

REQUEST TO PLAN MEMORANDUM

DATE: August 23, 2024

TO: Chief Academic Officers, Montana University System

FROM: Joe Thiel, Deputy Commissioner for Academic, Research, and Student Affairs

RE: August 2024 Request to Plan Proposals

The campuses of the Montana University System have proposed new academic programs or changes under the Request to Plan process authorized by the Montana Board of Regents. The proposals are being sent to you for your review and approval. If you have concerns about a particular proposal, you should share those concerns with your colleagues at that institution and try to come to some understanding. If you cannot resolve your concerns, raise them at the Chief Academic Officer's conference call Wednesday, August 28th. Issues not resolved at that meeting should be submitted in writing to OCHE by noon on Friday, August 30, 2024. If no concerns are received, OCHE will assume that the proposals have your approval.

Requests to Plan

Montana State University Bozeman:

- Request for authorization to establish the Institute for National Security Research and Education [Item #214-2010-R0924](#)

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ITEM XXX-2010-R0924

Meeting Date: September 2024

Item Name: Request authorization to establish the Institute for National Security Research and Education

Program/Center/Institute Title:	Institute for National Security Research & Education	Planned 6-digit CIP code: 43.0301
Campus, School/Department:	Montana State University, Research & Economic Development	Expected Final Submission Date: November 2024
Contact Name/Info:	Alison Harmon, Vice President Research & Economic Development	

1) Provide a description of the program/center/institute.

Montana State University proposes to establish the Institute for National Security Research and Education (INSRE) with the primary aim of addressing the nation's security needs and concerns through applied research, the development of operational technologies, and the training of the next generation of national security leaders. INSRE will serve as a central campus hub for communication, mentoring, networking and collaboration, and access to appropriate infrastructure to support both classified and controlled unclassified work in support of national security efforts, including National Industrial Security Program requirements, classified lab space, information technology, fiscal management, and contracting specialists. It will support PI research and relationship development and better connect MSU's national security efforts with undergraduate and graduate academic programming, student projects, and faculty scholarship.

In short, INSRE will strengthen national security by delivering technologies and developing educated and prepared leaders, and as a result, contribute to safeguarding the future of Montana and the nation.

2) Describe the need for the program/center/institute. Specifically, how the program/center/institute meets current student, state, and workforce demands. (Please cite sources).

INSRE will connect and better coordinate strong but disparate efforts at MSU currently addressing interests of national security with related research and high impact educational experiences for students. These efforts include but are not limited to: The Software Engineering and Cybersecurity Laboratory (SECL), TechLink, MilTech, the Applied Research Lab (ARL), Office of Technology Translation Research (OTTR), and ongoing partnerships with the Department of Defense (Air Force Research Lab, Army Research Lab etc.), Department of Energy (DOE Los Alamos National Lab, Pacific Northwest National Lab etc.), Veterans Administration (VA) and Department of Homeland Security (DHS).

Additionally, INSRE will provide the structure needed to conduct needed faculty and student recruitment, offer timely seminars and briefings, and build and strengthen relationships with external partners (DOD, DOE, DHS, NSIN, national laboratories, and related industry partners) across a wide swath of MSU research projects and academic areas.

According to Cyberseek.org's interactive map, Montana has 848 cybersecurity job openings, with more than 4,000 job openings in the Northern Plains region ([Cybersecurity Supply And Demand Heat Map \(cyberseek.org\)](https://www.cyberseek.org)). According to the Center for Security and Emerging Technology at Georgetown University, *The defense community is not replacing or expanding its tech workforce at the same rate as other industry sectors*. The US technical workforce has grown overall since the early 2000s, but the distribution of that workforce has changed significantly during that time. Most notably, the share of overall tech positions in big tech companies more than quadrupled over the past two decades while the share of positions in the defense agencies fell roughly 40 percent. The Department of Defense needs additional recruiting avenues

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and collaborative relationships with university academic programming to fill critical positions. See [The Race for U.S. Technical Talent: Can the DOD and DIB Compete? | RAND](#) at https://www.rand.org/pubs/external_publications/EP70254.html

3) Describe any significant new resources (financial, staff, facility, new curricula) needed to launch and sustain the program/center/institute.

The entities that would comprise the proposed Institute currently generate needed resources through existing grants and contracts. In FY23 the DoD, DoE and DHS constituted 40% of external funding. National security research programs at MSU generated more than \$45M in research expenditures, and this is expected to grow by approximately 37% in FY24. Institutional support is needed through F&A reinvestment to support more advanced campus infrastructure such as information technology resources, fiscal management, and contract services. These resources are already needed to support the growth of current entities but could be better organized under the umbrella of the Institute we propose. An institute director, government strategy director, and industry liaison will provide vision, leadership, and management for the Institute. Filling these positions can be accomplished by creating an organizational structure that reduces duplication of staffing and services across current entities while also filling challenging gaps. For example, improved resources are needed to handle the communication of Controlled Unclassified Information (CUI).

4) Describe any efforts or opportunities you have identified for collaboration either within the institution or between MUS institutions (i.e. articulation, course-sharing, research collaboration).

The development of this proposal represents a significant collaboration among existing entities currently conducting national security related research and education. INSRE will increase opportunities for collaboration among MilTech, TechLink, SECL, OTTR, the ARL, as well as other researchers and academic programs in the Norm Asbjornson College of Engineering.

5) Describe how the program/center/institute fits with the institutional mission, strategic plan, existing institutional program array, and academic priorities as described in the most recent Academic Priorities and Planning Statement.

INSRE will contribute to several *Choosing Promise* goals: Intentional focus 1: TechLink and MilTech currently employ many undergraduate and graduate students seeking to learn about national security technologies and Cybersecurity. These kinds of hands-on work and research experiences constitute high impact learning practices that contribute to student persistence and graduation. Additionally, INSRE partnerships with national DoD and DoE labs create opportunities for undergraduate and graduate capstone experiences, internships, and post-graduation employment.

Intentional focus 2: Securing the future of Montana and the nation—and in particular conducting research and education related to cybersecurity, photonics and optics, defense governance and public policy is central to the purpose of INSRE.

Intentional focus 3: The growth of the optics and photonics industry is strong evidence of university-supported economic development in the Gallatin Valley and across Montana. INSRE-supported programs regularly engage with Montana companies as well as regional and national industries, academic institutions, non-profits and government organizations. For example, the Office of Technology Translation Research (OTTR) is leading a major project within the statewide Headwaters Technology & Innovation Hub proposal in collaboration with the MT Dept of Commerce, the MT Chamber, Industry groups, and other MUS institutions.

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<u>Signature/Date</u>	
Chief Academic Officer:	DocuSigned by: <i>Robert Mokwa</i> 212A28411AC04BD... 5/22/2024 10:26 AM MDT
Chief Research Officer*:	DocuSigned by: <i>Allison Harmon</i> 8596262C40F2420... 5/22/2024 10:26 AM MDT
Chief Executive Officer:	DocuSigned by: <i>Waded Cruzado</i> 7D6A4CE96C3F415... 5/22/2024 10:26 AM MDT
Flagship Provost**:	DocuSigned by: <i>Robert Mokwa</i> 212A28411AC04BD... 5/22/2024 10:26 AM MDT
Flagship President**:	DocuSigned by: <i>Waded Cruzado</i> 7D6A4CE96C3F415... 5/22/2024 10:26 AM MDT

*Center/Institute Proposal only
**Not applicable to the Community Colleges.