

University of Montana Cybersecurity Assessment Program

The **University of Montana Cybersecurity Management Capstone (BMIS 472/502)** partners student teams with nonprofit organizations, schools, government agencies, and small businesses to conduct comprehensive cybersecurity and risk assessments. The program is designed to provide participating organizations with an independent review of their cybersecurity posture while giving students practical consulting experience.

Program Overview. Over a six-week engagement, teams of three to four graduate and undergraduate cybersecurity students work directly with an organization to assess cybersecurity risks, identify vulnerabilities, and develop actionable recommendations for improvement. The project is supported by industry best practices and guidance from cybersecurity professionals, including collaboration with LMG Security.

Assessment Activities

1. Student teams perform a structured assessment that may include:
2. Review of organizational policies, procedures, plans, and business documents.
3. Interviews with key stakeholders, including leadership, technical staff, and operational personnel.
4. Cybersecurity assessments using recognized frameworks such as:
 - NIST Cybersecurity Framework (CSF)
 - HIPAA Security Rule requirements
 - ISO/IEC 27001
 - CIS Controls
 - Other applicable standards
5. Physical or virtual walkthroughs of organizational facilities and processes.
6. Optional technical vulnerability scanning and testing of networks and systems (with organizational approval).
7. Risk analysis to identify and prioritize cybersecurity risks.
8. Development of recommendations to address the most significant security gaps.

Deliverables At the conclusion of the engagement, each organization receives:

- **Cybersecurity Assessment Results** - Evaluation against applicable cybersecurity standards and frameworks.
- **Risk Assessment** - Identification and analysis of approximately 8–10 cybersecurity risks.
- **Recommendations** - Practical recommendations addressing 4–5 priority risks and opportunities for improvement.
- **Final Report** - A written summary of assessment activities, findings, risks, and recommended actions.
- **Executive Presentation** - A professional 30-minute presentation of findings and recommendations to organizational leadership and stakeholders.

Organizational Commitment. The program is designed to minimize disruption while ensuring meaningful engagement. Participating organizations typically provide:

1. Access to relevant policies, procedures, and planning documents.
2. Availability of leadership, technical personnel, and operational staff for interviews.
3. Participation in a preliminary findings discussion.
4. Attendance at the final presentation.
5. Completion of a brief post-project evaluation survey.
6. The total time commitment is generally limited to several hours over the six-week project period.

Benefits to Participating Organizations. Organizations gain:

1. An independent review of their cybersecurity program.
2. Insight into cybersecurity risks and vulnerabilities.
3. Recommendations aligned with industry best practices.
4. Exposure to recognized cybersecurity frameworks and standards.
5. A low-cost opportunity to strengthen cybersecurity governance, risk management, and security controls.
6. The program has successfully supported numerous nonprofits, schools, government agencies, tribal organizations, and small businesses throughout Montana and the surrounding region, helping them better understand and improve their cybersecurity posture.

Organizations Supported by the University of Montana Cybersecurity Assessment Program

Over multiple years, student teams in the **University of Montana BMIS 472/502 Cybersecurity Management Capstone** have conducted cybersecurity assessments and risk analyses for a diverse range of organizations, including nonprofits, educational institutions, tribal organizations, government agencies, and private businesses.

Nonprofit Organizations

1. Missoula Food Bank
2. Habitat for Humanity Missoula
3. Ecology Project International
4. Missoula Aging Services
5. Child and Family Assistance Center (CFAC)
6. Missoula YMCA
7. Garden City Harvest
8. AWARE, Inc.
9. Montana High Tech Business Alliance
10. Montana Natural History Center
11. Open Aid Alliance
12. United Way
13. Homeword
14. CASA Missoula
15. Families First
16. Run Wild Missoula
17. Jeannette Rankin Peace Center
18. Missoula Children's Theatre
19. CASA of Yellowstone County

Educational Institutions

1. Missoula International School
2. Bright Ways Learning
3. St. Joseph School
4. Wise River School
5. Helena College
6. Mansfield Library
7. University of Montana College of Business
8. Great Falls Public Schools
9. Columbia Falls Public Schools
10. Lolo School District
11. Florence School District

Government and Tribal Organizations

1. Confederated Salish & Kootenai Tribes (CSKT) IT Department
2. Missoula County IT
3. North Dakota Information Technology
4. Great Falls IT

Community and Economic Development Organizations

1. Downtown Missoula Partnership
2. Missoula Urban Development Project
3. Missoula Chamber of Commerce

Healthcare, Human Services, and Senior Services Organizations

1. Ravalli Aging Services

Business and Technology Organizations

1. Capsource.io
2. NetVR
3. MyCareerSpan

Program Reach and Impact

The program has provided cybersecurity assessments to more than **40 organizations** across Montana and neighboring states. Participating organizations have ranged from small nonprofits with limited IT resources to government agencies, tribal governments, school districts, and technology companies. Through these engagements, student teams have delivered cybersecurity assessments, vulnerability analyses, risk assessments, recommendations for remediation, and executive-level presentations, helping organizations better understand and improve their cybersecurity posture.

This broad portfolio demonstrates the program's ability to adapt assessments to a wide variety of operational environments while providing valuable experiential learning opportunities for cybersecurity students.