campus, and/or the community.

For all three objectives, the respective indicator consists of summary statistics. A measure of quality for the indicators is based on each department's definition of quality, as found in respective department standards for promotion and tenure. The departmental faculty members will also submit abbreviated resumes with all three indicators of achievement addressed.

## Standard 3.B–Core Theme Planning

### Standard 3.B.1

Planning for each core theme is consistent with the institution's comprehensive plan and guides the selection of programs and services to ensure they are aligned with and contribute to accomplishment of the core theme's objectives.

### Standard 3.B.2

**Planning for core theme programs and services guides the selection of contributing components of those programs and services to ensure they are aligned with and contribute to achievement of the goals or intended outcomes of the respective programs and services.**

### Standard 3.B.3

**Core theme planning is informed by the collection of appropriately defined data that are analyzed and used to evaluate accomplishment of core theme objectives. Planning for programs and services is informed by the collection of appropriately defined data that are used to evaluate achievement of the goals or intended outcomes of those programs and services.**

Montana Tech is organized into curricular areas associated with departments or programs. Consistent with the Montana Tech Strategic Plan to have engaged faculty members provide instruction and knowledge, in each of these departments or programs, sufficient faculty members are employed to deliver the curriculum. Each department or program also has sufficient additional resources in the form of operating budgets, program fees, course fees, and other specialized resources to support these faculty and the demands of the curriculum. [Montana Tech Budgets](#) detail these human and monetary resources.

Each department or program has developed or is developing an approved set of [departmental standards](#), which defines the department's and institution's expectations in instruction, research/scholarship, and service for faculty at all ranks. Development of departmental standards began in 2009, and by 2014 essentially all departments had written standards approved by the deans, the Provost, and the Chancellor. These standards define, within a disciplinary context, what is expected of engaged faculty and what is required to be promoted and to be tenured. Since 2014, faculty portfolio development, annual faculty evaluations, and faculty review for promotion, mid-tenure, and tenure have occurred relative to these departmental standards.

A newly hired Montana Tech faculty who has been given no credit toward tenure or promotion would become eligible to apply for tenure and promotion on the following schedules:

Assistant, associate, full professor track:

- fall of year 3, mid-tenure review
- fall of year 4, promotion to associate professor
- fall of year 6, tenure
- fall of year 9, full professor (5 years after promotion to associate professor)

Instructor track:

- fall of year 3, mid-tenure review
- fall of year 5, promotion to instructor II (MS and 5 years of relevant experience at instructor I)
- fall of year 6, tenure
- fall of year 10, promotion to instructor III (MS and 5 years of relevant experience at instructor II)

Table 3.B.3.I shows the number of faculty who have been promoted or tenured (or denied these milestones in the last two years.

**Table 3.B.3.I Faculty Promotion And Tenure For The Last Two Years**

Year	Instructor II	Instructor III	Associate Professor	Full Professor	Tenure
2014-15	1	0	5 (1)	2	7
2015-16	2	1	6 (2)	1	3 (2)

The numbers in parentheses reflect applications that were either denied or postponed.

Montana Tech expects engaged faculty to actively pursue research/scholarship. Language to this effect can be found in the following:

- job descriptions for tenure-track positions, “Scholarship and engagement in relevant professional communication or instruction activities are expected.”
- letters of appointment, “Faculty members are expected to pursue research and/or scholarly activities, and in part tenure and promotion decisions will depend on the level and quality of these activities.”
- departmental standards, “The process of promotion and tenure ... is a continual demonstration of growth in knowledge and effectiveness in the areas of instruction, research, and service.”

For new faculty to have the time and resources to begin to develop a productive program of research/scholarship, new faculty are released from one course per semester for the first 4 to 6 semesters (this release may continue with department head approval for faculty who continue to demonstrate productive research/scholarship).

In addition to promotion and tenure, faculty engagement is encouraged, incentivized, recognized, and rewarded at Montana Tech through merit pay (up to 12 \$2,000 awards per year that increase the base pay of the recipients), the Rose and Anna Busch Faculty Achievement Awards (six \$1,000 awards per year distributed across the faculty), Distinguished Researcher and Lifetime Distinguished Researcher Award (since 2002, up to five per year distributed across the faculty), Service Awards, Faculty Advisor of the Year (a student-selected award), and Faculty Development Initiative Grants (10 or more grants of up to \$7,000 awarded annually). All, but the Service Awards, involve competitive processes open to faculty members. The Faculty Development Initiative Grants were developed in response to recognition by the faculty and administration that resources are required for faculty to be able to pursue research at a meaningful level. The number of awards for the past three years is shown in Table 3.B.3.II.

**Table 3.B.3.II Faculty Recognition Awards For The Past Three Years**

	2013-14	2014-15	2015-16
Rose and Anna Busch Faculty Achievement Awards	6	6	6
Merit Awards	12	12	12
Distinguished Research Awards	1	3	4
Lifetime Distinguished Research Awards	1	2	1
Advisor of the Year Award	1	1	1

Departments and programs prepare annual program reviews, which are in turn reviewed by a dean and an additional member of the assessment committee. These program reviews contain, among other data, faculty resumes, allowing departments or programs and reviewers to determine whether individual faculty are meeting the department or program standards with respect to instruction, research/scholarship, and service. If at least 90% of faculty in departments and programs are meeting

the departmental/program standards with respect to instruction, research/scholarship, and service, then overall the faculty members in these departments or programs are considered to be engaged in and meeting the standards of the Core Theme 3 objectives.

Montana Tech has published the program reviews for [2014-15](#) and 2015-16. The data from the 2014-15 reviews were used to determine whether Montana Tech departments or programs were meeting the objectives in Core Theme 3 for the NWCCU Year-7 Report.

## **Standard 4.A–Assessment**

### **Standard 4.A.1**

**The institution engages in ongoing systematic collection and analysis of meaningful, assessable, and verifiable data—quantitative and/or qualitative, as appropriate to its indicators of achievement—as the basis for evaluating the accomplishment of its core theme objectives.**

### **Standard 4.A.2**

**The institution engages in an effective system of evaluation of its programs and services, wherever offered and however delivered, to evaluate achievement of clearly identified program goals or intended outcomes. Faculty have a primary role in the evaluation of educational programs and services.**

### **Standard 4.A.3**

**The institution documents, through an effective, regular, and comprehensive system of assessment of student achievement, that students who complete its educational courses, programs, and degrees, wherever offered and however delivered, achieve identified course, program, and degree learning outcomes. Faculty with teaching responsibilities are responsible for evaluating student achievement of clearly identified learning outcomes.**

### **Standard 4.A.4**

**The institution evaluates holistically the alignment, correlation, and integration of programs and services with respect to accomplishment of core theme objectives.**

### **Standard 4.A.5**

**The institution evaluates holistically the alignment, correlation, and integration of planning, resources, capacity, practices, and assessment with respect to achievement of the goals or intended outcomes of its programs or services, wherever offered and however delivered.**

### **Standard 4.A.6**

**The institution regularly reviews its assessment processes to ensure they appraise authentic achievements and yield meaningful results that lead to improvement.**

**Objective 1: Faculty engage in the pursuit of successful teaching**

**Indicators of Achievement:** Summarized institutional, college, and department percentages of reviewed faculty meeting the departmental standards in successful teaching.

**Benchmark:** 90% of tenure-track faculty reviewed in an academic year meet departmental standards in teaching.

In 2014-15, 85 out of 131 full-time, tenure-track faculty were reviewed against their departmental standards for teaching as shown in the Table 4.A.3.I.

**Table 4.A.3.I Full-Time, Tenure-Track Faculty Meeting Core Theme 3, Objective 1, Indicator of Achievement A**

2014-2015	Number of Full-Time, Tenure-Track Faculty	Number Reviewed for Teaching	Objective 1, Indicator of Achievement A: Number of Department Faculty Reviewed this Year who Met Departmental Standards in Teaching
CLSPS	64	41	100%
Highlands	13	12	100%
SME	51	32	94%
Library	3	0	*
TOTAL	131	85	98%

Not all faculty are reviewed for teaching in a given year, as full professors are reviewed only once every three years on a rotating basis; library faculty program standards do not require teaching, although some faculty instruct in information science classes; and some faculty are on sabbatical. The assessment of whether a faculty member met departmental standards was carried out by the department or program head with oversight by a dean or the Provost. Overall, 98% of the 85 full-time, tenure-track faculty reviewed in this area met their departmental standards for teaching and hence are considered to be engaged in the successful pursuit of teaching. The number of faculty meeting this indicator of achievement exceeds the benchmark of 90%.

A direct measure of faculty engagement and effectiveness in teaching is provided by student evaluation of instruction. The [Montana Tech Faculty/Staff Handbook](#) requires that every course be evaluated every time it is taught (this requirement is relaxed for courses with only one student enrolled, for example, undergraduate research, where the anonymity of the student is compromised). Student evaluation of instruction is carried out with an in-house form standardized across the institution that has been used for more than 15 years. This form consists of 25 positively worded questions scored on a Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree) and three free-response questions. The mean and median student evaluation scores across the institution and the percent of courses with evaluations scores greater than 4.00 and 3.50 for courses with greater than three students enrolled for the fall and spring semesters of the 2014-15 and 2015-16 academic years are shown in Table 4.A.3.II.

**Table 4.A.3.II Mean and Median Student Evaluation Scores and the Percent Of Courses with Evaluations Scores Greater 4.00 And 3.50 for Courses with N > 3**

Academic Year	Student Evaluation Scores for Courses with N > 3				
	N	Mean	Median	% of Evaluations with Means >= 4.00	% of Evaluations with Means >= 3.50
2014-15	944	4.25	4.35	77%	92%
2015-16	992	4.30	4.39	79%	94%



These results indicate that most faculty are, from a student’s perspective, engaged and effective in their teaching. Faculty with student evaluation scores less than 3.50 in a given course are encouraged to work with their department chair to address the issues responsible for these less than effective scores.

Faculty are also encouraged to use Small Group Instructional Diagnosis (SGID), a formative assessment tool, to inform and improve their teaching. The Montana Tech Faculty Association Collective Bargaining Agreement, [Section 22.310](#), addresses SGID as an Instructional Performance assessment tool as follows:

*“All faculty members are encouraged to use the Small Group Instructional Diagnosis (SGID) procedure, or a similar mid-term evaluation or procedure, in at least one course each semester.”*

**Objective 2: Faculty engage in research, scholarly activity, and/or in professional development.**

**Indicators of Achievement:** Summarized institutional, college, and department percentages of reviewed faculty meeting the departmental standards in research, scholarly activity, and/or in professional development.

**Benchmark:** 90% of tenure-track faculty reviewed in an academic meet departmental standards in research, scholarly activity, and/or in professional development.

In 2014-15, 68 out of 131 full-time, tenure-track faculty were reviewed against their departmental standards for research/scholarship as shown in the Table 4.A.3.III

<b>Table 4.A.3.III Full-Time, Tenure-Track Faculty Meeting Core Theme 3, Objective 2, Indicator Of Achievement A</b>			
2014-2015	Number of Full-Time, Tenure-Track Faculty	Number Reviewed for Research - Scholarship	Objective 2, Indicator of Achievement A: Number of Department Faculty Reviewed this Year who Met Departmental Standards in Research/Scholarship
CLSPS	64	35	80%
Highlands	13	0	*
SME	51	30	93%
Library	3	3	100%
<b>TOTAL</b>	<b>131</b>	<b>68</b>	<b>87%</b>

Not all faculty are reviewed for research in a given year, as full professors are reviewed only once every three years on a rotating basis, instructors (all Highlands College faculty hold instructor rank) are not required to pursue research and scholarship, and some faculty are on sabbatical. The assessment of whether a faculty member met departmental standards was carried out by the department or program head with oversight by a dean or the Provost. Overall, 87% of the 68 full-time, tenure-track faculty reviewed in this area met their departmental or program standards for research/scholarship and hence are considered to be engaged in the successful pursuit of research/scholarship. While SME and Library faculty in aggregate met this benchmark, only 80% of the faculty in the CLSPS met the benchmark, resulting in the total number of faculty meeting this indicator of achievement falling slightly below the institutional benchmark of 90%.

As detailed in the following paragraphs and tables, there are a number of measures of Montana Tech faculty's active engagement in research/scholarship.

New faculty in the first two years of their appointment are also eligible to compete for one-time Seed Grant funding of up to \$7,000. Table 4.A.3.IV lists the number of awards and total funding in the Seed Grant program for the last three years (this program has been in continuous existence since 1997). This table shows a steady increase in Seed Grant funding allocated over the last three years.

**Table 4.A.3.IV Seed Grant Funding**

	2013-14	2014-15	2015-16
Number of Awards	5	7	6
Total Awarded	\$24,835	\$32,000	\$42,000

Faculty grant activity provides another measure of active engagement in research. Table 4.A.3.V shows, for the last four fiscal years, the number of proposals submitted, the funding requested in these proposals, the number of proposals awarded, and the funding awarded.

**Table 4.A.3.V Number of Proposals Submitted, Funding Requested, Number of Proposals Awarded, and Funding Awarded for FY 13-16**

	FY13	FY14	FY15	FY16
Number of Proposals Submitted	85	84	93	118
Funding requested	\$12.6 M	\$30.4 M	\$19.8 M	\$28.4 M
Number of Proposals Funded	59	54	56	58
Funding Awarded	\$4.4 M	\$6.1 M	\$6.4 M	\$9.4 M

Note that this table includes grant activity from the approximately 40 research faculty in the Montana Bureau of Mines and Geology. Also note that the data for FY 2016 includes proposals and amount funded through September 30, 2016. The data in this table reveals an increasing trend in the number of proposals submitted and the level of funding awarded.

As shown in Table 4.A.3.VI, the activity of faculty engaged in research can also be measured by the number of graduate students supported by the institution and mentored by faculty.

**Table 4.A.3.VI Graduate Students and Support**

	2013-14	2014-15	2015-16
Total Graduate Students (Fall)	165	195	210
On-Campus Graduate Students (Fall)	99	113	118
FY GTAs	60	56	~60
20-hour GTA Annual Stipend	\$8,000	\$10,000	\$10,000
GTA funds	\$325,700	\$418,300	\$434,100
GRAs	35	46	60
GRA Funds	\$228,700	\$370,000	\$451,400
Master of Science Theses	25	26	32
Graduate Student Completions	44	58	77

A substantial number of graduate students are supported by graduate research assistants (GRAs) funded by sources generally external to Montana Tech. The GRA funds listed in Table 4.A.3.VI are probably an underestimate, as a number of these students are paid on an hourly basis. In most cases, the funding for these GRAs was acquired through faculty contacts and effort. Recognizing that our graduate teaching assistant (GTA) support was not competitive, Montana Tech increased the annual full 20 hour per week

GTA stipend from \$8,000 to \$10,000 in 2014-15. This data demonstrates both a substantial investment of faculty time in advising graduate students and a growing graduate program. Note that two of Montana Tech’s largest graduate programs, Project and Engineering Management and Industrial Hygiene, are on-line and do not award GTAs or GRAs nor require these.

Yet another measure of faculty actively engaged in research is provided by faculty involvement in undergraduate research. Table 4.A.3.VII shows the number of students, projects, faculty mentors, and level of funding, for both Montana Tech’s Undergraduate Research Program (URP) and Summer Undergraduate Research Fellowship (SURF) for the previous three academic years.

**Table 4.A.3.VI Faculty Involvement In Undergraduate Research**

	Year	Number of Students	Number of Projects	Number of Faculty	Level of Funding
SURF	2014	9	7	7	\$33,283
URP	2014-15	19	18	15	\$30,600
SURF	2015	10	9	7	\$40,395
URP	2015-16	13	12	9	\$21,450
SURF	2016	18	12	13	\$46,000
URP	2016-17	17	17	14	\$32,836

**Objective 3: Faculty engage in service to their profession, the campus, and/or to the community.**

**Indicators of Achievement:** Summarized institutional, college, and department percentages of reviewed faculty meeting the departmental standards in service to their profession, the campus, and/or the community.

**Benchmark:** 90% of tenure-track faculty reviewed in an academic year meet departmental standards in service to their profession, the campus, and/or community.

In 2014-15, 88 out of 131 full-time, tenure-track faculty were reviewed against their departmental standards for service as shown in the Table 4.A.3.VIII.

**Table 4.A. 3.VIII Full-Time, Tenure-Track Faculty Meeting Core Theme 3, Objective 2, Indicator of Achievement A**

2014-2015	Number of Full-Time, Tenure-Track Faculty	Number Reviewed for Service	Objective 3, Indicator of Achievement A: Number of Department Faculty Reviewed this Year who Met Departmental Standards in Service
CLSPS	64	41	100%
HIGHLANDS	13	12	100%
SME	51	32	100%
LIBRARY	3	3	100%
TOTAL	131	88	100%

Not all faculty are reviewed for service in a given year, as full professors are reviewed only once every three years on a rotating bases and some faculty are on sabbatical. The assessment of whether a faculty member met departmental standards was carried out by the department or program head with oversight by a dean or the Provost. Overall 100% of the 88 full-time, tenure-track faculty reviewed in this area met their departmental or program standards for service and hence are considered to be

engaged in the successful pursuit of service. The number of faculty meeting this indicator of achievement exceeds the benchmark of 90%.

As part of their duties, active and engaged faculty are expected to provide service to their department or program, to Montana Tech, to the larger community in which Montana Tech resides, and to their profession. To ensure that faculty have time to provide this service, faculty in the SME and in the CLSPS are released from three of fifteen semester workload credits, i.e., one course per semester, to cover these duties. Highlands College faculty typically have an instructional workload of 15 credits. Service typically manifests itself in advising students and serving on department, institution, state, or professional committees.

Table 4.A.3.IX shows the number of advisees, the number of faculty with at least one advisee, and the median number of advisees per faculty member over the last four full semesters.

**Table 4.A.3.IX Advising Load Across The Faculty**

Term	Number of Advisees	Number of Advisors	Median Number of Advisees
Fall 2014	2945	118	13.5
Spring 2015	2754	122	12.0
Fall 2015	2980	126	12.0
Spring 2016	2708	124	13.0

In Table 4.A.3.IX the median, rather than the average, advisees per faculty is reported to avoid biasing the data, because the Director of the Freshmen Engineering Program and the Director of the Associates of Science program at Highlands College each advise between 100 and 200 students. A few faculty in our populous Petroleum Engineering program also advise between 50 and 100 students. In general, Montana Tech uses a dispersed advising model in which small numbers of students are assigned to faculty advisors, who remain their advisors throughout the student’s undergraduate career. In recent years, Montana Tech has taken steps away from this model, and now first year engineering students are advised through the Freshman Engineering Program. Students matriculating from the Freshman Engineering Program are, however, re-assigned to discipline specific faculty advisors at the beginning of their sophomore year.

