

University of Montana Cybersecurity Initiative



The 68th Montana Legislature provided \$6.1 million to the Montana University System and the University of Montana to advance the state's cybersecurity posture. These funds are being invested to support three areas of need for the state:

1. Workforce Training and Development

The University of Montana has created numerous opportunities for Montanans to earn employment credentials in cybersecurity, with all three programs being stackable:

- 4-year bachelor's degree from the College of Business
 - 46 admitted students (had projected 20 last year). On pace to reach that goal.
- 2-year associate's degree from Missoula College
 - The Bachelor's degree is laddered with the AAS from Missoula College. There is a very straightforward path for students who complete the CTS in cybersecurity to progress to the AAS, and then to the BS.
- Accelerated cybersecurity training certificate (10-15 weeks) – 31 participants through this summer term.

UM and CyberMontana is also working to strengthen the pipeline to a career in cybersecurity for K-12 students and businesses:

- Early college visits to 34 Montana high schools and counting
- Middle School STEM Summer Camps (391 total students participated statewide through summer 2023, with 150-200 additional students expected to attend summer 2024.)
- High School Early College Cybersecurity Certificate of Technical Studies (can be completed in 1-2 years) 1 completer from Conrad High School, 1 from Grass Range High School, and 1 completer from Helena who is home schooled.
- High School Introduction to Cybersecurity – 68 students from across the state have completed the course.
- Provide minimal to no-cost training to businesses, local governments, and education organizations through 1,900 training modules available through CyberMontana – 127 participants to date including the majority of the SITSD Cybersecurity team.
- Provide Security Awareness Trainings to local businesses to help establish a primary line of defense against cyber threats – over 2900 participants to date.

**In total, CyberMontana conducts cybersecurity outreach to approx. 4,500 Montanans each year.*

2. Cloud-Based Infrastructure

UM established a Security Operations Center (SOC), partially using funds from HB 10. The SOC monitors over 5,000 endpoints for the UM-system and for several participating communities. The SOC made an immediate impact in reducing malicious activity – including identifying a malicious tablet within the City of Whitefish's Water Treatment Plant. The SOC is staffed around the clock by UM employees and students studying one of UM's cybersecurity programs. Current participants include: Sheridan County, Ravalli County, Lake County, as well as the municipalities of Whitefish, Manhattan, and Harlowton.

UM's College of Business also established the Cyber Operations Center Learning Lab. This space allows UM to conduct cyber classes with up to 36 students at a time.

3. Address Statewide Cyber Threats

UM is conducting a series of Critical Infrastructure Incident Response Trainings. These trainings bring together numerous entities to simulate an attack to critical statewide infrastructure. Trainings to date with HB10 funds are:

- Electric grid cyberattack simulation with Northwestern Energy and Rural Electric Co-Ops
- Logan Health led a hospital-based scenario simulation
- Montana University System
- Local Governments in conjunction with MACo
- K-12 cyber threat simulation scheduled for April

We are partnering with CSMI to provide community-based cybersecurity planning and development workshops. Target audience is local government leaders (mayor/councilpersons/commissioners), IT workers, DES staff, K-12, critical infrastructure entities (chemical, commercial facilities, communications, critical manufacturing, dams, emergency services, energy, financial services, food and agriculture, government facilities, healthcare, information technology, transportation, water/wastewater). 18 workshops are planned across the state for 2024 and 2025, with the first launching at the end of June.