University of Montana
$1,500,000

The Montana Cyber Hub for workforce education is to serve the entire state of Montana from Missoula College. As Montana's first Nationally-recognized Center of Academic Excellence for Cyber Defense Education (National Security Agency, Department of Homeland Security, and federal partners, 2017), Missoula College is uniquely poised to lead Montana Cyber Hub (Dean of Missoula College has deep background in IT/Technology). UM will utilize remote learning to deliver education to all regions in the State using remote technologies for both non-traditional short-term training (boot camps, code school, and IRC) and existing certificate and two-year degree programs.

Cyber defense readiness includes development of the cybersecurity professional pipeline; professional development and upskilling of the existing cybersecurity workforce; and education programs designed to increase cyber awareness and increase the cybersecurity defense capacity of businesses.

Other campuses and partnerships involved in the initiative
Faculty and students from the following campuses have participated in activities funded by the CyberHub
Campuses

- University of Montana
- Helena College
- Miles Community College
- Salish Kootenai College
- Aaniih Nakoda College
- Gallatin College
- Highlands College
- Montana Tech
- Great Falls College
- MSU Billings
- Sentinel High School

Partnerships

- Montana Army National Guard
- Cengage
- Cyber Range Solutions
- Cyber.org
- CyberUSA
- Hanover Research
- Proofpoint, Inc
- Accelerate Montana
- State of Montana/Department of Labor and Industry
- State of Montana/Cyber406
- State of Montana/National Governors Association Policy Academy
- U.S. Cyber Range
- U.S. CyberCom (Department of Defense)
- Little Shell Chippewa Tribal Community

Status update on the initiative
The Cyber Hub is divided into 4 areas: creation of the Montana Cyber Range; workforce development for new learners and current practitioners; and statewide cyber awareness education, and dedicating personnel for recruitment & career mentoring as well as personnel to supplement Missoula College's existing cybersecurity program. Cyber Hub activities share resources with the Accelerate Montana team to broaden impact and efficiency.

The CyberHub initiative is focused on the following efforts:
- **Montana Cyber Range**: The Range is a mix of cloud-based and on-premise computing resources offering individual and team-based cybersecurity training. In the first full semester of operation, we are hosting lab activities for 12 instructors and over 60 students. Statewide professional development is taking

place with higher education faculty to incorporate the Range into IT and cybersecurity curricula to expand use of this resource.

- **Workforce Education and Development**:
  - K-12 learners – 6 middle school Cyber/STEM camps are being scheduled for Summer 2022 hosting approximately 150 students;
  - High school dual enrollment – Introduction to cybersecurity course (currently serving students from Alberton, Augusta, Billings, Conrad, Fairfield, Florence, Great Falls, Helena, Jackson, and Laurel). DE classes will be also offered again in Autumn and Spring 2023.
  - New Learners/Reskilling – Initial launch of 12-15 week Accelerated Certificate of Technical Studies in Cybersecurity May 2022, anticipated cohort of 15 students.
  - Professional Development/Upskilling – Statewide cybersecurity upskilling grants for public sector employees launch March 2022; National Initiative in Cybersecurity Education training for higher education faculty June 2022, anticipated cohort of 12; Cybersecurity High School Innovation (CHI) grant to train Montana K-12 teachers in cybersecurity, cohort of 2.
- **Small Business Cybersecurity End-user Training** – Pilots scheduled in Helena and Missoula in March 2022; expansion to Billings, Bozeman, Butte, Great Falls, and Kalispell in April 2022.
- **Recruitment and Career Mentoring** - Director of Workforce Training & Career Education started December 2021; High School Outreach and Student Retention Coordinator positions (openings in Missoula and Great Falls, advertised March 2022).

Plans for carrying out the initiative for the remainder of the biennium

- Development, delivery, and promotion of two high school dual enrollment courses in cybersecurity
- Expansion of K-12 STEM/Cyber camps throughout the state, including rural and tribal locations
- Expanding offerings at other 2-year campuses through statewide communities of practice that bring faculty together to explore curricular needs and alignment
- Upskilling efforts for workforce development in both the private and public sectors

Metrics used to measure success

- ✓ Number of CyberHub program participants engaged from outside Missoula County, and through remote delivery technology
- ✓ Number of participants and program completers from Montana's underserved groups

Budget Update

University of Montana - Missoula College CyberHub as of 2/22/2022	
Beginning Balance	750,000
Expenditures	
Personal Services	77,252
Contracted Services	24,025
Supplies	100,361
Communications	213
Travel	987
Repairs & Maintenance	8,082
Other Services	80
	211,000
FY 2022 Balance	539,000