In 2015-16, Montana Tech listed 39 committees on its [Committee Roster](#), with 469 total voting members. Of these these voting committee members, 268 or 61% held faculty rank. Some committees that deal largely with faculty concerns have a high percentage of faculty members, such as the Curriculum Committee (92% faculty) and the Graduate Council (100% faculty). With 186 full-time instructional and research faculty, there is on average one and one-half committee assignments per faculty member—some faculty members serve on many more committees, while others serve on none.

Many, if not most, Montana Tech faculty are involved in some form of service within the greater surrounding community. Examples range from faculty serving on local committees or coaching soccer to volunteering at the local science exploration center, the Science Mine. Most faculty members maintain at least one professional membership with a few serving actively in their professional societies.

## **Standard 4.B– Improvement**

### **Standard 4.B.1**

**Results of core theme assessments and results of assessments of programs and services are: a) based on meaningful institutionally identified indicators of achievement; b) used for improvement by informing planning, decision making, and allocation of resources and capacity; and c) made available to appropriate constituencies in a timely manner.**

### **Standard 4.B.2**

**The institution uses the results of its assessment of student learning to inform academic and learning-support planning and practices that lead to enhancement of student learning achievements. Results of student learning assessments are made available to appropriate constituencies in a timely manner.**

Program Reviews, which formed the basis for assessing Core Theme 3 were assessed by appropriate deans and another member of NWCCU Assessment Committee. These detailed assessments were made available to the department heads and program directors prior to developing the next program review. It is expected that these assessments will result in continuous improvement in the program reviews, leading ultimately to meaningful improvements in the functioning and outcomes of the program.

As detailed in the following, Montana Tech has used internal assessments to inform the planning, decision making, and allocation of resources and capacity.

In May, 2013, Montana Tech, MSU-Bozeman, and UM-Missoula, received approval for a collaborative Ph.D. in Materials Science. This substantive and significant program allows students from across the three institutions to pursue research in biomaterials; electronic, photonic, and magnetic materials; materials for energy storage, conversion, and conservation; and materials synthesis, processing, and fabrication. This is the first program authorizing Montana Tech to grant a Ph.D. degree and was a response on this campus to the need to access the wider array of funding available to doctoral granting programs and to provide a platform from which to recruit top faculty. There are currently 13 students at Montana Tech enrolled in this program, constituting approximately one-half of the total program enrollment.

Faculty have noted that, while Montana Tech encourages and requires faculty to pursue research/scholarship, a lack of time and resources make pursuing research/scholarship challenging. In response to this concern, the Dean's Council led by the Provost, along with assistance from the Chancellor, developed a pool of approximately \$70,000 to address this issue. Interested faculty can apply for up to \$7,000 of Faculty Development Initiative funds, which are awarded in a competitive process based on proposals submitted by the faculty. The faculty member can use an award for stipends for undergraduate and graduate students, to cover release from a course or courses, to fund a summer stipend, to purchase materials and equipment, to pay for travel, etc. The number and amount of these awards in the two years that we have conducted the Faculty Development Initiative are shown in Table 4.B.3.X.

**Table 4.B.3.X Faculty Development Initiative**

	Number of Proposals Submitted	Number of Proposals Awarded	Funds Awarded
2014-15	21	13	\$70,100
2015-16	21	11	\$72,535

Recognizing that our GTA support was not competitive, Montana Tech increased the annual full 20-hour per week GTA stipend from \$8,000 to \$10,000 in 2014-15. Similarly recognizing that Seed Grant funding for new faculty was too low, the maximum in Seed Grant funding was raised from \$5,000 to \$7,000 in 2016.

In response to the twin concerns of providing timely relevant advising to our first year engineering students and to ease the advising load on faculty, Montana Tech established in the fall 2014 a Freshman Engineering Program. This program provides advising and introductory engineering coursework to first year engineering students, who in general pursue very similar curricula in their first year. Similarly, students in the baccalaureate preparation AS Program at Highlands College have since the fall of 2012 followed a generally common curriculum and are all advised by the Director of the Associates of Science Program.

In 2016, Montana Tech received permission from the Montana BOR to create stand-alone BS degrees in Mechanical and Civil Engineering. These degrees had previously existed as options within the General Engineering degree. Earlier, a stand-alone BS degree in Electrical Engineering evolved from a Systems Control option that also existed as part of the General Engineering degree. The creation of all of these new degrees was in response to a need to serve students and employers better, by labeling correctly the curriculum and preparation that students in these options had received.

Engaged Montana Tech faculty continuously monitor industry needs and emerging fields. This has recently resulted in the development of several new programs: a BS degree in Data Science, a Certificate in Computational Science, a Certificate in Restoration, and a Land Management Option within Business and Information Technology.

In fall 2016, Montana Tech reviewed its committee roster and pruned eight inactive committees from the roster of 39 committees. While some inactive committees disappear, new committees appear. A good example of the latter is a committee of [Title IX investigators](#) formed in 2015-16, which has seven members, three of whom are faculty.





# CORE THEME 4

The Montana Tech Community





## **Core Theme 4: The Montana Tech Community**

### **Standard 3.B—Core Theme Planning**

#### **Standard 3.B.1**

**Planning for each core theme is consistent with the institution’s comprehensive plan and guides the selection of programs and services to ensure they are aligned with and contribute to accomplishment of the core theme’s objectives.**

#### **Standard 3.B.2**

**Planning for core theme programs and services guides the selection of contributing components of those programs and services to ensure they are aligned with and contribute to achievement of the goals or intended outcomes of the respective programs and services.**

Montana Tech has a broad definition of its community, including students and prospective students, their parents and families, staff, faculty, neighbors, alumni and their families, employers of graduates, sponsors, and friends. The densest population of community members is in Butte and Montana; however, the Montana Tech community is truly global. Planning for Core Theme 4 is integral to the institution’s comprehensive planning efforts, with four objectives and several strategies included in the [Strategic Plan, A Commitment to Excellence](#). Whenever the plan is reviewed, revised, or evaluated, either the entire [Strategic Planning Committee](#) or a subcommittee focuses on Core Theme 4. Planning for Theme 4 includes input from, and is based on strong connections with, the various elements of the Montana Tech Community to ensure that the resulting goals, objectives, and priorities serve the community well.

Several methods are used to maintain vibrant connections with, obtain information and input from, assess needs of, and maintain and enhance relationships with these many constituencies. Examples of how data are obtained and needs are assessed to inform the planning include surveys; open forums; service by Montana Tech faculty, staff, and administrators to Butte, Southwest Montana, and national organizations; and meetings with program-focused IABs, Montana Tech’s Foundation Board, the Digger Athletics Board, and the Alumni Association Board.

The Butte Community also includes Montana Tech in planning efforts, such as a membership position on the Board of Butte’s Chamber of Commerce, and campus representatives on numerous community groups and councils, such as the Butte Natural Resource Damage Restoration Council (BNRC), the Superfund Advisory and Redevelopment Trust Authority (SARTA), and the Community Action Team (CAT). The CAT was initiated by the Butte-Silver Bow Chief Executive in January 2014 as a response to suicides in Butte and has become an active coalition of our community.

Montana Tech’s strongest assurance that programs and services and their contributing components are aligned with the objectives and strategies for accomplishing Core Theme 4 is that the units of Montana Tech were and are extensively involved with the planning, and they take ownership of the objectives and strategies. This alignment is built into the performance management system by linking the annual performance objectives of each of the Cabinet members to the strategic plan objectives and strategies applicable to their responsibilities. The alignment is also reflected in the agendas and discussions at meetings and in budget development. Thus, the selection and prioritization of programs and services are intrinsically aligned with, and contribute to, the accomplishment of the core themes.

Every unit, manager, faculty member, and staff member at Montana Tech contributes to selecting and/or delivering the programs and services that serve the Montana Tech Community. Each unit has both formal and informal mechanisms to obtain input and guidance from the appropriate stakeholders and constituencies to ensure that the programs and services are aligned with their objectives and needs. For example, the ASMT is the elected student government, which both organizes activities for students and provides advice to Montana Tech's administration on services for students. Academic departments have IABs, which provide advice on the curricula and courses to ensure that the programs prepare students well for career opportunities and serve employers' needs. The Montana Tech Library responds to a library committee and to suggestions from its users. One service it offers the world community is searchable web access to many Montana Tech documents and events through [Digital Commons](#).

As a general service to the Southwestern Montana community, Montana Tech hosts public access—especially for non-profit organizations in the region—to the Foundation Center's grantseeker resources and databases. This access is available to everyone in the Montana Tech Library whenever the library is open. Career Services staff members interact extensively with employers, faculty, and students to organize the events and professional-development services that connect students with internships and jobs and prepare them for interviews and professional success. Montana Tech regularly surveys students regarding their satisfaction, experience, and needs, and uses this feedback to shape services. The Research Office invites and welcomes speaker suggestions for Montana Tech's weekly [Public Lecture Series](#) and publicizes these events to students, faculty, staff, and the public. Videos of most of these lectures are accessible to the public through [Digital Commons](#).

The Alumni Association and Alumni Office collaborate to maintain strong connections with, provide functions for, and serve our alumni. Montana Tech regularly updates the alumni, faculty, staff, and friends through a print publication produced three times per year called [MNews](#). In addition to publishing it on line, Montana Tech mails 16,000 copies of *MNews* to recipients throughout the U.S. and Canada. The Montana Tech Foundation cultivates strong relationships with alumni, friends, employers, and others by providing information and services that encourage giving, and by using the input from these stakeholders, in addition to input from the Foundation Board and from within Montana Tech, to shape campaign priorities and initiatives seeking philanthropic support.

Academic program planning is vital to the Montana Tech community because it helps the campus design and provide programs that effectively serve students, employers, and the interests of the State of Montana. Academic Program planning is covered under Core Theme 1 and is governed by Montana BOR Policies [303.1](#) and [303.10](#), which require campuses to follow [established OCHE procedures](#) to propose new academic programs, centers, or institutes. Proposals for new degrees and certificates are only permitted for programs that have been included on a publicized and [approved list](#). At Montana Tech, the inclusion of potential programs on this listing is informed via input from the Montana Tech Community, especially faculty, staff, students, alumni, and external constituencies, such as employers.

The development of new curriculum proposals must include input from the Community and demonstrate the need. OCHE mandates the format and types of information that must be included in the proposal. Applicable to Standard 3.B.1 and Theme 4, the [required information](#) includes details on how the proposed program advances the strategic goals of the institution (which include those associated with Theme 4), along with an analysis of the need, constituencies, and demand for the program. The proposal must include information on specifically which stakeholders were involved in demonstrating the need, designing the program, and developing the proposal.

### **Standard 3.B.3**

**Core theme planning is informed by the collection of appropriately defined data that are analyzed and used to evaluate accomplishment of core theme objectives. Planning for programs and services is informed by the collection of appropriately defined data that are used to evaluate achievement of the goals or intended outcomes of those programs and services.**

Many types of data and surveys inform both planning and execution for Core Theme 4. Not only are data acquired at a point in time and considered as a “snapshot,” but trends are also analyzed over time. Data that are collected and considered on student diversity include gender, ethnicity, veteran status, age, residency status, international citizenship, and major or discipline. Data on adequacy of facilities and infrastructure include [space surveys, space utilization](#), condition, maintenance and repair requests, and elapsed time to remedy a reported issue. The facilities information along with the [Strategic Plan](#) and academic programs and plans inform the campus Master Plan. Information on safety and security include data from inspections, incidents, accidents, and injuries. These data are reviewed at regular [Safety and Health Committee](#) meetings and inform actions, recommendations, and budget priorities. The annual program reviews summarize and evaluate these data and trends and propose strategies to maintain strengths and overcome weaknesses.

Student surveys regularly administered in alternate years include the Ruffalo Noel Levitz SSI and the NSSE or the CCSSE, as appropriate. These student surveys provide vital information for informing the programs and services for current students—especially with respect to gaps between the importance of a particular issue or service and related student satisfaction. Surveys of graduates and employers inform the programs and services of the Career Services Office, and survey results are also used by deans and departments to strengthen academic programs and co-curricular activities.

Events that serve the wider Montana Tech Community include [public lectures, seminars, performances, and athletic events](#). Data collected on these events include attendance and ideas from attendees for future events. User surveys are also employed to obtain feedback about the experience of campus visitors, what hours the Coffee Mill or other services should be open, faculty feedback on the Learning Management System (LMS), faculty feedback to inform distance-learning support services, feedback from participants in workshops and training sessions, or feedback from alumni about a program’s curriculum. Many of these surveys are conducted now using the Qualtrics® software, which is a powerful online survey “tool” available to students, faculty, and staff.

### **Standard 4.A Assessment**

The applicable standards related to assessment that apply to the Montana Tech Community are those that are not narrowly focused on academic courses, programs, and degrees. These Standard 4.A requirements are listed here and addressed in the following paragraphs.

#### **Standard 4.A.1**

**The institution engages in ongoing systematic collection and analysis of meaningful, assessable, and verifiable data—quantitative and/or qualitative, as appropriate to its indicators of achievement—as the basis for evaluating the accomplishment of its core theme objectives.**

#### **Standard 4.A.2**

**The institution engages in an effective system of evaluation of its programs and services, wherever offered and however delivered, to evaluate achievement of clearly identified program goals or intended outcomes. Faculty have a primary role in the evaluation of educational programs and services.**

#### **Standard 4.A.3**

**The institution documents, through an effective, regular, and comprehensive system of assessment of student achievement, that students who complete its educational courses, programs, and degrees, wherever offered and however delivered, achieve identified course, program, and degree learning outcomes. Faculty with teaching responsibilities are responsible for evaluating student achievement of clearly identified learning outcomes.**

#### **Standard 4.A.4**

**The institution evaluates holistically the alignment, correlation, and integration of programs and services with respect to accomplishment of core theme objectives.**

#### **Standard 4.A.5**

**The institution evaluates holistically the alignment, correlation, and integration of planning, resources, capacity, practices, and assessment with respect to achievement of the goals or intended outcomes of its programs or services, wherever offered and however delivered.**

#### **Standard 4.A.6**

**The institution regularly reviews its assessment processes to ensure they appraise authentic achievements and yield meaningful results that lead to improvement.**

Montana Tech's systematic mechanism for assessment is the preparation and publication of annual program reviews and the oversight and documented assessment of this process by the Assessment Committee. Among the non-academic "programs" for which the responsible managers prepare [program reviews](#) are several that serve the Montana Tech Community and/or address or fulfill objectives for Theme 4. Examples include Campus Safety, Alumni Services, Dining Services, The Montana Tech Foundation, Athletics, Residence Life, and Diversity. The template for these program reviews requires that they describe the objective(s) or outcomes, identify the performance criteria, describe the assessment or evaluation method, report on and evaluate the data applicable to each performance criterion, describe any actions taken or to be taken, and summarize strengths and weaknesses of the program. Strategies for maintaining the strengths and overcoming the weaknesses are also addressed. Like the academic program reviews, each of these program reviews is reviewed by at least two members of the Assessment Committee, who prepare a report and evaluation, which is provided as feedback to the manager responsible for the program. This entire process intrinsically and explicitly builds in the requirements of Standard 4A, thereby ensuring that requirements are met.

## **Standard 4.B Improvement**

### **Standard 4.B.1**

**Results of core theme assessments are: a) based on meaningful institutionally identified indicators of achievement; b) used for improvement by informing planning, decision making, and allocation of resources and capacity; and c) made available to appropriate constituencies in a timely manner.**

### **Standard 4.B.2**

**The institution uses the results of its assessment of student learning to inform academic and learning-support planning and practices that lead to enhancement of student learning achievements. Results of student learning assessments are made available to appropriate constituencies in a timely manner.**

For Core Theme 4, the campus has identified eight meaningful high-level indicators of achievement. These indicators are used for improvement, to inform planning and decision making, and are made available to appropriate constituencies. The [program reviews](#) are the backbone of the assessment process, and collectively they contribute to assessment of the indicators of achievement. Program reviews are prepared for several non-academic functions that serve various constituencies in the Montana Tech Community (see the response for Standard 4A). The program reviews and assessment process are used in assessing the indicators of achievement, and the template explicitly emphasizes performance and improvement. They inform planning, decision making, and allocation of resources, and they are made available to the appropriate constituencies in a timely manner. Thus, both the process and the documents have a clear focus on improvement and the accomplishment of goals, objectives, and outcomes for many activities that serve and support the Montana Tech Community.

A few examples follow of recent situations where decisions were made and actions taken to better serve the Montana Tech Community, based on the results of assessments.

### **Emergency Communications**

Montana Tech contracts for emergency communications services to which students, faculty, staff, parents, and community members could subscribe to receive emergency notifications via text message and/or email. Anyone who wished to receive these messages had to sign up for them. This approach left many individuals, who did not take the steps to sign up, “in the dark” in weather emergencies, drills, and in the event of more serious incidents. The new system, implemented in 2014, automatically enrolls all mtech.edu email addresses, which include all faculty, staff, and students. Any phone numbers for these individuals are included—if they are in Montana Tech’s computer systems. This means that campus community members now must take steps to opt out, if they choose, but they cannot unsubscribe their mtech.edu email addresses. Others, such as parents and community members, are still allowed to opt in. This new process provides greater assurance that emergency communications will reach the intended audience in a timely manner.

## **Connecting Students in All Majors with Role Models, Mentors, Employment Opportunities, and Internships**

The Career Services Office has worked continually to increase the presence and diversity of employers on campus and to connect students with alumni role models and employers. The two big venues for this effort are the fall career fair in September and the spring career fair in February. Recently, to serve the disciplines of all majors, Career Services has intentionally added new employers seeking graduates from Highlands College and CLSPS, as well as the SME. A very recent focus has been to reach out to employers located in Montana, so that they learn about the capabilities of Montana Tech students, and the students can find internship and job opportunities in the state. Another initiative connects specific interested and willing alumni volunteers with specific current students to serve as mentors. In addition, when the FE program was launched in fall 2014, Career Services began working with it to engage students early in their studies, by having each student create his or her account in DIGGERecruiting, attend the career fair, start preparing a resume, and complete a class assignment to learn about a company, major, career path, or job title. Throughout the term, alumni guest speakers make presentations to these freshmen about their career paths and answer questions, thereby improving the awareness of freshmen, who are prospective engineering majors, about the degree programs and professional opportunities in each of the different engineering majors.

