

Montana University System
PROGRAM REVIEW

Institution: **Helena College University of Montana**

Program Years: **2014-2019**

List of the programs reviewed:

- General Education
- Diesel Technology
- Machine Tool Technology/Computer Aided Manufacturing

Decision(s) concerning the future of the program(s), based on the program review criteria established at the campus:

- The Program Review Committee of Helena College University of Montana recommends the continuation of the General Education program.
- The Program Review Committee of Helena College University of Montana recommends the continuation of the Fire & Rescue Program under the proposed changes to the program and curriculum as outlined below.
- The Program Review Committee of Helena College University of Montana recommends the continuation of the Machine Tool Technology/Computer Aided Manufacturing Program.

Rationale or justification for the decision based on the program review process established at the campus. Include graduation numbers and student majors for each of the last seven (7) years for every program under review.

See the attached individual Program Review summaries.

Montana University System
PROGRAM REVIEW

Institution: **Helena College University of Montana**

Program Years: **2014-2019**

List of the programs reviewed:

- General Education

Decision(s) concerning the future of the program(s), based on the program review criteria established at the campus:

- The Program Review Committee of Helena College University of Montana recommends the continuation of the general education program.

Rationale or justification for the decision based on the program review process established at the campus. Include graduation numbers and student majors for each of the last seven (7) years for every program under review.

Information gathered during the internal program review indicates the General Education program aligns well with the college's mission and strategic plans, as well as the community's needs, preparing students for transfer to four-year university programs.

Enrollment in the program has been decreasing slightly over the last five years, though in a similar trajectory to the college's – and national – enrollment trends. Dual enrollment has grown tremendously over the last five years, and the large majority of our dual enrollment courses are general education courses. The college has developed and maintains healthy partnerships with many area high schools.

Fall-to-fall retention rates are holding steady around 49%. This has been identified as an area of focus for the next five years. The college has begun adopting the Guided Pathways framework and the General Education Department is fully onboard with the adoption.

Transfer rates have risen in the last five years, from 27% in AY 2014-15 to 35% in AY 2018-19, and the department is hoping to increase it further over the next five years. This is likely helped in part by the department's continued work in developing articulation agreements and 2+2 partnerships. Of the students who transfer to a 4-year institution within the MUS, the percent with good academic standing in after their first semester of transfer has also risen in the last five years, from 83% to 87%, indicating our students are well-prepared to continue their education. The general education program outcomes were revised in the last five years to better align them with four-year institutions.

In the last five years, the degree production rate (number of degrees/certificates granted per 100 FTE) has also grown steadily, from 9 to 26.

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Program Goals for 2020-2025:

1. **Student retention & completion** — Work to increase graduation rates for both full-time and part-time students, graduating within 150% completion time; increase transfer rates; and increase fall-to-fall retention.
 - Build and implement Guided Pathways.
 - Continue to build and improve student support services through a collaborative effort with the Library Learning Hub, including tutoring services and embedding tutors into specific courses.
 - Continue to increase the number of cooperative learning and/or internship opportunities for students.

2. **Objective & assessment alignment** — Work to align assessments and objectives across courses (full-time, adjunct, and dual-credit instruction); track progress within individual courses and alignment with general education program objectives; revise general education program objectives to better reflect current learning goals.
 - Continue to refine the assessment database and develop clear procedures and timelines for faculty involvement.
 - Assess and evaluate general education outcomes and revise as needed.

