Montana University System

PROGRAM REVIEW

Institution: Helena College University of Montana

Program Years: AY 2019-20 to AY 2021-22 (AVMT), AY 2017-18 to AY 2021-22 (IT & P)

List of the programs reviewed:

- Aviation Maintenance Technology
- Information Technology & Programming

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

- The Academic Program Review Committee and Dean's Cabinet recommends the continuation of the Aviation Maintenance Technology program.
- The Academic Program Review Committee and Dean's Cabinet recommends the continuation of the Information Technology & Programming program with modifications to credentials offered as described in the program review report.

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.

AVIATION MAINTENANCE TECHNOLOGY

Credentials: AAS Aviation Maintenance Technology, CAS Airframe, CAS Powerplant

The Aviation Maintenance Technology program at Helena College provides students with a marketable degree in a high-demand and well-paying industry. It continues to demonstrate satisfactory enrollment, higher-than-average retention and graduation rates, and outstanding pass rates on FAA licensing exams. Program faculty possess a good understanding of the job market at the local, state, national, and global levels, as well as both community and student needs. The program makes frequent curriculum changes in response to FAA requirements.

The program has plans to pursue adding an avionics degree in response to advisory board input and growing need for these new skills. In addition to the need to identify funding sources for equipment and an additional instructor, the curriculum will need to be evaluated for ways to streamline the pathways to support student learning and the addition of the avionics courses.

The program also plans to evaluate their equipment and space needs to ensure there is room and funding to add and maintain avionics equipment. Purchase of a separate hangar is currently in the works, but an additional instructional site brings many challenges.

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The program completed a program review for a three-year period instead of a five-year period to accommodate changes in the program review annual rotation.

Aviation Maintenance Technology Program Overall	AY 1920	AY 2021	AY 2122	3-Year Average
Program capacity	40	40	40	40
Unduplicated annual enrollment (headcount)	22	22	29	24
Percent program capacity	55%	55%	73%	61%
Average annual FTE	29	27	37	31
Retention rate	85%	83%	87%	85%
Credential course completion rate	94%	99%	96%	96%
Degrees/certificates awarded	4	24	19	16
150% graduation rate	80%	70%	71%	74%

INFORMATION TECHNOLOGY & PROGRAMMING

The Information Technology & Programming program at Helena College has undergone significant change during the five-year review period. The program name was changed from Computer Technology in 2020 and the Programming AAS received a new name of Software Development. The AAS in Networking was placed in moratorium at the same time and eventually terminated in 2022.

Enrollment in the Software Development program has remained relatively steady, while retention and graduation rates have fluctuated quite a bit. Credential course completion rates compare with the college average. Program faculty have made efforts to improve retention and increase support for students. Faculty explored a block schedule but eventually determined it would be more challenging for the large number of part-time students in the program. Transitioning more courses to a hyflex modality has enabled more flexible attendance options for students, especially part-time students who may be working while attending school.

The program faces a number of external challenges. Despite transfer pathways in computer science from Helena College to MSU, UM, and MT Tech, many high school students with an interest in computer science choose to start at the four-year university. Although he skills covered in the program are highly valued by the industry, the college degree is not required, as it is possible to obtain short-term certifications in a variety of ways.

The program is currently exploring new offerings, including short-term stackable certificates in fields such as ServiceNow and web development. The program is also planning to add a degree in DevOps, which integrates development and operations functions of an IT department. The program is also considering pursing the accreditation for cybersecurity, rather than adding another credential offering to the many available around the state. The faculty will also pursue options for gamers interested in programming..

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Marketing will be essential to promote the new and existing offerings in the program, as will partnerships with government, education, private industry, military, and community organizations. Not only will students have opportunities for work-based learning, but the partners may provide a valuable source of new students.

Associate of Applied Science in Computer Technology - Networking

AAS Computer Technology - Networking	AY 1718	AY 1819	AY 1920	AY 2021	AY 2122	5-Year Average
Program capacity	50	50	50	50	50	50
Unduplicated annual enrollment (headcount)	36	35	29	15	11	34
Percent program capacity	72%	70%	58%	30%	22%	50%
Average annual FTE	23	23	17	9	3	15
Retention rate	40%	38%	0%	50%	N/A	32%
Credential course completion rate	80%	77%	70%	78%	62%	73%
Degrees/certificates awarded	6	7	6	2	3	5
150% graduation rate	33%	17%	56%	30%	25%	32%

Associate of Applied Science in Software Development

AAS Software Development	AY 1718	AY 1819	AY 1920	AY 2021	AY 2122	5-Year Average
Program capacity	50	50	50	50	50	50
Unduplicated annual enrollment (headcount)	31	38	38	32	29	34
Percent program capacity	62%	76%	76%	64%	58%	68%
Average annual FTE	21	22	24	19	17	21
Retention rate	83%	33%	48%	71%	25%	52%
Credential course completion rate	74%	74%	70%	78%	61%	71%
Degrees/certificates awarded	5	8	5	4	5	5
150% graduation rate	15%	27%	25%	50%	25%	28%