## **Community Engagement through Intercollegiate Athletics**

To help Montana Tech engage more with the Butte community, improve attendance at intercollegiate athletics events, and host successful fundraising events, a new position was created in 2015 in the Athletic Department: External Associate Athletic Director. Matt Stepan—a Butte native and Montana Tech alumnus—was hired to fill this position. The results are that Montana Tech has successfully expanded the pre-game tailgating experience and increased local school outreach by engaging student athletes with community youth in local classrooms. The Digger Athletic Association has been able to grow scholarship support to allow the campus to recruit student-first athletes, who can be successful in Montana Tech's rigorous academic programs, as well as in their sports.

## **Sexual-Violence Prevention and Survivor Assistance**

Because of concerns about sexual violence and assault, the women of Montana Tech have for the past few years held annual gatherings and fundraisers to assist the Butte non-profit organization, [Safe Space](#), whose mission is to “provide assistance to primary and secondary survivors of domestic violence and sexual assault, with the goal of breaking the inter-generational cycle of violence.” In 2015, to enhance the visibility of this effort and dramatically increase the fundraising, Montana Tech decided to organize and host an auction and champagne brunch called “Purse Strings,” with numerous filled purses available to bidders through a silent and live auction. Attendance has grown from 150 to 250 between 2015 and 2016, and the donation to Safe Space has increased from \$13,000 to \$21,000, providing evidence of the success of this new approach.

## **Increasing High-School Graduation Rates and College Attendance**

Montana Tech through its Foundation and Alumni Engagement Office has increased outreach activities to engage with the local Southwest Montana and Butte communities. One goal of this effort is to increase high-school graduation rates and college aspirations in the local youth, which data show are below the state and national averages in these areas. Examples follow of some of the targeted outreach efforts to improve this situation.



- In August 2014, Montana Tech started what has become a popular annual event to equip the children of Butte with [school supplies to start their school year](#) successfully. Over 1,000 school supply items were given out to deserving kids in the community in the first year. With the success of the first event, it has been repeated in August of 2015 and 2016.
- Montana Tech dedicates the month of October to promote safety in our community with the use of our mascot, Charlie Oredigger. Montana Tech [promoted safety to kids](#) through TV and radio advertising along with distributing a *Safety Charlie* coloring book and posters to all elementary aged children in our community. We also gave away 5,000 reflectors or glow necklaces to kids in our community at the nearby World Museum of Mining's "Treat Street" on Halloween.
- The Butte School District #1 and Montana Tech joined forces in 2014 to promote the importance of graduating. Montana Tech team members visited all local public and private schools with student-athletes and Charlie Oredigger talking about the importance of working hard and graduating. A city-wide [Graduation-Matters poster contest](#) was held. In addition, through a partnership with KXLF, a project called "[One Class at a Time](#)" provided weekly grants of \$250 to teachers in Southwest Montana schools. Each week, Montana Tech surprised the winning teacher and classroom with the award.



# STANDARD 5

Mission Fulfillment, Adaptation,  
and Sustainability



## **Mission Fulfillment, Adaptation, Sustainability**

### **Executive Summary of Eligibility Requirement 24**

#### **Scale and Sustainability**

Montana Tech's operational scale is sufficient to fulfill its mission and achieve its core themes in the present and will be sufficient to do so in the foreseeable future. Montana Tech has and will continue to ensure that resources are available to fulfill its mission and achieve the initiatives outlined in the campus Strategic Plan.

#### **Standard 5.A– Mission Fulfillment**

##### **Standard 5.A.1**

**The institution engages in regular, systematic, participatory, self-reflective, and evidence-based assessment of its accomplishments.**

In the Year 3 Evaluation Report, Montana Tech received a recommendation to define and refine mission fulfillment. In response to the recommendation, the Dean's Council, Assessment Committee, and NWCCU Steering Committee began a process to improve demonstration of mission fulfillment. As a result of this process, the first [Mission Scorecard](#) was developed for 2014-2015 and will be updated annually. Mission fulfillment will be evaluated annually through collaboration with administration, faculty, staff and students. Table 5.A.I summarizes 2014-2015 demonstration of mission fulfillment. (See Table 5.A.I)

**Table 5.A.I Mission Fulfillment 2014-2015**

	Number of Indicators of Achievement	Number of Indicators of Achievement necessary for Objective to be met	Number of Indicators met	Objective Achievement
<b>Core Theme 1 Education and Knowledge</b>	<b>11</b>			
Objective 1 - Create and sustain strong graduate, baccalaureate, associate, and certificate programs	4	2	4	Objective Met
Objective 2 - Facilitate student learning through diverse delivery and educational experiences.	3	2	2	Objective Met
Objective 3 - Prepare students for successful careers.	1	1	0	Objective Not Met
Objective 4 - Provide students a gateway for transfer education.	2	1	2	Objective Met
Objective 5 - Provide students with a general education.	1	1	1	Objective Met
<b>Core Theme 2 Student Achievement</b>	<b>4</b>			
Objective 1 - Students make acceptable progress towards their Montana Tech degree.	2	1	1	Objective Met
Objective 2 - Students are prepared for employment, a four-year degree program, graduate school, or for professional school after graduating from Montana Tech.	1	1	1	Objective Met
Objective 3 - Students have the opportunity to obtain academic distinction while attending Montana Tech.	1	1	1	Objective Met
<b>Core Theme 3 Engaged Faculty</b>	<b>3</b>			
Objective 1 - Faculty engage in the pursuit of successful teaching.	1	1	1	Objective Met
Objective 2 - Faculty engage in research, scholarly activity, and/or professional development.	1	1	0	Objective Not Met
Objective 3 - Faculty engage in service to their profession, the campus, and/or community.	1	1	1	Objective Met
<b>Core Theme 4 The Montana Tech Community</b>	<b>8</b>			
Objective 1 - Promote a diverse and inclusive environment.	1	1	1	Objective Met
Objective 2 - Provide instructional, research, and living environments that enhance the educational experience.	3	2	3	Objective Met
Objective 3 - Provide events and programs that serve the Montana Tech community.	2	1	2	Objective Met
Objective 4 - Engage Montana Tech alumni and friends.	2	1	2	Objective Met

	Number of Objectives within Core Theme	Number of Objectives necessary for Core Theme to be met	Number of Objectives Met	Core Theme Achievement
Core Theme 1 Education and Knowledge	5	3	4	Core Theme Met
Core Theme 2 Student Achievement	3	2	3	Core Theme Met
Core Theme 3 Engaged Faculty	3	2	2	Core Theme Met
Core Theme 4 The Montana Tech Community	4	2	4	Core Theme Met
<b>Total</b>	<b>15</b>	<b>9</b>	<b>13</b>	

In previous sections, mission fulfillment is defined as achieving core themes through objectives measured by indicators of achievement. The Core Themes of the institution are aligned with the Strategic Plan themes. Many of the indicators of achievement are measured annually through program reviews and data collection. The program reviews of the previous academic year are requested in fall and due to the Provost's office by January 15<sup>th</sup>. The program reviews are done collaboratively with the department heads and faculty, for academic departments, and the director and staff, for nonacademic departments. The program reviews are assessed by two members of the Assessment Committee. The Assessment Committee consists of the Vice Chancellors, Deans, and three members of the NWCCU Steering Committee.

The results of the assessment are shared with the department heads prior to the next cycle of program reviews. Examples of verifiable data used when assessing mission fulfillment, either as measures of indicators of achievement or measures within the program reviews, include Integrated Postsecondary Education Data System (IPEDS), Office of the Commissioner of Higher Education (OCHE) Distance Learning Annual report, press releases, NAIA Athletic Report, ETS Proficiency Profiles, Student Satisfaction Inventory (SSI), National Survey of Student Engagement (NSSE), The Outcomes Survey (TOS), National Council Licensure Examination for Registered Nursing (NCLEX-RN) results, and Professional Fundamental Engineering License Exam (FE). The use of these verifiable data affords Montana Tech the opportunity to demonstrate mission fulfillment.

Annually the Chancellor, Provost, and appropriate Dean meet with each academic department individually; items discussed include Montana Tech's strategic plan, mission and core themes. Additionally, as part of the annual budget process, all department directors meet with the appropriate dean or vice chancellor to review budget requests. The meetings are an opportunity to discuss current and future needs of the department with their dean or vice chancellor. The departments link the requests to the strategic plan, core themes, and mission. Deans and Vice Chancellors present prioritized requests to the Executive Council in public meetings. These meetings and discussions are another avenue for administration, faculty, students, and staff to identify areas within core themes that have been met and ones that need to be improved upon.

The appropriateness of an indicator of achievement, benchmark, objective, and core themes is examined annually through the Assessment Committee, Deans Council, and Executive Council.

## **Standard 5.A.2**

**Based on its definition of mission fulfillment, the institution uses assessment results to make determinations of quality, effectiveness, and mission fulfillment and communicates its conclusions to appropriate constituencies and the public.**

The primary source of information for determining mission fulfillment at Montana Tech is program reviews. The program reviews provide evidence of obtaining benchmarks within an indicator of achievement framework.

The assessment of program reviews and mission fulfillment is discussed weekly at Dean's Council. The deans distribute the information to departments through the scorecard. The Deans solicit feedback from the departments on the program review process to improve annually the measurement, effectiveness, and quality of program reviews to demonstrate mission fulfillment.

At the start of each academic year, the Provost has a department head meeting. A selected faculty member presents information on the program review process and provides examples to facilitate discussion. As Montana Tech has progressed in developing core themes and defining mission fulfillment, the presentations have evolved from process focused to improvement of assessment of student learning outcomes. ([2011 Presentation](#) and [2016 Presentation](#))

Montana Tech, per BOR [Policy 219](#), [submits](#) and [presents](#) a mission review every three years. The most recent review of Montana Tech's mission statement and mission was done in November 2014. In January 2015, Highlands College provided a [comprehensive two-year college mission progress update](#) to OCHE. BOR meetings are broadcast on line and open to the public for comment.

## **Standard 5.B– Adaptation and Sustainability**

### **Standard 5.B.1**

**Within the context of its mission and characteristics, the institution evaluates regularly the adequacy of its resources, capacity, and effectiveness of operations to document its ongoing potential to fulfill its mission, accomplish its core theme objectives, and achieve the goals or intended outcomes of its programs and services, wherever offered and however delivered.**

Montana Tech regularly assesses and evaluates its resources, capacity, and effectiveness of operations in a number of different ways and on various, ongoing cycles, depending upon the program. The campus recently went through a process to develop a mission statement that truly reflects the mission of our campus. In combination with our NWCCU core themes, the mission statement drives a number of analyses and decisions that assist our campus in achieving our goals and intended outcomes of our programs and services. The clarification of our mission was an important step in enabling the campus to more clearly evaluate our level of mission fulfillment and accomplishment of our core themes.

Montana Tech has defined clear measures that demonstrate its success in the core theme areas of *Education and Knowledge, Student Achievement, Engaged Faculty, and the Montana Tech Community*. These core themes are described continuously throughout this accreditation report, specifically in Standard 4. In addition to the indicators of achievement identified in Standard 4, the campus receives



external and internal feedback from a number of different large-scale and institution-wide assessments. These feedback mechanisms include, but are not limited to:

- Specialized accreditation reports/campus visits. These program-specific accreditations are part of a rigorous review process that a number of our programs undertake. For example, our engineering programs (accredited by the Accreditation Board for Engineering and Technology (ABET) and the nursing program (accredited by the Commission on Collegiate Nursing Education (CCNE) are continuously evaluating our programs in the areas of adequacy of resources, capacity, and effectiveness.
- NWCCU accreditation. The demonstration of mission fulfillment is cause for the campus to employ a campus-wide reflection of what we are doing right and what can we do better.
- Reporting requirements by various constituencies. Montana Tech's Institutional Research Office continuously collects and analyzes data that is employed in our planning practices and resource allocation, among others.

Montana Tech develops a budget on an annual basis for all fund types that includes the following: Current Unrestricted Funds, Auxiliary, Designated, Loan, Endowment, Restricted, Plant, and Agency (Montana Bureau of Mines and Geology). These various budgets are submitted to the Board of Regents (BOR) for approval each September, and the budgets for all campuses of the Montana University System (MUS) are published to the MUS website and are referenced throughout the year. The Montana Tech Vice Chancellor of Administration and Finance (VCAF) and the Director of Purchasing and Budgeting monitor the budgets and prepare forecasts. Financial planning and budget development follows the eight-step process as described in the [Montana Tech Budget Guidelines](#). In response to a request made by the Dean's Council, the budget guidelines were updated and approved by the Chancellor beginning in FY2016 budgeting process.

In the 2013 Montana State Legislative session, the Governor and MUS entered into an agreement for [performance based funding](#) (PBF). The metrics identified for PBF were undergraduate completions and retention rate. Both of these measures are indicators of achievement within core themes *Education & Knowledge* and *Student Achievement*. Benchmarks were set for these indicators of achievement based on the PBF requirements.

Montana Tech assesses and plans for resource capacity in various areas within the strategic plan. For example, academic program planning is done every 3 years following the OCHE [Academic Program Planning](#) process. Academic [program reviews](#) are done annually in addition to [OCHE's program review](#) process which is done every seven years. Additional examples include the Montana Tech Library [Collection Development Policy](#), [IT Strategic Planning](#), enrollment projections through a recruitment plan, Career Services Operational Plan, and curricular changes through the Curriculum Review Committee ([CRC](#)).

To enable accomplishment of recent academic strategic planning efforts for moderate expansion and growth toward distant and alternative delivery modalities, a new Director of Distance Learning was hired in Feb. 2016. The intent of this position is to provide guidance, leadership, faculty training opportunities, institutional vision and stewardship toward the delivery of quality online (synchronous and asynchronous) and hybrid delivery course offerings. Prior to the hiring of the new Director of Distance Learning, the institution's various Colleges, Departments and Programs were solely responsible for all aspects of their alternative delivery offerings. As the new Director has come on board, the institution is currently benchmarking its preparedness and gaps using the [Online Learning Consortium's \(OLC\) Quality Scorecard](#). The OLC Quality Scorecard addresses nine key areas of institutional preparedness for quality alternative delivered courses (Institutional Support, Technology Support,

Course Development/Instructional Design, Course Structure, Teaching and Learning, Social and Student Engagement, Faculty Support, Student Support, and Evaluation and Assessment). Once the metric is completed a strategic plan to address institutional deficiencies and to sustain success will be devised. We are in the earliest stages of this overall process as of this writing.

In spring of 2016, Montana Tech began a partnership with the State of Montana department of Architectural and Engineering Services (A&E) to fund a comprehensive review of the [2010 Campus Master Plan](#). Instructional room utilization is evaluated each semester by the Registrar's Office.

### **Standard 5.B.2**

**The institution documents and evaluates regularly its cycle of planning, practices, resource allocation, application of institutional capacity, and assessment of results to ensure their adequacy, alignment, and effectiveness. It uses the results of its evaluation to make changes, as necessary, for improvement.**

One of the fundamental tenants of Montana Tech's planning practices, resource allocation, and assessment of results is the notion of participation and transparency. Numerous constituencies are invited to participate in these processes. These include, but are not limited to:

- Associated Students of Montana Tech (ASMT);
- Faculty Senate;
- Staff Senate;
- Deans Council;
- Chancellor's Cabinet;
- Executive Committee;
- Strategic Planning Committee; and
- Executive Committee.

The [Institutional Research website](#) presents the data to the aforementioned constituencies to allow them to make informed decisions and provide feedback in the planning and evaluation processes on the Tech campus.

The newly described mission fulfillment evaluation will be completed each year. The process consists of annual program reviews being completed by January 15 for the previous academic year. The results of the assessment are made available through the scorecard annually. The annual program review cycle and eight step budget process provide the basis of the cycle of planning, allocation, and assessment. As an example of how the campus uses the assessment of resource allocation and institutional capacity to affect change is demonstrated by the recent hire of our Director of Distance Learning. This position is charged with the responsibility of growing our presence in the area of distance learning. Program and institutional assessments identified a need for expanding Montana Tech's presence in the online environment as a means to serve our current students, alumni seeking career advancement through distance-based education as well as other place-bound students interested in our programs.

### Standard 5.B.3

**The institution monitors its internal and external environments to identify current and emerging patterns, trends, and expectations. Through its governance system it uses those findings to assess its strategic position, define its future direction, and review and revise, as necessary, its mission, core themes, core theme objectives, goals or intended outcomes of its programs and services, and indicators of achievement.**

Montana Tech monitors internal and external environments through engaged faculty, staff, alumni and friends, IABs, student surveys, faculty surveys, program specific accreditation and boards, campus committees, UM affiliation, MUS, Board of Regents (BOR), local, state, and national government.

Each of Montana Tech's four colleges has identified and strategically adapted to the external environment recently; and, following is an example from each college. The documentation of each proposal cites the involvement of various constituencies throughout the development process.

#### **College of Letters Science and Professional Studies**

The Montana Tech nursing program has adapted to changes in industry for decades. The BOR approved Montana Tech offering an [Associate of Applied Science Practical Nursing](#) (AAS-PN) and an [Associate of Science in Nursing](#) (ASN) in 1999; a [post licensure Bachelor of Science Nursing](#) (BSN) in 2002; and, the AAS-PN was reverted back to a [certificate program](#) in 2003.

Since 2010, there has been an increasing demand for baccalaureate prepared nurses within the local, state, and national community. The Institute of Medicine's (2010), *The Future of Nursing*, calls for increasing the number of baccalaureate prepared nurses to 80% by 2020. In January 2013, the Montana Tech Nursing Department moved from Highlands College into the newly remodeled Health Science Building (HSB). In 2014, the Montana Tech Nursing Department began developing a formal plan to 1) discontinue the ASN, 2) develop a direct entry 120 credit BSN, and 3) continue to offer the post licensure BSN. In March 2015, the BOR approved [Montana Tech's Level I](#) submission. The last class of ASN students was accepted in fall 2015 and are scheduled to graduate in spring 2017. In spring 2016, the first students were admitted to the 120 credit BSN program and are scheduled to graduate in spring 2018. With the new 120 credit BSN and the post licensure BSN, Montana Tech is addressing the emerging expectations of the profession.

#### **Graduate School**

The collaborative [PhD in Materials Science](#) was approval by OCHE in May 2013. This was the culmination of the Montana Tech faculty and IAB's evaluation of the uniqueness of the program and industry needs within the Montana Tech mission. The [OCHE Level II request](#) for this item along with the appendices ([Attachment #1 -Business Plan](#) and [Attachment #2 - AAAS Review of Proposed Joint Ph.D. Program in Material Science](#)) document the position, direction and assessment of the program and defining the direction.