General Education - Student Participation and Success								
Data Definition:	AY1415	AY1516	AY1617	AY1718	AY1819	5 Year Ave	Program Notes	Source
A. Transfer rates to 4-year colleges (AA/AS)	27%	21%	36%	28%	35%	29%	Fall 2012-16 Cohort FT/PT	Institutional Research
B. Good Acad Standing 1st Sem After Transfer to MUS 4 Year	83%	78%	84%	82%	87%	83%	Fall 2015-19	Institutional Research
B. Program Capacity (Headcount)	N/A	N/A	N/A	N/A	N/A	N/A		Institutional Research
C. Annual Headcount Enrollment (Unduplicated)	668	647	643	623	563	629		Institutional Research
D. Annual FTE Enrollment PI	352	321	329	331	299	326		Institutional Research
E. Annual Program Capacity	N/A	N/A	N/A	N/A	N/A	N/A		Institutional Research
F. Fall to Fall Retention Rates (FT/PT students) PI	48%	49%	50%	49%	47%	49%	Fall 2014-2018 Cohorts	Institutional Research
H. Program Course Completion Rate (C- or better)	68%	80%	82%	84%	82%		Fall+Spring Semester/2	Institutional Research
I. 150% Time Graduation Rate (FT/PT students)	18%	27%	18%	21%	20%	21%	Fall 2012-2016 Cohorts	Institutional Research
K. Annual Degree & Certificate Completions	32	48	56	74	77	57		Institutional Research
L. Degree Production Rates – <i>proportion of degrees/certificates granted per 100 FTE PI</i>	9	15	17	22	26	18		Institutional Research

Denotes Items that are Core Theme Indicators for Helena College

KPI or PI

Key Performance Indicator or Performance Indicator for Program Quality and/or Effectiveness under Strategic Enrollment Planning/Management

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General Education - Fiscal and Physical Resources								
Data Definition: Instructional costs include program personnel and operating expenses	FY15	FY16	FY17	FY18	FY19	5 Year Ave	Program Notes	Source
A. Program Expenditure/ FTE PI	\$3,184	\$3,280	\$3,330	\$3,745	\$4,186	\$3,545		Institutional Research/ Finance
B. Average HC Program Expenditure/ FTE	\$4,919	\$5,146	\$6,827	\$6,284	\$8,252	\$6,286		Institutional Research/ Finance
C. Program Expenditure/ Completion	\$35,616	\$22,549	\$20,158	\$16,724	\$14,597	\$21,929		Institutional Research/ Finance
D. Average HC Program Expenditure/ Completion	\$17,959	\$13,493	\$16,601	\$17,005	\$13,598	\$15,731		Institutional Research/ Finance
E. Program Expenditure/ Transfer	\$25,877	\$18,859	\$43,033	\$28,324	\$26,903	\$28,599		
F. Student Program Fees- Fund Balance	\$14,976	\$14,898	\$11,851	\$19,767	\$20,149	\$16,328	H60250, H60240, H60400	Institutional Research/ Finance
G. Student Program Fees- Fund Expenditures	\$21,584	\$14,226	\$17,724	\$18,810	\$19,541	\$18,377	H60250, H60240, H60400	Institutional Research/ Finance
H. Total Program Expense	\$1,350,391	\$1,247,973	\$1,302,922	\$1,237,578	\$1,123,965	\$1,252,566	Personnel + Operating	Institutional Research/ Finance
I. Total Program Revenue	\$2,945,922	\$2,970,394	\$3,061,345	\$3,084,046	\$2,613,579	\$2,935,057	State Approp + Tuition	Institutional Research/ Finance
J. Program Revenue/ FTE	\$8,369.10	\$9,253.56	\$9,305.00	\$9,317.36	\$8,741.07	\$8,997	Total Revenue/ FTE	Institutional Research/ Finance

Key Performance Indicator or Performance Indicator for Program Effectiveness under Strategic Enrollment Planning/Management

KPI or PI

Montana University System
PROGRAM REVIEW

Institution: Helena College University of Montana

Program Years: 2014-2019

List of the programs reviewed:

- Fire & Rescue
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Decision(s) concerning the future of the program(s), based on the program review criteria established at the campus:

- The Program Review Committee of Helena College University of Montana recommends the continuation of the Fire & Rescue Program under the proposed changes to the program and curriculum as outlined below.
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Rationale or justification for the decision based on the program review process established at the campus. Include graduation numbers and student majors for each of the last seven (7) years for every program under review.

Information gathered during the internal program review indicates that the Fire & Rescue program should transition from offering an AAS to an AS and CAS to better meet the needs of the industry and students. The CAS will enable students to move directly into entry-level fire service employment after one year, while the AS will prepare students to transfer to a four-year institution and pursue an advanced degree, which is increasingly preferred in the fire service. These changes align with the college's mission, strategic plan, and community needs.