#### **Highlands College**

Highlands College began offering an Aerospace Welding Certificate in spring 2015. This program was developed in response to an increased demand for Gas Tungsten Arc Welders (GTAW or TIG) when Montana Precision Products/SeaCast began building new jet engine parts for General Electric. Montana Precision Products/SeaCast donated \$35,000 for equipment and shop upgrades. The MUS two year

colleges were awarded a \$25 million dollar Department of Labor Trade Adjustment Assistance Community College And Career Training Grants ([TAACCCT](#)); and, Highlands College received \$454,965. As part of this grant, the MUS 2-year schools received funding for additional Commercial Driver's License (CDL) training; Highlands College was authorized to respond to industry needs and use these funds for an Aerospace Welding faculty member rather than CDL training. Out of the TAACCCT grants, MUS 2-year schools developed Strengthening Workforce Alignment in Montana's Manufacturing and Energy Industries project ([SWAMMEI](#)), rebranded as [RevUp](#) Montana later during the grant process).

The TAACCCT Department of Labor grant was extended to March 30, 2017 to cover only the workforce navigator; thus eliminating the funds for the aerospace welding faculty member in academic year 16-17. Beginning in academic year 16-17, Montana Precision Products entered into a contract with Highlands College to sponsor the faculty member through the Montana Tech Foundation.

### **School of Mines and Engineering**

Montana Tech's BS in Mechanical Engineering and BS in Civil Engineering degrees were approved by the BOR in May 2016. The change from General Engineering degrees with an option to one of the two specific areas, was developed based on feedback from students, faculty, alumni, and industry. Montana Tech worked with OCHE and Montana State University - Bozeman (MSU-Bozeman) to define a new strategic position for the institution within the core themes and mission. As stated in the academic proposal request ([Mechanical](#) and [Civil](#)), the degree status will clarify the skills and knowledge of graduates along with increasing their employability within the market.

### **Summary**

Emerging external trends are monitored formally through IABs and informally through Core Theme 3 Engaged Faculty. All of the SME departments have IABs; these groups meet at a minimum once a year. Approximately, half of the CLSPS departments have IABs; and, the frequency of meetings varies among departments. Highlands College has an IAB for the college as a whole and not individual programs. At all IAB meetings regardless of frequency, Montana Tech's Provost and Chancellor attend part of the meeting. As noted in Standard 3B Core Theme 3 Engaged Faculty, Montana Tech faculty engage in research, scholarly activity, and/or professional development and service to their profession; so faculty are continually evaluating emerging trends through research, professional organization, and conferences.

The information acquired through both the informal and formal methods is used to assess Montana Tech's strategic position, define its future direction, and review and revise, components of mission fulfillment through the campus committees, Deans, Dean's Council, Executive Council, UM affiliation, and MUS.

In order to "*blends theory with practice in meeting the changing needs of society and the responsible development and use of natural resources*", the institution must monitor emerging trends, assess the strategic position of Montana Tech locally and globally, review and revise the strategic position while the institution "*builds on a strong heritage in engineering, science, and technology.*"

## Conclusion

The spring 2011 Montana Tech Year One Report (YOR) was developed to include *“both meaningful review of our mission and subsequent analysis of our mission.”* This Year Seven Self Study is the summary of the self-evaluation and analysis of Montana Tech’s mission. Through this seven year process, the indicators of achievement, benchmarks, and definition of mission fulfillment have been modified to further define Montana Tech. This report represents a summary of the successes and areas of improvement while noting the ability of the institution to adapt.

Since the 2011 YOR, Montana Tech has for example: modified the mission statement; added and discontinued programs; created and refined a strategic plan; began developing a new master plan while following the principle that *“our mission serves as our foundation, and through continual assessment of our core themes we will find ways not only to improve where we are lacking but also identify the methodologies employed in sustaining what we do well.”*



## Appendix A Acronym List

### Montana Tech NWCCU Document Acronym List

A&E	Architectural and Engineering Services
AA	Associate of Arts
AA/EEO	Affirmative Action/Equal Employment Opportunity
AAS	Associate of Applied Science
ABET	Accreditation Board for Engineering and Technology
ACE	Academic Center for Excellence
ACES	Academic Center for Excellence-South Campus
ACSC	American Chemical Society Certification
ACUHO-I	Association of College and University Housing Officers-International
AED	Automated External Defibrillators
AIMHO	Association of Intermountain Housing Officers
AISES	American Indian Science and Engineering Society
AS	Associate of Science
ASMT	Associated Students of Montana Tech
BOR	Board of Regents
BS	Bachelor of Science
CAM	Chemical Acquisition Manager
CAMP	Center for Advanced Mineral Processing
CAPP	Curriculum, Advising, and Program Planning
CAS	Central Authentication Service
CAS	Certificate of Applied Science
CCA	Complete College America
CCNE	Commission on Collegiate Nursing Education
CCSSE	Community College Survey of Student Engagement
CEO	Chief Executive Officer
CEU	Continuing Education Unit
CIH	Certified Industrial Hygienists
CLP	Campus Landscape and Lighting Plan
CLSPS	College of Letters Sciences and Professional Studies
CMMS	Computer-based Maintenance Management System
CMP	Campus Master Plan
CORE	Committee on Retention Efforts
CPE	Certified Professional Ergonomists



CPP	Campus Parking Plan
CPR	Cardiopulmonary Resuscitation
CPS	Certified Safety Professionals
CRC	Curriculum Review Committee
CTE	Career Technical Education
CTS	Campus Technology Services
DAA	Digger Athletics Association
DEQ	Department of Environmental Quality
DOA	Department of Administration
ECE	Educational Credentials Evaluators
EH&S	Environmental Health and Safety
ELC	Engineering Laboratory Classroom Building
EO	Education Objectives
FE	Fundamentals of Engineering
FEMA	Federal Emergency Management Agency
FEP	Freshman Engineering Program
FERPA	Family Educational and Privacy Act
FESP	Foundations of Engineering and Science Program
FICM	Facilities Inventory and Classification Manual
FIN	Funding Information Network
FLOCs	Faculty Learning Outcome Councils
FY	Fiscal year
GA	Graduate Assistant
GEC	General Education Committee
GIS	Geographic Information System
GPA	Grade Point Average
GPU	Graphics Processing Unit
GRE	Graduate Record Examination
GTA	Graduate Teaching Assistant
HPC	High Performance Computing
HPER	Health Physical Education Recreation
HVAC	Heating, Ventilating, Air Conditioning
IAB	Industrial Advisory Board
IH	Industrial Hygiene
IMS	Interdisciplinary Master of Science
IRB	Institutional Review Board

IT	Information Technology
LAP	Campus Land Use and Acquisition Plan
LRBP	Long Range Building Plan
LRBP	Long Range Building Program
MBMG	Montana Bureau of Mines and Geology
MEA-MFT	Montana Education Association-Montana Federation of Teachers
MG	Mining Geology Building
MOA	Vocational Education Methods of Administration
MRI	Major Research Instrumentation
MSU	Montana State University
MTFA-CBA	Montana Tech Faculty Association Collective Bargaining Agreement
MTYCFA-CBA	Montana Two-Year College Faculty Association
MUS	Montana University System
NACUBO	National Association of College and University Business Officers
NAIA	National Association of Intercollegiate Athletics
NAIT	Northern Alberta Institute of Technology
NASF	Net Assignable Square Feet
NLR	National Lambda Rail
NRB	Natural Resource Building
NRRC	Natural Resources Research Center
NSF	National Science Foundation
NSSE	National Survey of Student Engagement
NWCCU	Northwest Commission on Colleges and Universities
OCHE	Commissioner of Higher Education
OCHE	Office of the Commissioner of Higher Education
OCR	Office for Civil Rights
OTO	One-time only
PA	Public Address
PBF	Performance Based Funding
PDM	Pre-Disaster Mitigation Plan
PhD	Doctor of Philosophy
PI	Principle Investigators
PLA	Prior Learning Assessment
PRA	Personnel Requisition Approval
RA	Resident Assistant
RAD	Resident Assistant Director

RCR	Responsible Conduct of Research
RHA	Residence Hall Association
RIO	Research Integrity Officer
RMTD	Risk Management and Tort Defense Division
SAIT	Southern Alberta Institute of Technology
SCH	Student Credit Hours
SDSs	Safety Data Sheets
SGID	Small Group Instructional Diagnostic
SIS	Student Information System
SLO	student learning outcomes
SMARTe	Specific, Measurable, Achievable, Realistic, Time-bound, and Engaged
SME	School of Mines and Engineering
SSI	Student Satisfaction Inventory
SSS	Student Success Services
STEM	Science, Technology, Engineering, and Math
SURF	Summer Undergraduate Research Fellowship
TOS	The Outcome Survey
TRAILS	Treasure State Academic Information & Library Services
UM	University of Montana
UMDW	UM Data Warehouse
UM-Missoula	The University of Montana-Missoula
URP	Undergraduate Research Program
VCAF	Vice Chancellor for Administration and Finance
VIMS	Vertere Inventory Management System
VoIP	Voice-over IP
WES	World Education Services
WUE	Western Undergraduate Exchange

## Appendix B Evidence of Compliance

### Standard 2A Governance

#### 2.A.1 Institutional governance policies/procedures

- Board of Regent's Policies
  - <http://mus.edu/borpol/>
- Montana Tech Faculty/Staff Handbook
  - [http://www.mtech.edu/about/facultystaff/Fac\\_staff\\_Handbook.pdf](http://www.mtech.edu/about/facultystaff/Fac_staff_Handbook.pdf)
- Collective Bargaining Agreements
  - <http://mus.edu/hr/cba/collbarg.asp>
    - Montana Tech Faculty Association
      - [http://mus.edu/hr/cba/014\\_CBA.pdf](http://mus.edu/hr/cba/014_CBA.pdf)
    - Two-Year College Faculty Association
      - [http://mus.edu/hr/cba/015\\_CBA.pdf](http://mus.edu/hr/cba/015_CBA.pdf)
    - Montana Public Employees Association
      - [http://mus.edu/hr/cba/001\\_CBA.pdf](http://mus.edu/hr/cba/001_CBA.pdf)
    - Maintenance Painters Union
      - <http://mus.edu/hr/cba/010-CBA.pdf>
    - International Union of Operating Engineers
      - <http://mus.edu/hr/cba/011-CBA.pdf>
    - Pacific Northwest Regional Council of Carpenters
      - <http://mus.edu/hr/cba/006-CBA.pdf>

#### 2.A.2 System governance policies/procedures (if applicable)

- Board of Regent's Policies
  - <http://mus.edu/borpol/>
- Montana Tech Faculty/Staff Handbook
  - [http://www.mtech.edu/about/facultystaff/Fac\\_staff\\_Handbook.pdf](http://www.mtech.edu/about/facultystaff/Fac_staff_Handbook.pdf)
- Collective Bargaining Agreements
  - <http://mus.edu/hr/cba/collbarg.asp>
    - Montana Tech Faculty Association
      - [http://mus.edu/hr/cba/014\\_CBA.pdf](http://mus.edu/hr/cba/014_CBA.pdf)
    - Two-Year College Faculty Association
      - [http://mus.edu/hr/cba/015\\_CBA.pdf](http://mus.edu/hr/cba/015_CBA.pdf)
    - Montana Public Employees Association
      - [http://mus.edu/hr/cba/001\\_CBA.pdf](http://mus.edu/hr/cba/001_CBA.pdf)
    - Maintenance Painters Union
      - <http://mus.edu/hr/cba/010-CBA.pdf>
    - International Union of Operating Engineers
      - <http://mus.edu/hr/cba/011-CBA.pdf>
    - Pacific Northwest Regional Council of Carpenters
      - <http://mus.edu/hr/cba/006-CBA.pdf>

#### **2.A.4 Multiple board governing policies/procedures (if applicable)**

- Board of Regent's Policies
  - <http://mus.edu/borpol/>

#### **2.A.5 By-laws of the governing board: acts only as a committee of the whole**

- Board of Regent's Policies
  - <http://mus.edu/borpol/>
- Board of Regent's Policy 201.7 By-laws
  - <http://mus.edu/borpol/bor200/201-7.pdf>
- Board of Regent's Meeting Agendas, Minutes, Video, and Audio
  - <http://mus.edu/board/meetings/agendas-and-minutes.asp>

#### **2.A.6 Board's calendar for reviewing institutional and board policies/procedures**

- Board of Regent's Policy 103 Procedures for Maintenance of the Manual
  - <http://mus.edu/borpol/bor100/103.pdf>
- Board of Regent's Meeting Agendas, Minutes, Video, and Audio
  - <http://mus.edu/board/meetings/agendas-and-minutes.asp>

#### **2.A.7 By-laws of the governing board: board selects and evaluates regularly chief executive officer who is accountable for the operation of the institution. It delegates authority and responsibility to the CEO.**

- Board of Regent's Policy 205.2 Presidents; Duties and Responsibilities
  - <http://mus.edu/borpol/bor200/205-2.pdf>
- Board of Regent's Policy 205.2.1 Chancellors; Duties and Responsibilities
  - <http://mus.edu/borpol/bor200/205-2-1.pdf>
- Board of Regent's Policy 705.2 Performance Evaluation; Presidents
  - <http://mus.edu/borpol/bor700/705-2.pdf>

#### **2.A.8 Board evaluation tool and review calendar**

- Board of Regent's Policy 705.1 Commissioner and Board Performance Assessment and Compensation Procedure
  - <http://mus.edu/borpol/bor700/705-1.pdf>

#### **2.A.9 Leadership organizational chart**

- Montana University System Organizational Chart
  - [http://mus.edu/che/OCHE\\_org\\_chart.png](http://mus.edu/che/OCHE_org_chart.png)
- Montana Tech Organizational Chart
  - [http://www.mtech.edu/accreditation/yr7/exhibits/Main\\_org\\_chart.pdf](http://www.mtech.edu/accreditation/yr7/exhibits/Main_org_chart.pdf)

#### **2.A.10 Resume of President/CEO**

- Resume Dr. Donald Blacketter, Chancellor
  - [http://www.mtech.edu/accreditation/yr7/exhibits/Don\\_Blacketter.pdf](http://www.mtech.edu/accreditation/yr7/exhibits/Don_Blacketter.pdf)

#### **2.A.11 Curriculum vitae of senior administrators**

- Vitea Dr. Douglas Abbott, Provost
  - [http://www.mtech.edu/accreditation/yr7/exhibits/Abbott\\_resume.pdf](http://www.mtech.edu/accreditation/yr7/exhibits/Abbott_resume.pdf)

- Vitea Mrs. Margaret Peterson, Vice Chancellor for Administration and Finance
  - [http://www.mtech.edu/accreditation/yr7/exhibits/m\\_Peterson\\_CV.pdf](http://www.mtech.edu/accreditation/yr7/exhibits/m_Peterson_CV.pdf)
- Vitea Dr. Beverly Hartline, Vice Chancellor for Research and Dean of Graduate Students
  - <http://www.mtech.edu/accreditation/yr7/exhibits/B-Hartline-June2016.pdf>
- Vitea Mr. Joseph McClafferty, Vice Chancellor for Development and University Relations
  - [http://www.mtech.edu/accreditation/yr7/exhibits/Joe\\_McClafferty.pdf](http://www.mtech.edu/accreditation/yr7/exhibits/Joe_McClafferty.pdf)

#### **2.A.12 Policies/procedures related to teaching, scholarship, service, and artistic creation**

- Montana Tech Faculty/Staff Handbook
  - [http://www.mtech.edu/about/facultystaff/Fac\\_staff\\_Handbook.pdf](http://www.mtech.edu/about/facultystaff/Fac_staff_Handbook.pdf)
- Montana Tech Student Handbook
  - [http://www.mtech.edu/student\\_life/student-handbook.pdf](http://www.mtech.edu/student_life/student-handbook.pdf)
- Montana Tech Departmental Standards Website
  - <http://www.mtech.edu/academics/provost/departmental-standards/index.htm>
- Nursing Department Handbooks
  - <http://www.mtech.edu/academics/clsp/s/nursing/handbooks.htm>
- Collective Bargaining Agreements
  - <http://mus.edu/hr/cba/collbarg.asp>
    - Montana Tech Faculty Association
      - [http://mus.edu/hr/cba/014\\_CBA.pdf](http://mus.edu/hr/cba/014_CBA.pdf)
    - Two-Year College Faculty Association
      - [http://mus.edu/hr/cba/015\\_CBA.pdf](http://mus.edu/hr/cba/015_CBA.pdf)

#### **2.A.13 Policies/procedures related to the library and information resources**

- Montana Tech Library Policies Website
  - <http://www.mtech.edu/library/policies.htm>
    - Collection Development Policy
      - [http://www.mtech.edu/library/Collection\\_Development\\_Policy.pdf](http://www.mtech.edu/library/Collection_Development_Policy.pdf)
    - Public Services Policies and Procedures Manual
      - [http://www.mtech.edu/library/Public\\_Services\\_Policy\\_Manual.pdf](http://www.mtech.edu/library/Public_Services_Policy_Manual.pdf)
    - Technical Services Policies and Procedures Manual
      - [http://www.mtech.edu/library/Technical\\_Services\\_Policies\\_Manual.pdf](http://www.mtech.edu/library/Technical_Services_Policies_Manual.pdf)
- Interlibrary Loan
  - <http://www.mtech.edu/library/ILL.htm>
- Board of Regent's Policy 1300 Section Information Technology
  - <http://mus.edu/borpol/bor1300/bor1300.asp>
- Montana Tech Network and Computer Use Policies
  - <http://www.mtech.edu/cts/policies/index.htm>

#### **2.A.14 Transfer of credit policies/procedures**

- Board of Regents Policies Governing Transfers in the MUS website
  - <http://mus.edu/transfer/policies.asp>
- Board of Regent's Policy 301.5 Transfer of Credits; MUS and Community Colleges

- <http://mus.edu/borpol/bor300/301-5.pdf>
- Board of Regent's Policy 301.10 General Education Transfer Policy
  - <http://mus.edu/borpol/bor300/301-10.pdf>
- Montana University System (MUS) Common Course Numbering Administration
  - <http://mus.edu/Qtools/CCN/CCN.asp>
- Montana Tech Catalog Transfer Credit & Other College-Level Course Work Policies
  - [http://catalog.mtech.edu/content.php?catoid=8&navoid=993#TRANSFER\\_CREDIT\\_OTHER\\_COLLEGE-LEVEL\\_COURSE\\_WORK\\_POLICIES](http://catalog.mtech.edu/content.php?catoid=8&navoid=993#TRANSFER_CREDIT_OTHER_COLLEGE-LEVEL_COURSE_WORK_POLICIES)

**2.A.15 Student rights and responsibilities policies/procedures which include: academic honesty, appeals, grievances, and accommodations for persons with disabilities**

- Montana Tech Student Handbook
  - [http://www.mtech.edu/student\\_life/student-handbook.pdf](http://www.mtech.edu/student_life/student-handbook.pdf)
  - Academic Dishonesty
    - [http://www.mtech.edu/student\\_life/student-handbook.pdf#page=17](http://www.mtech.edu/student_life/student-handbook.pdf#page=17)
  - Grade Appeals
    - [http://www.mtech.edu/student\\_life/student-handbook.pdf#page=23](http://www.mtech.edu/student_life/student-handbook.pdf#page=23)
  - Discrimination Grievance Procedures Appeals
    - [http://www.mtech.edu/student\\_life/student-handbook.pdf#page=21](http://www.mtech.edu/student_life/student-handbook.pdf#page=21)
  - Grievances
    - [http://www.mtech.edu/student\\_life/student-handbook.pdf#page=9](http://www.mtech.edu/student_life/student-handbook.pdf#page=9)
  - Accommodations for persons with disabilities
    - [http://www.mtech.edu/student\\_life/student-handbook.pdf#page=14](http://www.mtech.edu/student_life/student-handbook.pdf#page=14)
    - [http://www.mtech.edu/student\\_life/student-handbook.pdf#page=18](http://www.mtech.edu/student_life/student-handbook.pdf#page=18)
- Montana Tech College Community Expectations Program Manual
  - [http://www.mtech.edu/student\\_life/blocks/Student\\_Conduct.pdf](http://www.mtech.edu/student_life/blocks/Student_Conduct.pdf)
- Montana Tech Catalog
  - Academic Dishonesty
    - [http://catalog.mtech.edu/content.php?catoid=8&navoid=983#ACADEMIC\\_DISHONESTY](http://catalog.mtech.edu/content.php?catoid=8&navoid=983#ACADEMIC_DISHONESTY)
  - Grade Appeal
    - <http://catalog.mtech.edu/content.php?catoid=8&navoid=983#Appeals>
- Montana Tech EEO-AA & Title IX website
  - <http://www.mtech.edu/campus-safety/eo-aa-titleix.htm>
- Montana Tech's Policy on Discrimination, Harassment, Sexual Misconduct, Stalking and Retaliation
  - <http://www.mtech.edu/campus-safety/files/discrimination-sexual-misconduct-policy.pdf>
- Montana Tech's Discrimination Grievance Procedure
  - <http://www.mtech.edu/campus-safety/files/discrimination-grievance-procedures.pdf>
- Montana Tech Student Conduct Website
  - <http://www.mtech.edu/student-conduct/>
- Montana Tech Student Athlete Handbook



- [http://www.godiggers.com/documents/2016/12/20/2016\\_2017\\_Student\\_Athlete\\_Handbook.pdf](http://www.godiggers.com/documents/2016/12/20/2016_2017_Student_Athlete_Handbook.pdf)

**2.A.16 Admission and placement policies/procedures. Policies/procedures related to continuation and termination from educational programs including appeal process and readmission policies/procedures.**

- Board of Regents Policy 301 Admissions Requirements
  - <http://mus.edu/borpol/bor300/301.pdf>
- Board of Regents Policy 301.1 Admission Requirements for Undergraduates into Four-year University Programs
  - <http://mus.edu/borpol/bor300/301-1.pdf>
- Board of Regents Policy 301.3 Admissions Requirements; Graduate Students
  - <http://mus.edu/borpol/bor300/301-3.pdf>
- Montana Tech Catalog Admission Requirements
  - <http://catalog.mtech.edu/content.php?catoid=8&navoid=993>
- Montana Tech Catalog Admission Requirements (Graduate School)
  - [http://catalog.mtech.edu/content.php?catoid=8&navoid=987#Admission\\_to\\_the\\_Graduate\\_School](http://catalog.mtech.edu/content.php?catoid=8&navoid=987#Admission_to_the_Graduate_School)
- Montana Tech Catalog Academic Standing
  - [http://catalog.mtech.edu/content.php?catoid=8&navoid=983#ACADEMIC\\_STANDING](http://catalog.mtech.edu/content.php?catoid=8&navoid=983#ACADEMIC_STANDING)
- Montana Tech Catalog Former Student Readmission
  - [http://catalog.mtech.edu/content.php?catoid=8&navoid=993#Former\\_Student\\_Readmission](http://catalog.mtech.edu/content.php?catoid=8&navoid=993#Former_Student_Readmission)
- Montana Tech Student Handbook
  - [http://www.mtech.edu/student\\_life/student-handbook.pdf](http://www.mtech.edu/student_life/student-handbook.pdf)

**2.A.17 Policies/procedures that define relationship of institution with co-curricular activities including student publications and media.**

- Montana Tech Student Handbook Campus Opportunities and Resources
  - [http://www.mtech.edu/student\\_life/student-handbook.pdf#page=11](http://www.mtech.edu/student_life/student-handbook.pdf#page=11)
- The Associated Students of Montana Tech Constitution
  - <http://asmt-mtech.com/wp-content/uploads/2017/02/ASMTConstitution-revised-April-2016.pdf>
- The Associated Students of Montana Tech By-Laws
  - <http://asmt-mtech.com/wp-content/uploads/2017/02/ASMT-By-Laws-revised-2016.pdf>

## **2.A.18 Human resource policies/procedures**

- Board of Regent's Policy 700 Section Personnel
  - <http://mus.edu/borpol/bor700/bor700.asp>
- Board of Regent's Policy 800 Compensation
  - <http://mus.edu/borpol/bor800/bor800.asp>
- Montana Tech Faculty/Staff Handbook
  - [http://www.mtech.edu/about/facultystaff/Fac\\_staff\\_Handbook.pdf](http://www.mtech.edu/about/facultystaff/Fac_staff_Handbook.pdf)
- Montana Tech Human Resources Website
  - <http://www.mtech.edu/administration/hr/>

## **2.A.19 Policies/procedures for apprising employees of working conditions, rights and responsibilities, evaluation, retention, promotion, and termination**

- Montana Tech Faculty/Staff Handbook
  - [http://www.mtech.edu/about/facultystaff/Fac\\_staff\\_Handbook.pdf](http://www.mtech.edu/about/facultystaff/Fac_staff_Handbook.pdf)
- Collective Bargaining Agreements
  - <http://mus.edu/hr/cba/collbarg.asp>
    - Montana Tech Faculty Association
      - [http://mus.edu/hr/cba/014\\_CBA.pdf](http://mus.edu/hr/cba/014_CBA.pdf)
    - Two-Year College Faculty Association
      - [http://mus.edu/hr/cba/015\\_CBA.pdf](http://mus.edu/hr/cba/015_CBA.pdf)
    - Montana Public Employees Association
      - [http://mus.edu/hr/cba/001\\_CBA.pdf](http://mus.edu/hr/cba/001_CBA.pdf)
    - Maintenance Painters Union
      - <http://mus.edu/hr/cba/010-CBA.pdf>
    - International Union of Operating Engineers
      - <http://mus.edu/hr/cba/011-CBA.pdf>
    - Pacific Northwest Regional Council of Carpenters
      - <http://mus.edu/hr/cba/006-CBA.pdf>
- Montana Tech Additional Policy Book
  - <http://www.mtech.edu/policies/additional.pdf>

## **2.A.20 Policies/procedures ensuring security and confidentiality of human resource records**

- Code of Ethics: Standards of conduct for State Employees
  - <https://hr.mt.gov/Portals/78/newdocs/guidesandforms/standardsofconductguide.pdf>
- Montana Tech Human Resources Website
  - <http://www.mtech.edu/administration/hr/>

## **2.A.21 Policies/procedures/ for reviewing publications that assures integrity**

- Montana Tech Marketing & Public Relations Website
  - <http://www.mtech.edu/pr/>

## **2.A.22 Policies/procedures for reviewing internal and external complaints and grievances**

- Montana Tech Website Montana University System Complaint Process
  - <http://www.mtech.edu/onestop/Complaints.htm>
- Montana Tech Faculty/Staff Handbook Section 506 Grievance Policy and Procedure

- [http://www.mtech.edu/about/facultystaff/Fac\\_staff\\_Handbook.pdf#page=86](http://www.mtech.edu/about/facultystaff/Fac_staff_Handbook.pdf#page=86)
- Collective Bargaining Agreements
  - <http://mus.edu/hr/cba/collbarg.asp>
    - Montana Tech Faculty Association
      - [http://mus.edu/hr/cba/014\\_CBA.pdf](http://mus.edu/hr/cba/014_CBA.pdf)
    - Two-Year College Faculty Association
      - [http://mus.edu/hr/cba/015\\_CBA.pdf](http://mus.edu/hr/cba/015_CBA.pdf)
    - Montana Public Employees Association
      - [http://mus.edu/hr/cba/001\\_CBA.pdf](http://mus.edu/hr/cba/001_CBA.pdf)
    - Maintenance Painters Union
      - <http://mus.edu/hr/cba/010-CBA.pdf>
    - International Union of Operating Engineers
      - <http://mus.edu/hr/cba/011-CBA.pdf>
    - Pacific Northwest Regional Council of Carpenters
      - <http://mus.edu/hr/cba/006-CBA.pdf>
- Montana Tech EEO-AA & Title IX website
  - <http://www.mtech.edu/campus-safety/eo-aa-titleix.htm>
- Montana Tech Campus Safety Website
  - <http://www.mtech.edu/campus-safety/>
- Montana Tech Student Handbook
  - Discrimination Grievance Procedures Appeals
    - [http://www.mtech.edu/student\\_life/student-handbook.pdf#page=21](http://www.mtech.edu/student_life/student-handbook.pdf#page=21)
  - Grievances
    - [http://www.mtech.edu/student\\_life/student-handbook.pdf](http://www.mtech.edu/student_life/student-handbook.pdf)
- Montana Tech College Community Expectations Program Manual
  - [http://www.mtech.edu/student\\_life/blocks/Student\\_Conduct.pdf](http://www.mtech.edu/student_life/blocks/Student_Conduct.pdf)
- Montana Tech Catalog
  - Academic Dishonesty
    - [http://catalog.mtech.edu/content.php?catoid=8&navoid=983#ACADEMIC DISHONESTY](http://catalog.mtech.edu/content.php?catoid=8&navoid=983#ACADEMIC_DISHONESTY)
  - Grade Appeal
    - <http://catalog.mtech.edu/content.php?catoid=8&navoid=983#Appeals>
- Montana Tech's Policy on Discrimination, Harassment, Sexual Misconduct, Stalking and Retaliation
  - <http://www.mtech.edu/campus-safety/files/discrimination-sexual-misconduct-policy.pdf>
- Montana Tech' Discrimination Grievance Procedure
  - <http://www.mtech.edu/campus-safety/files/discrimination-grievance-procedures.pdf>
- Montana Tech Student Conduct Website
  - <http://www.mtech.edu/student-conduct/>
- Montana Tech Library Collection Development Policy Appendix D, Request for Review of Library Materials
  - [http://www.mtech.edu/library/Collection\\_Development\\_Policy.pdf#page=33](http://www.mtech.edu/library/Collection_Development_Policy.pdf#page=33)

**2.A.23 Policies/procedures prohibiting conflict of interest of employees and board members, ensures educational autonomy, and provides notice if the institution requires constituents to conform to a specific code of conduct.**

- Board of Regent's Policy 770 Conflict of Interest
  - <http://mus.edu/borpol/bor700/770.pdf>
- Montana Tech Conflict of Interest and Financial Disclosure Policy
  - <http://www.mtech.edu/research/conflict-interest-financial-disclosure.pdf>
- Code of Ethics: Standards of conduct for State Employees
  - <https://hr.mt.gov/Portals/78/newdocs/guidesandforms/standardsofconductguide.pdf>

**2.A.24 Policies/procedures clarifying ownership, copyright, control, compensation, and revenue derived from the creation and production of intellectual property**

- Board of Regent's Policy 401.2 Invention and Patents
  - <http://mus.edu/borpol/bor400/401-2.pdf>
- Board of Regent's Policy 401.3 Copyright Policy
  - <http://mus.edu/borpol/bor400/401-3.pdf>
- Board of Regent's Policy 406 Ownership of Electronic Course Material
  - <http://mus.edu/borpol/bor400/406.pdf>
- Board of Regent's Policy 407 University System/Employee Joint Ventures
  - <http://mus.edu/borpol/bor400/407.pdf>
- Board of Regent's Policy 1901.1 Unauthorized Copying and Use of Computer Software
  - <http://mus.edu/borpol/bor1900/1901-1.pdf>
- Montana Tech Faculty/Staff Handbook Section 217 Inventions and Patents and 218 Copyrights
  - [http://www.mtech.edu/about/facultystaff/Fac\\_staff\\_Handbook.pdf#page=50](http://www.mtech.edu/about/facultystaff/Fac_staff_Handbook.pdf#page=50)
- Montana Tech Research Office Policies and Procedures Website
  - [http://www.mtech.edu/research/policies\\_procedures.htm](http://www.mtech.edu/research/policies_procedures.htm)
- Montana Tech Principal Investigator Training
  - <http://www.mtech.edu/research/files/principal-investigator-training.pdf>
- Montana Tech Faculty Association Article 17
  - [http://mus.edu/hr/cba/014\\_CBA.pdf#page=41](http://mus.edu/hr/cba/014_CBA.pdf#page=41)

**2.A.26 Policies/procedures related to contractual agreements with external entities**

- Montana Tech Faculty/Staff Handbook Section 603 Requisitions and Purchase Orders
  - [http://www.mtech.edu/about/facultystaff/Fac\\_staff\\_Handbook.pdf#page=97](http://www.mtech.edu/about/facultystaff/Fac_staff_Handbook.pdf#page=97)
- Montana Tech Purchasing Website
  - <http://www.mtech.edu/administration/purchasing/>
- Montana Tech Foundation Operating Agreement
  - [http://www.mtech.edu/accreditation/yr7/exhibits/Montana\\_Tech\\_Foundation\\_Operating\\_Agreement.pdf](http://www.mtech.edu/accreditation/yr7/exhibits/Montana_Tech_Foundation_Operating_Agreement.pdf)
- Montana Tech Alumni Association Operating Agreement
  - [http://www.mtech.edu/accreditation/yr7/exhibits/Montana\\_Tech\\_Alumni\\_Association\\_Operating\\_Agreement.pdf](http://www.mtech.edu/accreditation/yr7/exhibits/Montana_Tech_Alumni_Association_Operating_Agreement.pdf)
- Montana Tech Digger Athletic Association

- [http://www.mtech.edu/accreditation/yr7/exhibits/Montana Tech Digger Athletic Association Operating Agreement.pdf](http://www.mtech.edu/accreditation/yr7/exhibits/Montana_Tech_Digger_Athletic_Association_Operating_Agreement.pdf)

#### **2.A.27 Academic freedom policies/procedures**

- Board of Regent's Policy 302 Academic Freedom
  - <http://mus.edu/borpol/bor300/302.pdf>
- Montana Tech Faculty/Staff Handbook Section 202 Academic Freedom and 203 Faculty Code of Conduct
  - [http://www.mtech.edu/about/facultystaff/Fac\\_staff\\_Handbook.pdf#page=15](http://www.mtech.edu/about/facultystaff/Fac_staff_Handbook.pdf#page=15)
- Collective Bargaining Agreements
  - <http://mus.edu/hr/cba/collbarg.asp>
    - Montana Tech Faculty Association
      - [http://mus.edu/hr/cba/014\\_CBA.pdf](http://mus.edu/hr/cba/014_CBA.pdf)
    - Two-Year College Faculty Association
      - [http://mus.edu/hr/cba/015\\_CBA.pdf](http://mus.edu/hr/cba/015_CBA.pdf)

#### **2.A.28 Academic freedom policies/procedures**

- See 2.A.27 Evidence

#### **2.A.29 Policies/procedures prohibiting plagiarism by faculty and staff**

- Board of Regent's Policy 1901.1 Unauthorized Copying and Use of Computers
  - <http://mus.edu/borpol/bor1900/1901-1.pdf>
- Montana Tech of the University of Montana Institutional Review Board
  - <https://www.mtech.edu/research/images/irb-procedures.pdf>
- Collective Bargaining Agreement Montana Tech Faculty Association 19.200
  - [http://mus.edu/hr/cba/014\\_CBA.pdf#page=46](http://mus.edu/hr/cba/014_CBA.pdf#page=46)

#### **2.A.30 Policies/procedures that articulate the oversight and management of financial resources including planning and monitoring of operating and capital budgets, reserves, investments, fundraising, cash management, debt management, transfers and borrowing between funds**

- Board of Regent's Policy 900 Section – Financial Affairs
  - <http://mus.edu/borpol/bor900/bor900.asp>
- Board of Regent's Policy 901.9 Campus-Affiliated Foundations
  - <http://mus.edu/borpol/bor900/901-9.pdf>
- Montana Tech's Guidelines for Budgeting and Planning Process
  - <http://www.mtech.edu/administration/budgets/files/montana-tech-budget-guidelines.pdf>

## Standard 2B Human Resources

### 2.B.1 Personnel hiring policy/procedures

- Montana Tech Faculty/Staff Handbook Section 204 Recruiting & Selecting New Faculty and 501 Hiring Procedures
  - [http://www.mtech.edu/about/facultystaff/Fac\\_staff\\_Handbook.pdf#page=16](http://www.mtech.edu/about/facultystaff/Fac_staff_Handbook.pdf#page=16)
  - [http://www.mtech.edu/about/facultystaff/Fac\\_staff\\_Handbook.pdf#page=73](http://www.mtech.edu/about/facultystaff/Fac_staff_Handbook.pdf#page=73)
- Montana Tech Human Resources Website
  - <http://www.mtech.edu/administration/hr/index.htm>
    - Check List
      - <http://www.mtech.edu/administration/hr/docs/SEARCH%20PROCEDURES%20CHECKLIST%202016.docx>
    - Personnel Requisition Approval
      - [http://www.mtech.edu/administration/hr/PERSONNEL%20REQUISITION%20APPROVAL\\_revised2015.doc](http://www.mtech.edu/administration/hr/PERSONNEL%20REQUISITION%20APPROVAL_revised2015.doc)
    - Search Committee Procedures
      - <http://www.mtech.edu/administration/hr/docs/Search%20Procedures%20REV%20%202016.pptx>
    - EEO/AA Form
      - <http://www.mtech.edu/administration/hr/docs/EEO-AA%20form.doc>
    - AA Employment Evaluation Sheet
      - <http://www.mtech.edu/administration/hr/docs/Employment%20Evaluation.doc>
    - Applicant Screening Matrix
      - <http://www.mtech.edu/administration/hr/docs/search%20matrix%20SAMPLE.xls>
- Montana Tech Employment Website
  - <http://www.mtech.edu/employment/index.htm>
    - Affirmative Action Equal Employment Opportunity Form
      - <http://www.mtech.edu/employment/forms/eoo-aa.pdf>
    - Employment Preference Form
      - <http://www.mtech.edu/employment/employpref.doc>
    - Montana Tech Employee Benefits
      - <http://www.mtech.edu/employment/forms/employee-benefits.pdf>
    - Montana Tech Application
      - <http://www.mtech.edu/employment/forms/montana-tech-application.pdf>
- Collective Bargaining Agreements
  - <http://mus.edu/hr/cba/collbarg.asp>
    - Montana Tech Faculty Association Article 10
      - [http://mus.edu/hr/cba/014\\_CBA.pdf](http://mus.edu/hr/cba/014_CBA.pdf)
    - Two-Year College Faculty Association Article 9.5
      - [http://mus.edu/hr/cba/015\\_CBA.pdf](http://mus.edu/hr/cba/015_CBA.pdf)