Enrollment has decreased over the last five years, and it is hoped that the new format will attract more students to the program. Degree and certificate completions, as well as degree production rates, have fluctuated over the last five years. The program hopes the new format will improve these numbers, as well.

Recommendations & Preliminary Implementation Plan:

A major program revision was done in academic year 2019-2020. The program was put on pause and no new students were taken in during the fall of 2020. We are currently awaiting approval for the previously described updates from the Board of Regents, NWCCU, and the Department of Education. Once we have final approval, a new cohort of students will be admitted in the fall of 2021 along with implementation of the new program curriculum. This program will also be offered at satellite locations in Frenchtown and Livingston to their resident volunteer fire fighters. Assessment will be performed after the first year and any adjustments will be made and new goals will be added in the annual plan.

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Fire and Rescue 2014-2019 - Alignment with Community Needs (CTE Only)									
Data Definition:	Current MT	Projected MT	Current U.S.	Projected U.S.			Program Notes	Source	
A. Total number of projected job openings from related occupations for Montana and U.S.	104 EMT 110 FF	558 EMT 568 FF	262,100 EMT 332,400 FF	280,800 EMT 350,000 FF			EMT Projected annual openings MT: 56 Projected annual openings US: 19,900	Montana Research & Analysis Bureau/ Bureau of Labor Statistics (2018-2028 Projections) . US DOL (2016-2016 Projections)	
B. Percent change in job openings for related occupations for Montana and U.S.		+7.3% FF +9.7% EMT		+5.0% FF +7.0% EMT			Firefighters Projected annual openings MT: 57 Projected annual openings US: 25,000	Montana Research & Analysis Bureau/ BLS (2018-2028 Projections). US DOL (2016-2026 Projections)	
C. Median hourly wage or annual salary for related occupations	\$28,700 EMT \$50,400 FF		\$34,320 EMT \$49,620 FF				Starting Salary Range (2013-2017): \$25,112-\$37,856	Montana Research & Analysis Bureau/ BLS (2018-2028 Projections). US DOL (2016-2026 Projections)	
Data Definition:	AY1213	AY1314	AY1415	AY1516	AY1617	5 Year Ave	Program Notes	Source	
D. 5 years of job placement rates for all program graduates PI	79%	100%	93%	100%	100%	94%	% of graduates employed for at least 1 quarter following graduation	OCHE & Bureau of Labor Statistics	
Fire& Rescue - Student Participation and Success									
Data Definition:	AY1415	AY1516	AY1617	AY1718	AY1819	5 Year Ave	Program Notes	Source	
A. Transfer rates to 4-year colleges (AA/AS)	N/A	N/A	N/A	N/A	N/A	N/A		Institutional Research	
B. Program Capacity (Headcount)	100	100	82	100	90	94		Institutional Research	
C. Annual Headcount Enrollment (Unduplicated)	47	47	31	34	33	38		Institutional Research	
D. Annual FTE Enrollment PI	42	26	30	31	34	33		Institutional Research	
E. Annual Program Capacity	47%	47%	38%	34%	37%	41%		Institutional Research	
F. Fall to Fall Retention Rates (FT/PT students) PI	48%	45%	63%	78%	55%	58%	Fall 2014-2018 Cohorts	Institutional Research	
H. Program Course Completion Rate (C- or better)	84%	79%	87%	93%	91%	87%	Fall+Spring Semester/2	Institutional Research	
I. 150% Time Graduation Rate (FT/PT students)	63%	68%	24%	36%	44%	47%	Fall 2012-2016 Cohorts	Institutional Research	
K. Annual Degree & Certificate Completions	15	6	12	7	13	11		Institutional Research	
L. Degree Production Rates – proportion of degrees/ certificates granted per 100 FTE PI	36	23	40	23	38	32		Institutional Research	