## 2.B.2 Administrator/staff evaluation policies/procedures

- Board of Regent's Policy 705.2 Performance Evaluation; Presidents
  - <http://mus.edu/borpol/bor700/705-2.pdf>
- Montana Tech Faculty/Staff Handbook Section 206.4 Performance Evaluation: Full-Time Faculty, Part-Time Faculty, and Deans
  - [http://www.mtech.edu/about/facultystaff/Fac\\_staff\\_Handbook.pdf#page=24](http://www.mtech.edu/about/facultystaff/Fac_staff_Handbook.pdf#page=24)
- Montana Tech Faculty/Staff Handbook Section 208.3 Montana Bureau of Mines and Geology Evaluation of Professional Staff
  - [http://www.mtech.edu/about/facultystaff/Fac\\_staff\\_Handbook.pdf#page=40](http://www.mtech.edu/about/facultystaff/Fac_staff_Handbook.pdf#page=40)
- Montana Tech Faculty Association Article 22.50
  - [http://mus.edu/hr/cba/014\\_CBA.pdf](http://mus.edu/hr/cba/014_CBA.pdf)
- Montana Tech Performance Review Form
  - [http://www.mtech.edu/administration/forms/docs/Perf\\_Review\\_Tech\\_final.doc](http://www.mtech.edu/administration/forms/docs/Perf_Review_Tech_final.doc)
- Montana Tech Faculty/Staff Handbook Section 505 Professional and Staff Performance Evaluation Policy and Procedures
  - [http://www.mtech.edu/about/facultystaff/Fac\\_staff\\_Handbook.pdf#page=84](http://www.mtech.edu/about/facultystaff/Fac_staff_Handbook.pdf#page=84)
- Employee Evaluation Notification Emails
  - Hard copy in Exhibit Room

## 2.B.3 Employee professional development policies/procedures

- Board of Regent's Policy 801.1 Sabbatical Assignment
  - <https://mus.edu/borpol/bor800/801-1.pdf>
- Montana Tech Faculty/Staff Handbook Section 213 Sabbatical Assignment
  - [http://www.mtech.edu/about/facultystaff/Fac\\_staff\\_Handbook.pdf#page=48](http://www.mtech.edu/about/facultystaff/Fac_staff_Handbook.pdf#page=48)
- Board of Regent's Policy 940.13 Tuition Waivers
  - <https://mus.edu/borpol/bor900/940-13.pdf>
- Montana Tech Faculty Association
  - [http://mus.edu/hr/cba/014\\_CBA.pdf](http://mus.edu/hr/cba/014_CBA.pdf)
- Two-Year College Faculty Association
  - [http://mus.edu/hr/cba/015\\_CBA.pdf](http://mus.edu/hr/cba/015_CBA.pdf)

## 2.B.4 Academic organizational chart

- Montana Tech Provost Webpage
  - <http://www.mtech.edu/academics/provost/academic-affairs-organizational-chart.pdf>

## 2.B.5 Faculty workload policies/procedures

- Montana Tech Faculty Association Article 21
  - [http://mus.edu/hr/cba/014\\_CBA.pdf#page=52](http://mus.edu/hr/cba/014_CBA.pdf#page=52)
- Two-Year College Faculty Association Appendix C
  - [http://mus.edu/hr/cba/015\\_CBA.pdf#page=52](http://mus.edu/hr/cba/015_CBA.pdf#page=52)
- Research Position Base Salaries
  - <https://www.mtech.edu/research/research-salary-policy.pdf>
- Compensation from Sponsored Programs
  - <https://www.mtech.edu/research/files/sponsored-program-compensation.pdf>



## 2.B.6 Faculty evaluation policies/procedures

- Montana Tech Faculty/Staff Handbook Section 206 Evaluation, Tenure, Promotion and Merit – North Campus Faculty
  - [http://www.mtech.edu/about/facultystaff/Fac\\_staff\\_Handbook.pdf#page=18](http://www.mtech.edu/about/facultystaff/Fac_staff_Handbook.pdf#page=18)
- Montana Tech Faculty/Staff Handbook Section 207 Evaluation, Tenure, Promotion and Merit – Highlands College
  - [http://www.mtech.edu/about/facultystaff/Fac\\_staff\\_Handbook.pdf#page=32](http://www.mtech.edu/about/facultystaff/Fac_staff_Handbook.pdf#page=32)
- Montana Tech Faculty/Staff Handbook Section 208 Classification, Promotion and Merit – Montana Bureau of Mines and Geology Professional Faculty and Staff
  - [http://www.mtech.edu/about/facultystaff/Fac\\_staff\\_Handbook.pdf#page=39](http://www.mtech.edu/about/facultystaff/Fac_staff_Handbook.pdf#page=39)
- Montana Tech Faculty/Staff Handbook Section 206.4 Performance Evaluation: Full-Time Faculty, Part-Time Faculty, and Deans,
  - [http://www.mtech.edu/about/facultystaff/Fac\\_staff\\_Handbook.pdf#page=24](http://www.mtech.edu/about/facultystaff/Fac_staff_Handbook.pdf#page=24)
- Montana Tech Faculty Association Article 14, Section 22.311, 22.313, 22.331
  - [http://mus.edu/hr/cba/014\\_CBA.pdf#page=23](http://mus.edu/hr/cba/014_CBA.pdf#page=23)
- Two-Year College Faculty Association Article 7,
  - [http://mus.edu/hr/cba/015\\_CBA.pdf#page=24](http://mus.edu/hr/cba/015_CBA.pdf#page=24)

## Standard 2C Education Resources

### 2.C.1 Learning outcomes for all courses, programs, and degrees

- Course Learning Outcomes
  - Hard copy in Exhibit Room
  - Recommended Syllabus Policy
    - [http://www.mtech.edu/accreditation/yr7/exhibits/Syllabus\\_policy.pdf](http://www.mtech.edu/accreditation/yr7/exhibits/Syllabus_policy.pdf)
- General Education Outcomes
  - [http://catalog.mtech.edu/preview\\_program.php?catoid=8&poid=1370](http://catalog.mtech.edu/preview_program.php?catoid=8&poid=1370)
- Program and Degree Outcomes
  - College of Letters, Science, and Professional Studies
    - <http://catalog.mtech.edu/content.php?catoid=8&navoid=984>
      - [Biological Sciences \(B.S.\)](#)
      - [Biology \(B.A.S\)](#)
      - [Business and Information Technology \(B.S.\)](#)
      - [Business \(B.A.S\)](#)
      - [Chemistry \(B.S.\)](#)
      - [Computer Science \(B.S.\)](#)
      - [Data Science \(B.S.\)](#)
      - [General Science \(B.S.\)](#)
      - [General Studies \(B.A.S\)](#)
      - [Health Care Informatics](#)
      - [Liberal Studies \(B.S.\)](#)
      - [Mathematical Sciences \(B.S.\)](#)
      - [Network Technology \(B.S.\)](#)
      - [Nursing A.S.](#) (link to 15/16 catalog as last class in this catalog)
      - [Nursing B.S.](#)
      - [Professional and Technical Communications \(B.S.\)](#)
      - [Software Engineering \(B.S.\)](#)
      - [Statistics \(B.S.\)](#)
  - Graduate School
    - <http://catalog.mtech.edu/content.php?catoid=8&navoid=987>
      - All M, M.S., Graduate Certificates
  - Highlands College
    - <http://catalog.mtech.edu/content.php?catoid=8&navoid=985>
      - [Associate of Science \(A.S.\)](#)
      - [Accounting Technology \(A.A.S\)](#)
      - [Business Technology \(A.A.S\)](#)
      - [Medical Assistant \(A.A.S\)](#)
      - [Radiologic Technology \(A.A.S\)](#)
      - [Surgical Technology](#)
      - [Certified Nurse Assistant \(Certificate\)](#)
      - [Network Technology \(A.A.S\)](#)

- [Web Development \(A.A.S\)](#)
- [Automotive Technology \(A.A.S\)](#)
- [Civil Engineering Technology \(A.A.S\)](#)
- [Construction Technology – Carpentry \(A.A.S\)](#)
- [Drafting Technology \(A.A.S\)](#)
- [Historic Preservation Technology \(A.A.S\)](#)
- [Metals Fabrication Technology \(A.A.S\)](#)
- [Aerospace Welding \(Certificate\)](#)
- [Pre-Apprenticeship Line \(Certificate\)](#)
- School of Mines and Engineering
  - <http://catalog.mtech.edu/content.php?catoid=8&navoid=986>
    - [Freshman Engineering \(non degree\)](#)
    - [Electrical Engineering \(B.S\)](#)
    - [Environmental Engineering \(B.S.\)](#)
    - [General Engineering \(B.S.\)](#)
    - [Geological Engineering \(B.S.\)](#) (set up different than others)
    - [Geophysical Engineering\(B.S.\)](#)
    - [Metallurgical and Materials Engineering \(B.S.\)](#)
    - [Mining Engineering \(B.S.\)](#)
    - [Petroleum Engineering \(B.S.\)](#)
    - [Applied Health & Safety Sciences \(B.S.\)](#)
    - [Occupational Safety and Health \(B.S.\)](#)

### **2.C.2 Learning outcomes for all courses, programs, and degrees**

- See 2.C.1 Evidence

### **2.C.3 Policies/procedures that define the awarding of credit and degrees**

- Montana Tech Catalog Academic Regulations and Requirements
  - <http://catalog.mtech.edu/content.php?catoid=8&navoid=983>
- Montana Tech Catalog Definition of Credits
  - <http://catalog.mtech.edu/content.php?catoid=8&navoid=983#Credits>
- Montana Tech Degree Requirements Website
  - <http://www.mtech.edu/onestop/>
- Montana Tech Catalog Degree Requirements (Undergraduate and Technical)
  - [http://catalog.mtech.edu/content.php?catoid=8&navoid=983#DEGREE\\_REQUIREMENTS  
UNDERGRADUATE TECHNICAL](http://catalog.mtech.edu/content.php?catoid=8&navoid=983#DEGREE_REQUIREMENTS_UNDERGRADUATE_TECHNICAL)
- Montana Tech Catalog Degree Requirements (Graduate)
  - [http://catalog.mtech.edu/content.php?catoid=8&navoid=987#Summary\\_of\\_Procedures  
and Deadlines to Complete Masters Degree Requirements](http://catalog.mtech.edu/content.php?catoid=8&navoid=987#Summary_of_Procedures_and_Deadlines_to_Complete_Masters_Degree_Requirements)

### **2.C.4 Admission and graduation requirements for degree programs**

- Board of Regents Policy 301 Admissions Requirements
  - <http://mus.edu/borpol/bor300/301.pdf>
- Board of Regents Policy 301.1 Admission Requirements for Undergraduates into Four-year University Programs

- <http://mus.edu/borpol/bor300/301-1.pdf>
- Board of Regents Policy 301.3 Admissions Requirements; Graduate Students
  - <http://mus.edu/borpol/bor300/301-3.pdf>
- Montana Tech Catalog Admission Requirements
  - <http://catalog.mtech.edu/content.php?catoid=8&navoid=993>
- Montana Tech Catalog Admission Requirements (Graduate School)
  - <http://catalog.mtech.edu/content.php?catoid=8&navoid=987#Admission to the Graduate School>
- Montana Tech Catalog Admission Requirements (Nursing)
  - [http://catalog.mtech.edu/preview\\_entity.php?catoid=8&ent\\_oid=1704&returnto=984#Nursing Department Application Requirements](http://catalog.mtech.edu/preview_entity.php?catoid=8&ent_oid=1704&returnto=984#Nursing Department Application Requirements)
- Montana Tech Admission Requirements Website First Year
  - <http://www.mtech.edu/admissions/first-year/admission-procedures.htm>
- Montana Tech Admission Requirements Website Transfer
  - <http://www.mtech.edu/admissions/transfer/admission-procedures.htm>
- Montana Tech Admission Requirements Website International
  - <http://www.mtech.edu/admissions/international/admission-procedures.htm>
- Montana Tech Admission Requirements Website Graduate
  - <http://www.mtech.edu/academics/gradschool/apply/>
- Montana Tech Admission Requirements Website Highlands College
  - <http://www.mtech.edu/admissions/highlands/admission-procedures.htm>
- Degree Requirements Website
  - <http://www.mtech.edu/onestop/>
- Montana Tech Catalog Degree Requirements (Undergraduate and Technical)
  - [http://catalog.mtech.edu/content.php?catoid=8&navoid=983#DEGREE\\_REQUIREMENTS UNDERGRADUATE TECHNICAL](http://catalog.mtech.edu/content.php?catoid=8&navoid=983#DEGREE_REQUIREMENTS_UNDERGRADUATE_TECHNICAL)
- Montana Tech Catalog Degree Requirements (Graduate)
  - <http://catalog.mtech.edu/content.php?catoid=8&navoid=987#Summary of Procedures and Deadlines to Complete Master s Degree Requirements>

**2.C.5 Policies/procedures explaining the faculty role in revising curriculum, selecting faculty, and assessing achievement of student learning outcomes**

- Curriculum Review Committee Change Request Form
  - <http://www.mtech.edu/about/facultystaff/curriculum-review-committee/forms/curriculum-request.pdf>
- General Education
  - <http://www.mtech.edu/accreditation/yr7/exhibits/Gen ed App V2.pdf>
- Program and Degree Outcomes
  - College of Letters, Science, and Professional Studies
    - <http://catalog.mtech.edu/content.php?catoid=8&navoid=984>
  - Graduate School
    - <http://catalog.mtech.edu/content.php?catoid=8&navoid=987>
  - Highlands College
    - <http://catalog.mtech.edu/content.php?catoid=8&navoid=985>

- School of Mines and Engineering
  - <http://catalog.mtech.edu/content.php?catoid=8&navoid=986>
- Board of Regents of Higher Education Academic Affairs Procedural Guidebook
  - <http://mus.edu/che/arsa/AcademicAffairsHandbook.pdf>
- Program Reviews
  - [http://www.mtech.edu/academics/assessment/program\\_review.htm](http://www.mtech.edu/academics/assessment/program_review.htm)

#### Selecting Faculty

- Montana Tech Faculty/Staff Handbook Section 204 Recruiting & Selecting New Faculty
  - [http://www.mtech.edu/about/facultystaff/Fac\\_staff\\_Handbook.pdf#page=16](http://www.mtech.edu/about/facultystaff/Fac_staff_Handbook.pdf#page=16)
- Collective Bargaining Agreements
  - <http://mus.edu/hr/cba/collbarg.asp>
    - Montana Tech Faculty Association
      - [http://mus.edu/hr/cba/014\\_CBA.pdf](http://mus.edu/hr/cba/014_CBA.pdf)
    - Two-Year College Faculty Association
      - [http://mus.edu/hr/cba/015\\_CBA.pdf](http://mus.edu/hr/cba/015_CBA.pdf)
- Personnel Requisition Approval
  - [http://www.mtech.edu/administration/hr/PERSONNEL%20REQUISITION%20APPROVAL\\_revised2015.doc](http://www.mtech.edu/administration/hr/PERSONNEL%20REQUISITION%20APPROVAL_revised2015.doc)
- Montana Tech Employment Website
  - <http://www.mtech.edu/employment/index.htm>

#### **2.C.6 Policies/procedures that explains faculty/library partnership for assuring library and information resources are integrated into the learning process**

- Subject Guides
  - <http://libguides.mtech.edu/>
- Curriculum Review Committee Change Request Form
  - <http://www.mtech.edu/about/facultystaff/curriculum-review-committee/forms/curriculum-request.pdf>

#### **2.C.7 Policies/procedures for approval of experiential learning**

- Board of Regents Policy 301.19 Prior Learning Assessment
  - [https://mus.edu/board/meetings/2015/Sept2015/ASA/168-106-R0915\\_A1.pdf](https://mus.edu/board/meetings/2015/Sept2015/ASA/168-106-R0915_A1.pdf)
- Montana Tech Catalog Prior Learning Assessment (PLA)
  - <http://catalog.mtech.edu/content.php?catoid=8&navoid=983#prior>

#### **2.C.8 Transfer of credit acceptance policies/procedures**

- Montana University System Transferability Initiative website
  - <https://ccn.mus.edu/search/>
- Board of Regents Policies Governing Transfers in the MUS website
  - <http://mus.edu/transfer/policies.asp>
- Montana Tech Transfer Credit Policies website
  - <http://www.mtech.edu/onestop/Registrar/Transfer-Credit-Policies.htm>
- Montana Tech Transfer of International Credit website

- <http://www.mtech.edu/admissions/international/transferring-credits.htm>
- Montana Tech Catalog Graduate School Regulations Courses Taken at Another Institution
  - <http://catalog.mtech.edu/content.php?catoid=8&navoid=987#Regulations>
- Montana Tech Graduate School Petition to Transfer Credit Form
  - [http://www.mtech.edu/academics/gradschool/Forms/petition\\_transfer\\_credit.pdf](http://www.mtech.edu/academics/gradschool/Forms/petition_transfer_credit.pdf)
- Articulation Agreements
  - Southern Alberta Institute of Technology (SAIT) and Northern Alberta Institute of Technology (NAIT)
    - <http://www.mtech.edu/admissions/international/sait-nait-petroleum.pdf>
- Transfer Agreements
  - Hard copy in Exhibit Room.

### **2.C.9 Description of general education program**

- Montana Tech Catalog General Education
  - [http://catalog.mtech.edu/preview\\_program.php?catoid=8&poid=1370](http://catalog.mtech.edu/preview_program.php?catoid=8&poid=1370)

### **2.C.10 Assessable learning outcomes for all general education components of baccalaureate and transfer degree programs**

- Montana Tech Catalog General Education
  - [http://catalog.mtech.edu/preview\\_program.php?catoid=8&poid=1370](http://catalog.mtech.edu/preview_program.php?catoid=8&poid=1370)
- Montana University System (MUS) Common Course Guide
  - <https://ccn.mus.edu/search/>
- Program Reviews
  - [http://www.mtech.edu/academics/assessment/program\\_review.htm](http://www.mtech.edu/academics/assessment/program_review.htm)
- Educational Testing Service Proficiency Profile Exam
  - [http://www.mtech.edu/accreditation/yr7/exhibits/ETS\\_Proficiency\\_Profile.pdf](http://www.mtech.edu/accreditation/yr7/exhibits/ETS_Proficiency_Profile.pdf)

### **2.C.11 Assessable learning outcomes for related instruction**

- Montana University System (MUS) Common Course Guide
  - <https://ccn.mus.edu/search/>
- Program Reviews
  - [http://www.mtech.edu/academics/assessment/program\\_review.htm](http://www.mtech.edu/academics/assessment/program_review.htm)
- Program and Degree Outcomes
  - College of Letters, Science, and Professional Studies
    - <http://catalog.mtech.edu/content.php?catoid=8&navoid=984>
  - Graduate School
    - <http://catalog.mtech.edu/content.php?catoid=8&navoid=987>
  - Highlands College
    - <http://catalog.mtech.edu/content.php?catoid=8&navoid=985>
  - School of Mines and Engineering
    - <http://catalog.mtech.edu/content.php?catoid=8&navoid=986>

### **2.C.12 Assessable learning outcomes for graduate program**

- Program and Degree Outcomes
  - Graduate School
    - <http://catalog.mtech.edu/content.php?catoid=8&navoid=987>

- Program Reviews
  - [http://www.mtech.edu/academics/assessment/program\\_review.htm](http://www.mtech.edu/academics/assessment/program_review.htm)

### **2.C.13 Graduate admission, retention, and transfer of credit policies/procedures**

- Montana Tech Catalog Admission Requirements (Graduate School)
  - <http://catalog.mtech.edu/content.php?catoid=8&navoid=987#Admission to the Graduate School>
- Montana Tech Admission Requirements Website Graduate
  - <http://www.mtech.edu/academics/gradschool/apply/>
- Montana Tech Admission Requirements Website Graduate (International)
  - <http://www.mtech.edu/academics/gradschool/apply/apply-intl-requirements.htm>
- Montana Tech Catalog Graduate School Regulations Time Limitation
  - <http://catalog.mtech.edu/content.php?catoid=8&navoid=987#Regulations>
- Montana Tech Catalog Graduate School Regulations Courses Taken at Another Institution
  - <http://catalog.mtech.edu/content.php?catoid=8&navoid=987#Regulations>
- Montana Tech Graduate School Petition to Transfer Credit Form (Enrollment Services)
  - <http://www.mtech.edu/onestop/registrar/pdf/Request for Approval of Transfer Courses Fillable.pdf>
- Montana Tech Graduate School Petition to Transfer Credit Form (Graduate Dean)
  - [http://www.mtech.edu/academics/gradschool/Forms/petition\\_transfer\\_credit.pdf](http://www.mtech.edu/academics/gradschool/Forms/petition_transfer_credit.pdf)

### **2.C.14 Internships, field experiences, clinical practices, and experiential learning policies/procedures**

- Experiential Learning Website (Career Services)
  - <http://www.mtech.edu/career/ExperientialLearning/index.php>
- Experiential Learning Checklist
  - <http://www.mtech.edu/career/ExperientialLearning/intern-credit-checklist.pdf>
- Graduate School Industrial Hygiene Distance/Professional Track (Notes for CIH/CSP)
  - [http://catalog.mtech.edu/preview\\_program.php?catoid=8&poid=1519](http://catalog.mtech.edu/preview_program.php?catoid=8&poid=1519)

### **2.C.15 List of graduate programs that prepare students for research, professional practice, scholarship or artistic creation**

- Graduate School
  - <http://catalog.mtech.edu/content.php?catoid=8&navoid=987>
- Program Reviews
  - [http://www.mtech.edu/academics/assessment/program\\_review.htm](http://www.mtech.edu/academics/assessment/program_review.htm)
- Digital Commons
  - [http://digitalcommons.mtech.edu/grad\\_rsch/](http://digitalcommons.mtech.edu/grad_rsch/)

### **2.C.16 List of credit and non-credit continuing education programs**

- Montana Tech offers continuing education courses but no programs.

### **2.C.17 Policies/procedures for assuring academic quality for all continuing education programs**

- Board of Regent's Policy 304.1 Continuing Education; Credit Programs
  - <http://mus.edu/borpol/bor300/304-1.pdf>
- Board of Regent's Policy 304.2 Continuing Education; Credit Programs
  - <http://mus.edu/borpol/bor300/304-2.pdf>



### **2.C.18 Policies/procedures for awarding CEU's**

- Board of Regent's Policy 304.1 Continuing Education; Credit Programs
  - <http://mus.edu/borpol/bor300/304-1.pdf>
- the International Association for Continuing Education and Training (IACET)
  - <https://www.iacet.org/about-iacet/>

### **2.C.19 Policies/procedures for keeping records of continuing education programs**

- Montana Tech offers continuing education courses but no programs.

## Standard 2D Student Support Resources

### 2.D.1 Description of process for determining appropriate programs and services to support student learning needs

- Montana Tech Dean of Student Affairs Procedure
  - [http://www.mtech.edu/accreditation/yr7/exhibits/Dean of Student Affairs 2d1.pdf](http://www.mtech.edu/accreditation/yr7/exhibits/Dean_of_Student_Affairs_2d1.pdf)

### 2.D.2 Policies/procedures that explain provisions for ensuring the safety and security of students including the reporting of crime statistics

- Montana Tech Campus Safety Website
  - <http://www.mtech.edu/campus-safety/>
- Security & Safety Reports
  - <http://www.mtech.edu/campus-safety/security-reports.htm>
- Montana Tech Student Life Programs Emergency Procedures Manual
  - [http://www.mtech.edu/student\\_life/emergency-procedures.pdf](http://www.mtech.edu/student_life/emergency-procedures.pdf)
- Montana Tech Emergency Procedures Website
  - [http://www.mtech.edu/env\\_health\\_safety/emergency/index.htm](http://www.mtech.edu/env_health_safety/emergency/index.htm)
- Montana Tech Student Handbook
  - [http://www.mtech.edu/student\\_life/student-handbook.pdf](http://www.mtech.edu/student_life/student-handbook.pdf)
  - Emergency Procedures
    - [http://www.mtech.edu/student\\_life/student-handbook.pdf#page=31](http://www.mtech.edu/student_life/student-handbook.pdf#page=31)
  - Alcohol Policy
    - [http://www.mtech.edu/student\\_life/student-handbook.pdf#page=19](http://www.mtech.edu/student_life/student-handbook.pdf#page=19)
  - Drug Free Workplace Policy
    - [http://www.mtech.edu/student\\_life/student-handbook.pdf#page=21](http://www.mtech.edu/student_life/student-handbook.pdf#page=21)
  - Firearm/Weapon/Explosive Policy
    - [http://www.mtech.edu/student\\_life/student-handbook.pdf#page=23](http://www.mtech.edu/student_life/student-handbook.pdf#page=23)
  - Discrimination, Harassment, Sexual Misconduct, Stalking and Retaliation Policy
    - [http://www.mtech.edu/student\\_life/student-handbook.pdf#page=25](http://www.mtech.edu/student_life/student-handbook.pdf#page=25)
  - Annual Security Report
    - [http://www.mtech.edu/student\\_life/blocks/campus-security-report.pdf](http://www.mtech.edu/student_life/blocks/campus-security-report.pdf)
  - Emergency Contacts
    - [http://www.mtech.edu/student\\_life/student-handbook.pdf#page=7](http://www.mtech.edu/student_life/student-handbook.pdf#page=7)
- Montana Tech EEO-AA & Title IX website
  - <http://www.mtech.edu/campus-safety/eo-aa-titleix.htm>
- Montana Tech's Policy on Discrimination, Harassment, Sexual Misconduct, Stalking and Retaliation
  - <http://www.mtech.edu/campus-safety/files/discrimination-sexual-misconduct-policy.pdf>
- Montana Tech's Discrimination Grievance Procedure
  - <http://www.mtech.edu/campus-safety/files/discrimination-grievance-procedures.pdf>
- Montana Tech Student Conduct Website
  - <http://www.mtech.edu/student-conduct/>

- Montana University System Commissioner’s Directives Website
  - Protocol for student completion of educational programs on sexual assault awareness and prevention, alcohol use and abuse, and financial literacy
    - [https://mus.edu/che/directives/CommissionersDirective\\_EverFi%2010-15-14.pdf](https://mus.edu/che/directives/CommissionersDirective_EverFi%2010-15-14.pdf)

### 2.D.3 Policies/procedures for recruiting, admitting and advising students

- National Association for College Admission Counseling (NACAC) Statement of Principles of Good Practice
  - [https://www.nacacnet.org/globalassets/documents/advocacy-and-ethics/statement-of-principles-of-good-practice/spgp\\_10\\_1\\_2016\\_final.pdf](https://www.nacacnet.org/globalassets/documents/advocacy-and-ethics/statement-of-principles-of-good-practice/spgp_10_1_2016_final.pdf)
- Board of Regents Policy 301 Admissions Requirements
  - <http://mus.edu/borpol/bor300/301.pdf>
- Board of Regents Policy 301.1 Admission Requirements for Undergraduates into Four-year University Programs
  - <http://mus.edu/borpol/bor300/301-1.pdf>
- Board of Regents Policy 301.3 Admissions Requirements; Graduate Students
  - <http://mus.edu/borpol/bor300/301-3.pdf>
- Montana Tech Catalog Admission Requirements
  - <http://catalog.mtech.edu/content.php?catoid=8&navoid=993>
- Montana Tech Catalog Admission Requirements (Graduate School)
  - [http://catalog.mtech.edu/content.php?catoid=8&navoid=987#Admission\\_to\\_the\\_Graduate\\_School](http://catalog.mtech.edu/content.php?catoid=8&navoid=987#Admission_to_the_Graduate_School)
- Montana Tech Admission Requirements Website First Year
  - <http://www.mtech.edu/admissions/first-year/admission-procedures.htm>
- Montana Tech Admission Requirements Website Transfer
  - <http://www.mtech.edu/admissions/transfer/admission-procedures.htm>
- Montana Tech Admission Requirements Website International
  - <http://www.mtech.edu/admissions/international/admission-procedures.htm>
- Montana Tech Admission Requirements Website Graduate
  - <http://www.mtech.edu/academics/gradschool/apply/>
- Montana Tech Admission Requirements Website Highlands College
  - <http://www.mtech.edu/admissions/highlands/admission-procedures.htm>
- Montana Tech Catalog Academic Advising
  - [http://catalog.mtech.edu/content.php?catoid=8&navoid=996#Academic\\_Advising](http://catalog.mtech.edu/content.php?catoid=8&navoid=996#Academic_Advising)
- Montana Tech Catalog Academic Advising & Course Placement
  - [http://catalog.mtech.edu/content.php?catoid=8&navoid=983#Advising\\_Placement](http://catalog.mtech.edu/content.php?catoid=8&navoid=983#Advising_Placement)
- Montana Tech Advising Website
  - <http://www.mtech.edu/academics/advising/>
    - Undergraduate Academic Probation Requirement Adjustment Appeal Form
      - <http://www.mtech.edu/onestop/Registrar/pdf/academic-probation-appeal.pdf>

- Montana Tech Change of Major/Advising Form
  - <http://www.mtech.edu/onestop/Registrar/pdf/change-of-major-form.pdf>

#### **2.D.4 Teachout plan or agreement**

- Board of Regents Policy 303.4 Academic Program Moratorium and Termination
  - <https://mus.edu/borpol/bor300/303-4.pdf>

#### **2.D.5 Catalog which provides information regarding mission and core themes, course requirements, names and titles of administrators and faculty, code of conduct, costs, refund policies, financial aid, academic calendar**

- Montana Tech Catalog
  - <http://catalog.mtech.edu/index.php?catoid=8>
    - Mission
      - <http://catalog.mtech.edu/content.php?catoid=8&navoid=998>
    - Core Themes
      - <http://catalog.mtech.edu/content.php?catoid=8&navoid=998>
    - Course Requirements
      - <http://catalog.mtech.edu/content.php?catoid=8&navoid=1004>
    - Names and Titles of Administrators and Faculty
      - <http://catalog.mtech.edu/content.php?catoid=8&navoid=997>
    - Code of Conduct
      - <http://catalog.mtech.edu/content.php?catoid=8&navoid=996#Conduct>
    - Costs
      - <http://catalog.mtech.edu/content.php?catoid=8&navoid=994>
    - Refund Policy
      - [http://catalog.mtech.edu/content.php?catoid=8&navoid=994#Refund Schedule](http://catalog.mtech.edu/content.php?catoid=8&navoid=994#Refund_Schedule)
    - Financial Aid
      - <http://catalog.mtech.edu/content.php?catoid=8&navoid=995>
    - Academic Calendar
      - <http://www.mtech.edu/onestop/Registrar/Academic-Calendars.htm>

#### **2.D.6 Publication that describes program requirements, licensure, and other unique requirements**

- Montana Tech Catalog Nursing Department Application Requirements
  - [http://catalog.mtech.edu/preview\\_entity.php?catoid=8&ent\\_oid=1704&returnto=984#Nursing Department Application Requirements](http://catalog.mtech.edu/preview_entity.php?catoid=8&ent_oid=1704&returnto=984#Nursing_Department_Application_Requirements)
- Montana Tech Nursing Handbook Website
  - <http://www.mtech.edu/academics/clsp/nursing/handbooks.htm>
    - BSN Handbook
      - <http://www.mtech.edu/academics/clsp/nursing/BSN/handbook.pdf>
    - BSN Completion Handbook
      - <http://www.mtech.edu/academics/clsp/nursing/pdfs/bsn-completion-handbook.pdf>
    - ASN Handbook

- <http://www.mtech.edu/academics/clsp/s/nursing/pdfs/asn-handbook.pdf>

#### **2.D.7 Policies/procedures regarding secure retention of student records, i.e., back-up, confidentiality, release**

- Montana Tech Catalog Family Educational Rights and Privacy Act (FERPA)
  - [http://catalog.mtech.edu/content.php?catoid=8&navoid=983#FAMILY\\_EDUCATIONAL\\_RIGHTS\\_AND\\_PRIVACY\\_ACT\\_FERPA](http://catalog.mtech.edu/content.php?catoid=8&navoid=983#FAMILY_EDUCATIONAL_RIGHTS_AND_PRIVACY_ACT_FERPA)
- Student Information Backup and Security Policy
  - Hard copy in Exhibit Room

#### **2.D.8 Published financial aid policies/procedures**

- Montana Tech One Stop Shop Website (Paying For College)
  - <http://www.mtech.edu/onestop/>
    - Terms & Conditions for Financial Aid
      - <http://www.mtech.edu/onestop/financial-aid/termsandconditions.htm>
- Montana Tech Financial Aid Website
  - <http://www.mtech.edu/onestop/financial-aid/>
    - Apply for Financial Aid
      - <http://www.mtech.edu/onestop/financial-aid/index.htm>
    - Apply for Scholarship
      - <http://www.mtech.edu/onestop/scholarships/Scholarships.htm>
    - Financial Aid Forms & Directions
      - <http://www.mtech.edu/onestop/financial-aid/forms.htm>
    - Financial Aid Statement of Ethical Principles
      - <http://www.mtech.edu/onestop/financial-aid/ethical-principles.htm>
    - Financial Aid Code of Conduct
      - <http://www.mtech.edu/onestop/financial-aid/conduct-code.htm>
- Montana Tech Student Handbook
  - [http://www.mtech.edu/student\\_life/student-handbook.pdf](http://www.mtech.edu/student_life/student-handbook.pdf)
  - Financial Aid
    - [http://www.mtech.edu/student\\_life/student-handbook.pdf#page=10](http://www.mtech.edu/student_life/student-handbook.pdf#page=10)
- Montana Tech Catalog
  - <http://catalog.mtech.edu/index.php?catoid=8>
    - Financial Aid
      - <http://catalog.mtech.edu/content.php?catoid=8&navoid=995>

#### **2.D.9 Policies/procedures for student loan repayment and procedure for monitoring loan default**

- Memorandum of Understanding Student Financial Services
  - Hard copy in Exhibit Room.
- Montana Tech Cohort Default Rates
  - <http://www.mtech.edu/accreditation/yr7/exhibits/defaultrates.pdf>

## 2.D.10 Description of advising program and advising publications

- Montana Tech Catalog Academic Advising
  - [http://catalog.mtech.edu/content.php?catoid=8&navoid=996#Academic Advising](http://catalog.mtech.edu/content.php?catoid=8&navoid=996#Academic_Advising)
- Montana Tech Catalog Academic Advising & Course Placement
  - [http://catalog.mtech.edu/content.php?catoid=8&navoid=983#Advising Placement](http://catalog.mtech.edu/content.php?catoid=8&navoid=983#Advising_Placement)
- Montana Tech Advising Website
  - <http://www.mtech.edu/academics/advising/>
    - Undergraduate Academic Probation Requirement Adjustment Appeal Form
      - <http://www.mtech.edu/onestop/Registrar/pdf/academic-probation-appeal.pdf>
- Montana Tech Change of Major/Advising Form
  - <http://www.mtech.edu/onestop/Registrar/pdf/change-of-major-form.pdf>

## 2.D.11 Policies/procedures regarding co-curricular activities

- Associated Students of Montana Tech By-Laws
  - <http://asmt-mtech.com/wp-content/uploads/2017/02/ASMT-By-Laws-revised-2016.pdf>
- Montana Tech Student Organization Application
  - <http://asmt-mtech.com/wp-content/uploads/2013/06/student-organization-application.pdf>
- Montana Tech Active Clubs
  - [http://www.mtech.edu/accreditation/yr7/exhibits/MT\\_Tech\\_clubs11\\_16.xlsx](http://www.mtech.edu/accreditation/yr7/exhibits/MT_Tech_clubs11_16.xlsx)