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Fire & Rescue – Fiscal and Physical Resources								
Data Definition: Instructional costs include program personnel and operating expenses	FY15	FY16	FY17	FY18	FY19	5 Year Ave	Program Notes	Source
A. Program Expenditure/ FTE PI	\$4,145	\$6,496	\$7,490	\$6,650	\$6,049	\$6,166		Institutional Research/ Finance
B. Average HC Program Expenditure/ FTE	\$4,919	\$5,146	\$6,827	\$6,284	\$8,252	\$6,286		Institutional Research/ Finance
C. Program Expenditure/ Completion	\$11,469	\$27,354	\$18,413	\$28,976	\$15,589	\$20,360		Institutional Research/ Finance
D. Average HC Program Expenditure/ Completion	\$17,959	\$13,493	\$16,601	\$17,005	\$13,598	\$15,731		Institutional Research/ Finance
E. Student Program Fees-Fund Balance	\$11,170	\$7,230	\$8,448	\$20,372	\$24,751	\$14,394	H60380, H60420, H60430	Institutional Research /Finance
F. Student Program Fees-Fund Expenditures	\$22,999	\$6,315	\$20,411	\$6,906	\$16,070	\$14,540	H60380, H60420, H60430	Institutional Research/ Finance
G. Total Program Expense	\$172,030	\$164,123	\$220,952	\$202,832	\$202,652	\$192,518	Personnel + Operating	Institutional Research/ Finance
H. Total Program Revenue	\$347,812	\$236,334	\$274,498	\$276,533	\$326,089	\$292,253	State Approp + Tuition	Institutional Research/ Finance
I. Program Revenue/FTE	\$8,281.24	\$9,089.77	\$9,149.93	\$8,920.42	\$9,590.85	\$9,006	Total Revenue/FTE	Institutional Research/ Finance

Montana University System

PROGRAM REVIEW

Institution: Helena College University of Montana

Program Years: 2014-2019

List of the programs reviewed:

- Machine Tool Technology/Computer Aided Manufacturing
-

Decision(s) concerning the future of the program(s), based on the program review criteria established at the campus:

- The Program Review Committee of Helena College University of Montana recommends the continuation of the Machine Tool Technology/Computer Aided Manufacturing program.
-

Rationale or justification for the decision based on the program review process established at the campus. Include graduation numbers and student majors for each of the last seven (7) years for every program under review.

Information gathered during the internal program review indicates the Machine Tool Technology/Computer Aided Manufacturing program aligns well with the college's mission and strategic plans, as well as the community's needs, preparing students for entry-level employment at local industry manufacturers.

Enrollment has remained steady over the last five years, with an average capacity of 89%. The program course completion rate is around 95%, but 150% time graduation rates are low, around 56% on average. An average of 95% of graduates are employed for at least 1 quarter following graduation.

Curriculum changes were made for first-year machining courses in 2019. Many student learning outcomes were improved and updated. Blueprint reading was integrated into many courses and a specific course covering Solidworks was added, which better prepares first-year students for their second year of coursework. The program plans to review all second-year courses in the coming academic year.

Program Goals for 2020-2025

- 1) A comprehensive review will be done of the second year program and any significant changes made in response to industry need and advisory board recommendations.
- 2) New equipment will be purchased in both the manual machining and CAM areas in order to update old equipment with new technology.
- 3) Course completion is high in this program is high, but degree completion is low; therefore, we will investigate the possible causes of this and look for solutions to increase degree completions in this program.
- 4) All students will be advised to take all of their related requirements in addition to their machining curriculum in the first year and then apply for a CAS even if they suspect that they will be moving into the second year. This will ensure that the College has completions for all first year students.

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Computer Aided Manufacturing 2014-2019 - Alignment with Community Needs (CTE Only)									
Data Definition:	Current MT	Projected MT	Current U.S.	Projected U.S.				Program Notes	Source
A. Provide the total number of projected job openings from related occupations for Montana and the U.S.	297	356	24,300	29,200				Projected annual openings MT: 36 Projected annual openings US: 3,200	Montana Research & Analysis Bureau /Bureau of Labor Statistics (2018-2028 Projections). US DOL (2016-2016 Projections)
B. Provide percent change in job openings for related occupations for Montana and the U.S.		+4%		20%					Montana Research & Analysis Bureau/ Bureau of Labor Statistics (2018-2028 Projections). US DOL (2016-2026 Projections)
C. Provide the median hourly wage or annual salary for related occupations	\$40,430		\$53,190					Starting Salary Range (2013-2017): \$33,385-\$44,567	Montana Research & Analysis Bureau /Bureau of Labor Statistics (2018-2028 Projections). US DOL (2016-2026 Projections)
Data Definition:	AY1213	AY1314	AY1415	AY1516	AY1617	5 Year Ave	Program Notes	Source	
D. 5 years of job placement rates for all program graduates PI	100%	100%	100%	100%	75%	95%	% of graduates employed for at least 1 quarter following graduation	OCHE & Bureau of Labor Statistics	