## 2.D.12 Policies/procedures regarding auxiliary services

- Montana Tech Committee Roster
  - <http://www.mtech.edu/about/facultystaff/files/committee-roster.pdf>
- Montana Tech Catalog Student Life Facilities
  - <http://catalog.mtech.edu/content.php?catoid=8&navoid=996#Facilities>
- Montana Tech Catalog Student Health Center
  - [http://catalog.mtech.edu/content.php?catoid=8&navoid=996#Student Health](http://catalog.mtech.edu/content.php?catoid=8&navoid=996#Student_Health)
- Montana Tech Student Handbook
  - [http://www.mtech.edu/student\\_life/student-handbook.pdf](http://www.mtech.edu/student_life/student-handbook.pdf)
  - Residence Halls
    - Firearm/Weapon Explosive Policy Residence Halls
      - [http://www.mtech.edu/student\\_life/student-handbook.pdf#page=23](http://www.mtech.edu/student_life/student-handbook.pdf#page=23)
  - Apartment Housing
    - Alcohol Policy
      - [http://www.mtech.edu/student\\_life/student-handbook.pdf#page=19](http://www.mtech.edu/student_life/student-handbook.pdf#page=19)
    - Firearm/Weapon Explosive Policy Apartment Housing
      - [http://www.mtech.edu/student\\_life/student-handbook.pdf#page=23](http://www.mtech.edu/student_life/student-handbook.pdf#page=23)
  - Student Union/Activities

- [http://www.mtech.edu/student\\_life/student-handbook.pdf#page=15](http://www.mtech.edu/student_life/student-handbook.pdf#page=15)
    - Alcohol Policy
      - [http://www.mtech.edu/student\\_life/student-handbook.pdf#page=20](http://www.mtech.edu/student_life/student-handbook.pdf#page=20)
  - Dining Services
    - [http://www.mtech.edu/student\\_life/student-handbook.pdf#page=13](http://www.mtech.edu/student_life/student-handbook.pdf#page=13)
  - Bookstore
    - [http://www.mtech.edu/student\\_life/student-handbook.pdf#page=11](http://www.mtech.edu/student_life/student-handbook.pdf#page=11)
  - HPER Complex
    - Campus Recreation
      - [http://www.mtech.edu/student\\_life/student-handbook.pdf#page=12](http://www.mtech.edu/student_life/student-handbook.pdf#page=12)
  - Student Health Services
    - Student Health Center
      - [http://www.mtech.edu/student\\_life/student-handbook.pdf#page=15](http://www.mtech.edu/student_life/student-handbook.pdf#page=15)
- Residence Halls website
  - [http://www.mtech.edu/student\\_life/housing/index.htm](http://www.mtech.edu/student_life/housing/index.htm)
    - Application for Residence Hall Living
      - [http://www.mtech.edu/student\\_life/housing/application/res\\_app.asp](http://www.mtech.edu/student_life/housing/application/res_app.asp)
    - Residence Life Application for Room and Board - Terms of Contract
      - [http://www.mtech.edu/student\\_life/housing/terms.htm](http://www.mtech.edu/student_life/housing/terms.htm)
    - Resident Handbook
      - [http://www.mtech.edu/student\\_life/housing/handbook.pdf](http://www.mtech.edu/student_life/housing/handbook.pdf)
- Apartment Housing website
  - [http://www.mtech.edu/student\\_life/housing/apartment.htm](http://www.mtech.edu/student_life/housing/apartment.htm)
    - Montana Tech Apartment Housing Lease Summary
      - [http://www.mtech.edu/student\\_life/housing/lease.htm](http://www.mtech.edu/student_life/housing/lease.htm)
- Student Union/Activities
  - Montana Tech Student Union Building Handbook DRAFT
    - Hard copy of contract in Exhibit Room.
- Dining Services
  - Montana Tech Retail Food Establishment Inspection Report (11/3/2016 & 2/1/2016)
    - Hard copy of contract in Exhibit Room.
- Bookstore
  - Montana Tech Bookstore Website
    - <http://www.montanatechbookstore.com/>
  - Montana Tech Bookstore Course Materials Principles and Procedures
    - [http://www.montanatechbookstore.com/site\\_principles\\_and\\_procedures.asp](http://www.montanatechbookstore.com/site_principles_and_procedures.asp)
- HPER Complex
  - HPER Rules and Regulations
    - [http://godiggers.com/sports/2012/6/12/Facilities\\_0612123340.aspx?id=101](http://godiggers.com/sports/2012/6/12/Facilities_0612123340.aspx?id=101)
  - Montana Tech HPER Complex Use and Fee Policy 2015
    - [http://www.godiggers.com/documents/2015/7/27//Montana\\_Tech\\_HPER\\_Complex\\_Use\\_and\\_Fee\\_Policy\\_2015.pdf?id=327](http://www.godiggers.com/documents/2015/7/27//Montana_Tech_HPER_Complex_Use_and_Fee_Policy_2015.pdf?id=327)
- Student Health Services



- Hard copy of contract in Exhibit Room.

#### **2.D.13 Policies/procedures governing intercollegiate athletics**

- Frontier Conference Bylaws
  - [http://www.frontierconference.com/f/Frontier\\_Conference\\_Bylaws.php](http://www.frontierconference.com/f/Frontier_Conference_Bylaws.php)
- National Association of Intercollegiate Athletics Official & Policy Handbook
  - [http://www.naia.org/ViewArticle.dbml?DB\\_OEM\\_ID=27900&ATCLID=205327260](http://www.naia.org/ViewArticle.dbml?DB_OEM_ID=27900&ATCLID=205327260)
- Montana Tech Student Athlete Handbook
  - [http://www.godiggers.com/documents/2016/12/20/2016\\_2017\\_Student\\_Athlete\\_Handbook.pdf](http://www.godiggers.com/documents/2016/12/20/2016_2017_Student_Athlete_Handbook.pdf)

#### **2.D.14 Policies/procedures for assuring identity verification for students enrolling in distance education courses**

- Montana Tech Campus Technology Services Policies
  - <https://www.mtech.edu/cts/policies/index.htm>
- Montana Tech College Community Expectations Program Manual
  - [http://www.mtech.edu/student\\_life/blocks/Student\\_Conduct.pdf](http://www.mtech.edu/student_life/blocks/Student_Conduct.pdf)

## **Standard 2E Library Resources**

### **2.E.1 Procedures for assessing adequacy of library collections**

- Montana Tech Library Collection Development Policy
  - [http://www.mtech.edu/library/Collection\\_Development\\_Policy.pdf](http://www.mtech.edu/library/Collection_Development_Policy.pdf)

### **2.E.2 Library planning committee and procedures for planning**

- Montana Tech Library Collection Development Policy
  - [http://www.mtech.edu/library/Collection\\_Development\\_Policy.pdf](http://www.mtech.edu/library/Collection_Development_Policy.pdf)
- Montana Tech Library Suggest a Book, Journal or DVD Website
  - <http://www.mtech.edu/library/form.htm>
- Montana Tech Library Satisfaction Survey
  - [http://www.mtech.edu/accreditation/yr7/exhibits/library\\_studentsurvey\\_2016.pdf](http://www.mtech.edu/accreditation/yr7/exhibits/library_studentsurvey_2016.pdf)

### **2.E.3 Library instruction plan**

- Montana Tech Library Instruction Plan
  - <http://www.mtech.edu/library/Information%20Literacy%20Plan.pdf>
- Montana Tech Library Subject Guides
  - <http://libguides.mtech.edu/>
- Montana Tech Library Instruction Request Form
  - <http://www.mtech.edu/library/instruc.htm>

### **2.E.4 Policies/procedures for library self-evaluation**

- Montana Tech Library Collection Development Policy
  - [http://www.mtech.edu/library/Collection\\_Development\\_Policy.pdf](http://www.mtech.edu/library/Collection_Development_Policy.pdf)
- Montana Tech Library Strategic Plan
  - <http://www.mtech.edu/library/StrategicPlan2015Final.pdf>
- Montana Tech Library -Library Instruction Assessment Form
  - <http://www.mtech.edu/library/Library%20Instruction%20Assessment%20Form.pdf>

## Standard 2F Financial Resources

### 2.F.1 Policies/procedures for financial planning and budget development

- Board of Regent's Policy Section 900 Financial Affairs
  - <http://mus.edu/borpol/bor900/bor900.asp>
- Board of Regent's Policy 901.15 Establishment of Reserve Revolving Accounts
  - <http://mus.edu/borpol/bor900/901-15.pdf>
- Board of Regent's Policy 901.10 Retirement Costs Revolving Account
  - <http://mus.edu/borpol/bor900/901-10.pdf>
- Board of Regent's Policy 901.13 Use of General Operations Savings to Establish Scholarship and Stipend Accounts
  - <http://mus.edu/borpol/bor900/901-13.pdf>
- Board of Regent's Policy 901.6 Authorization to Expend Reverted Appropriations
  - <http://mus.edu/borpol/bor900/901-6.pdf>
- Board of Regent's Annual Report Due Dates
  - <https://mus.edu/board/AnnualReports.pdf>
- University of Montana Debt Management Policy
  - <http://www.mtech.edu/accreditation/yr7/exhibits/DebtManagementPolicy.pdf>
- University of Montana Affiliation Bond Audit
  - <http://www.mtech.edu/accreditation/yr7/exhibits/University of MT Revenue Bonds 6 30 15.pdf>
- Montana Tech Budget Guidelines
  - <http://www.mtech.edu/administration/budgets/files/montana-tech-budget-guidelines.pdf>

### 2.F.2 Policies/procedures for resource planning

- Montana University System Operating Budget Checklist
  - <http://www.mtech.edu/accreditation/yr7/exhibits/FY 16 OP BUD Checklist.pdf>
- Montana University System Operating Budget Website
  - [http://mus.edu/data/operating\\_budgets/OperatingBudgets.asp](http://mus.edu/data/operating_budgets/OperatingBudgets.asp)
- Montana Board of Regents September 14-15, 2016 Minutes Approval of Budget
  - [http://mus.edu/board/meetings/2016/Nov2016/Sept.2016\\_BORMinutes.pdf](http://mus.edu/board/meetings/2016/Nov2016/Sept.2016_BORMinutes.pdf)
- Montana Tech Budget Guidelines
  - <http://www.mtech.edu/administration/budgets/files/montana-tech-budget-guidelines.pdf>

### 2.F.3 Policies/procedures for financial planning committee

- Montana Tech Budget Guidelines
  - <http://www.mtech.edu/administration/budgets/files/montana-tech-budget-guidelines.pdf>
- Montana Tech Budget Planning Template Example
  - <http://www.mtech.edu/accreditation/yr7/exhibits/BudgetTemplateExample.pdf>
- Montana Tech Budget Website (published budgets, budget metrics, budget books)

- <http://www.mtech.edu/administration/budgets/>

#### **2.F.4 Description of internal financial controls**

- Inventory of Controls & Activities
  - [http://www.mtech.edu/accreditation/yr7/exhibits/Montana Tech Internal Control Inventory.pdf](http://www.mtech.edu/accreditation/yr7/exhibits/Montana_Tech_Internal_Control_Inventory.pdf)

#### **2.F.5 Long-range capital plan to include capital budget policies/procedures**

- State of Montana 2017 Biennium Executive Budget
  - [https://budget.mt.gov/Budgets/2017\\_Budget](https://budget.mt.gov/Budgets/2017_Budget)
    - Section F Long-Range Planning
      - [https://budget.mt.gov/Portals/29/execbudgets/2017\\_Budget/Volume 1 Section F.pdf](https://budget.mt.gov/Portals/29/execbudgets/2017_Budget/Volume_1_Section_F.pdf)
- 2015 Montana Legislature House Bill No. 5
  - <http://leg.mt.gov/bills/2015/billhtml/HB0005.htm>
- Montana University System Long Range Building Program (LRBP)
  - <http://mus.edu/data/briefs/LRBP-OnePager.pdf>
- University of Montana Affiliation LRBP Requests FY 2016-2017
  - Hard copy in Exhibit Room.
- Montana Tech LRBP Requests FY 2016-2017
  - Hard copy in Exhibit Room.
- Montana Tech Auxiliary Funds Report
  - Hard copy in Exhibit Room.
- Montana Tech Equipment Fee Report
  - Hard copy in Exhibit Room.
- Montana Tech Computer Use Fee
  - Hard copy in Exhibit Room.
- Montana Tech Technology Fee
  - Hard copy in Exhibit Room.
- Montana Tech Foundation Operating Agreement
  - [http://www.mtech.edu/accreditation/yr7/exhibits/Montana Tech Foundation Operating Agreement.pdf](http://www.mtech.edu/accreditation/yr7/exhibits/Montana_Tech_Foundation_Operating_Agreement.pdf)
- NRRC Memorandum of Understanding
  - Hard copy in Exhibit Room.

#### **2.F.6 General operations/auxiliary operations budget policies/procedures**

- Budget Recharge \$15,000
  - Hard copy in Exhibit Room.

### 2.F.7 Latest example of external financial audit including management letter

- Legislative Audit Division
  - Annual Consolidated Financial Audits
    - <http://leg.mt.gov/content/Publications/Audit/Report/15-10A.pdf>
  - Biennial Consolidated Financial-Related Audits
    - <http://leg.mt.gov/content/Publications/Audit/Report/14-02.pdf>
  - Financial—Compliance Audit
    - <http://leg.mt.gov/content/Publications/Audit/Report/15-10A.pdf>
  - Audit Recommendation
    - <http://leg.mt.gov/content/Publications/Audit/Report/15-10A.pdf>
  - Action Plan
    - <http://leg.mt.gov/content/Publications/Audit/Report/15-10A.pdf>
- Bond Audit
  - Hard copy in Exhibit Room.

### 2.F.8 Operating agreements between institution and fundraising organizations

- Board of Regent’s Policy Section 901.9 Campus-Affiliated Foundations: Montana University System
  - <http://www.mus.edu/borpol/bor900/901-9.pdf>
- Montana Tech Foundation Operating Agreement
  - [http://www.mtech.edu/accreditation/yr7/exhibits/Montana Tech Foundation Operating Agreement.pdf](http://www.mtech.edu/accreditation/yr7/exhibits/Montana_Tech_Foundation_Operating_Agreement.pdf)
- Montana Tech Alumni Association Operating Agreement
  - [http://www.mtech.edu/accreditation/yr7/exhibits/Montana Tech Alumni Association Operating Agreement.pdf](http://www.mtech.edu/accreditation/yr7/exhibits/Montana_Tech_Alumni_Association_Operating_Agreement.pdf)
- Montana Tech Digger Athletic Association
  - [http://www.mtech.edu/accreditation/yr7/exhibits/Montana Tech Digger Athletic Association Operating Agreement.pdf](http://www.mtech.edu/accreditation/yr7/exhibits/Montana_Tech_Digger_Athletic_Association_Operating_Agreement.pdf)

## **Standard 2G Physical and Technological Infrastructure**

### **2.G.1 Procedures for assessing adequacy of physical facilities**

- Montana Tech Campus Master Plan
  - [http://www.mtech.edu/about/Master\\_Plan\\_for\\_web.pdf](http://www.mtech.edu/about/Master_Plan_for_web.pdf)
- Montana Tech Facilities Master Plan Draft - February 2017
  - <http://www.mtech.edu/about/facilities-draft-master-plan.pdf>
- APPA: Leadership in Educational Facilities
  - <http://www.appa.org/>
- National Association of College and University Business Officers
  - <http://www.nacubo.org/>

### **2.G.2 Policies/procedures for the use, storage, and disposal of hazardous waste**

- Montana Tech Environmental Health & Safety Programs & Policies Website
  - [http://www.mtech.edu/env\\_health\\_safety/safetyprogs/index.htm](http://www.mtech.edu/env_health_safety/safetyprogs/index.htm)
- Montana Tech Hazard Communication Program
  - [http://www.mtech.edu/env\\_health\\_safety/safetyprogs/docs/hazard-communication-program.pdf](http://www.mtech.edu/env_health_safety/safetyprogs/docs/hazard-communication-program.pdf)
- Montana Tech Hazardous Materials Management Plan
  - [http://www.mtech.edu/env\\_health\\_safety/docs/hazardous-materials-management-plan.pdf](http://www.mtech.edu/env_health_safety/docs/hazardous-materials-management-plan.pdf)
- Montana Tech Environmental Health & Safety Chemical & Lab Safety Website
  - [http://www.mtech.edu/env\\_health\\_safety/chem\\_lab/index.htm](http://www.mtech.edu/env_health_safety/chem_lab/index.htm)
- Montana Tech Chemical Hygiene Plan
  - [http://www.mtech.edu/env\\_health\\_safety/files/chemical-hygiene-plan.pdf](http://www.mtech.edu/env_health_safety/files/chemical-hygiene-plan.pdf)

### **2.G.3 Physical and technological master plan**

- Montana Tech Campus Master Plan
  - [http://www.mtech.edu/about/Master\\_Plan\\_for\\_web.pdf](http://www.mtech.edu/about/Master_Plan_for_web.pdf)
- Montana Tech IT Strategic Plan
  - [http://www.mtech.edu/accreditation/yr7/exhibits/IT\\_Strategic\\_Planning.pdf](http://www.mtech.edu/accreditation/yr7/exhibits/IT_Strategic_Planning.pdf)

### **2.G.4 Equipment replacement policies/procedures**

- Montana Tech Equipment Fee Report (North & South)
  - Hard copy in Exhibit Room.
- Montana Tech Academic Facilities Fee Report
  - Hard copy in Exhibit Room.

### **2.G.6 Instructional technology training and use policies/procedures**

- Board of Regent's Policy Section 1300 Information Technology
  - <http://mus.edu/borpol/bor1300/bor1300.asp>
- Montana Tech Computer Technology Services Website
  - <http://www.mtech.edu/cts>
- Montana Tech Computer Technology Services Policies Website
  - <http://www.mtech.edu/cts/policies/index.htm>

- Montana Tech Network Policies Website
  - <http://www.mtech.edu/cts/policies/mtech-policies/index.htm>
- University of Montana Affiliate Policies
  - <http://www.umt.edu/it/policies/>
- Montana Tech Faculty 101 Videos
  - <http://media.mtech.edu/cts/Fac101.mp4>
- Montana Tech Student 101 Videos
  - [http://media.mtech.edu/cts/Student101\\_Final\\_Draft.mp4](http://media.mtech.edu/cts/Student101_Final_Draft.mp4)

#### **2.G.7 Technology planning processes**

- Montana Tech IT Strategic Plan
  - <http://www.mtech.edu/accreditation/yr7/exhibits/IT Strategic Planning.pdf>

#### **2.G.8 Technology update and replacement plan**

- Montana Tech Computer Use Plan
  - <http://www.mtech.edu/accreditation/yr7/exhibits/Computer lab plan FY17 modified 4-2-16.xlsx>



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