Denotes Items that are Core Theme Indicators for Helena College

Key Performance Indicator or Performance Indicator for Program Effectiveness under Strategic Enrollment Planning/Management

KPI or PI

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Computer Aided Manufacturing 2014-2019 - Student Participation and Success								
Data Definition:	AY1415	AY1516	AY1617	AY1718	AY1819	5 Year Ave	Program Notes	Source
A. Transfer rates to 4-year colleges (AA/AS)	N/A	N/A	N/A	N/A	N/A	N/A		Institutional Research
B. Program Capacity (Headcount)	30	30	30	30	30	30		Institutional Research
C. Annual Headcount Enrollment (Unduplicated)	29	23	31	21	30	27		Institutional Research
D. Annual FTE Enrollment PI	28	25	34	23	31	28		Institutional Research
E. Annual Program Capacity	97%	77%	103%	70%	100%	89%		Institutional Research
F. Fall to Fall Retention Rates (FT/PT students) PI	100%	67%	81%	60%	56%	73%	Fall 2014-2018 Cohorts	Institutional Research
H. Program Course Completion Rate (C- or better)	97%	93%	95%	94%	96%	95%	(Fall + Spring Semester)/2	Institutional Research
I. 150% Time Graduation Rate (FT/PT students)	50%	50%	91%	33%	56%	56%	Fall 2012-2016 Cohorts	Institutional Research
K. Annual Degree & Certificate Completions	9	16	23	19	15	16		Institutional Research
L. Degree Production Rates – <i>proportion of degrees/certificates granted per 100 FTE PI</i>	33	65	68	84	48	60		Institutional Research

Denotes Items that are Core Theme Indicators for Helena College

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Montana University System

PROGRAM REVIEW

Computer Aided Manufacturing 2014-2019 - Fiscal and Physical Resources								
Data Definition: Instructional costs include program personnel and operating expenses	FY15	FY16	FY17	FY18	FY19	5 Year Ave	Program Notes	Source
A. Program Expenditure/FTE PI	\$6,169	\$6,618	\$6,095	\$11,138	\$9,160	\$7,836		Institutional Research /Finance
B. Average HC Program Expenditure/FTE	\$4,919	\$5,146	\$6,827	\$6,284	\$8,252	\$6,286		Institutional Research /Finance
C. Program Expenditure /Completion	\$19,192	\$10,340	\$9,010	\$13,190	\$18,931	\$14,133		Institutional Research /Finance
D. Average HC Program Expenditure /Completion	\$17,959	\$13,493	\$16,601	\$17,005	\$13,598	\$14,101		Institutional Research /Finance
E. Student Program Fees-Fund Balance	\$4,033	\$6,314	\$8,306	\$6,075	\$7,348	\$6,415	H60530	Institutional Research /Finance
F. Student Program Fees-Fund Expenditures	\$0	\$0	\$0	\$9,701	\$6,613	\$3,263	H60530	Institutional Research /Finance
G. Total Program Expense	\$173,927	\$169,043	\$210,400	\$250,602	\$283,968	\$217,588	Personnel + Operating	Institutional Research /Finance
H. Total Program Revenue	\$230,478	\$277,066	\$316,370	\$286,608	\$301,754	\$282,455	State Approp + Tuition	Institutional Research /Finance
I. Program Revenue/FTE	\$8,231.36	\$11,083	\$9,305	\$12,461	\$9,734	\$8,798	Total Revenue/FT E	Institutional Research /Finance

Key Performance Indicator or Performance Indicator for Program Effectiveness under Strategic Enrollment Planning/Management

KPI or PI