SOUTH DAKOTA BOARD OF REGENTS

Academic and Student Affairs Consent

AGENDA ITEM: 5 – B (1) **DATE: December 11-12, 2024**

SUBJECT

New Program Request - DSU - Minor in Cyber Leadership and Intelligence

CONTROLLING STATUTE, RULE, OR POLICY

BOR Policy 2.3.2 – New Programs, Program Modifications, and Inactivation/Termination

BACKGROUND / DISCUSSION

Dakota State University (DSU) requests authorization to offer a minor in Cyber Leadership and Intelligence. The proposed minor would expose students to cyber-related topics as they are impacted by world affairs and human behavior. It will introduce students to the basic concepts of leadership, and will prepare them for careers in a wide variety of cyber fields.

IMPACT AND RECOMMENDATION

DSU plans to offer the minor in Cyber Leadership and Intelligence on campus and online. DSU does not request new state resources. No new courses will be required. DSU estimates 17 students enrolled and 7 graduates by the fourth year of the program.

Board office staff recommends approval.

ATTACHMENTS

Attachment I – New Program Request Summary: DSU – Minor in Cyber Leadership and Intelligence

DRAFT MOTION 20241211_5-B(1):

I move to authorize DSU to offer a minor in Cyber Leadership and Intelligence, as presented.



SOUTH DAKOTA BOARD OF REGENTS ACADEMIC AFFAIRS FORMS

New Baccalaureate Degree Minor

Use this form to propose a new baccalaureate degree minor (the minor may include existing and/or new courses. An academic minor within a degree program enables a student to make an inquiry into a discipline or field of study beyond the major or to investigate a particular content theme. Minors provide a broad introduction to a subject and therefore develop only limited competency. Minors consist of a specific set of objectives achieved through a series of courses. Course offerings occur in a specific department or may draw from several departments (as in the case of a topical or thematic focus). In some cases, all coursework within a minor proscribed; in others cases, a few courses may form the basis for a wide range of choices. Regental undergraduate minors typically consist of 18 credit hours. Proposals to establish new minors as well as proposals to modify existing minors must recognize and address this limit. The Board of Regents, Executive Director, and/or their designees may request additional information about the proposal. After the university President approves the proposal, submit a signed copy to the Executive Director through the system Chief Academic Officer. Only post the New Baccalaureate Degree Minor Form to the university website for review by other universities after approval by the Executive Director and Chief Academic Officer.

UNIVERSITY:	DSU
TITLE OF PROPOSED MINOR:	Cyber Leadership and Intelligence
DEGREE(S) IN WHICH MINOR MAY BE	Artificial Intelligence in
EARNED:	Organizations, Cyber Operations,
	Computer Science, Artificial
	Intelligence
EXISTING RELATED MAJORS OR MINORS:	Cyber Leadership and Intelligence
INTENDED DATE OF IMPLEMENTATION:	Fall 2025
PROPOSED CIP CODE:	29.0202
UNIVERSITY DEPARTMENT:	Social Science
BANNER DEPARTMENT CODE:	DSOS
UNIVERSITY DIVISION:	College of Arts and Science
BANNER DIVISION CODE:	DAS

Please check this box to confirm that:

- The individual preparing this request has read <u>AAC Guideline 2.8</u>, which pertains to new baccalaureate degree minor requests, and that this request meets the requirements outlined in the guidelines.
- This request will not be posted to the university website for review of the Academic Affairs Committee until it is approved by the Executive Director and Chief Academic Officer.

University Approval

To the Board of Regents and the Executive Director: I certify that I have read this proposal, that I believe it to be accurate, and that it has been evaluated and approved as provided by university policy.



Note: In the responses below, references to external sources, including data sources, should be documented with a footnote (including web addresses where applicable).

- 1. Do you have a major in this field (place an "X" in the appropriate box)? \boxtimes Yes No
- 2. If you do not have a major in this field, explain how the proposed minor relates to your university mission and strategic plan, and to the current Board of Regents Strategic Plan 2014-2020.

Links to the applicable State statute, Board Policy, and the Board of Regents Strategic Plan are listed below for each campus.

BHSU: SDCL § 13-59 **BOR Policy 1:10:4** DSU: SDCL § 13-59 **BOR Policy 1:10:5** *NSU*: SDCL § 13-59 BOR Policy 1:10:6 SDSMT: SDCL § 13-60 **BOR Policy 1:10:3** SDCL § 13-58 **BOR Policy 1:10:2** SDSU: SDCL § 13-57 BOR Policy 1:10:1 USD:

Board of Regents Strategic Plan 2014-2020

Dakota State University currently offers a BS in Cyber Leadership and Intelligence. This new minor aligns with the University's Strategic Plan to increase student success by providing graduates with the needs of higher skilled careers. This minor would ensure students' preparedness to enter the workforce.

3. What is the nature/purpose of the proposed minor? Please include a brief (1-2 sentence) description of the academic field in this program.

This minor will expose students to cyber-related topics as they are impacted by world affairs and human behavior. It will introduce students to the basic concepts of leadership and will prepare them for careers in a wide variety of cyber fields.

4. How will the proposed minor benefit students?

This proposed minor will enable students to make an inquiry into Cyber Leadership and provide a broad introduction to the subject. It will provide crucial skills (writing, analytical thinking, etc.) to supplement some of our most popular majors (cyber security, network administration, etc.).

5. Describe the workforce demand for graduates in related fields, including national demand and demand within South Dakota. Provide data and examples; data sources may include but are not limited to the South Dakota Department of Labor, the US Bureau of Labor Statistics, Regental system dashboards, etc. Please cite any sources in a footnote.

The following are occupation statistics for South Dakota according to the Bureau of Labor Statistics:¹

Occupation	Annual Mean Wage
Computer and Information Systems Managers	\$156,550
Network and Computer Systems Administrators	\$73,220
Computer Occupations (all other)	\$87,330

The BS in Cyber Leadership and Intelligence has two specializations, Digital Forensics, and World Affairs/Human Behavior. Enrollment has had steady growth (Fall 22 = 56 students, Fall 23 = 58 students, and Fall 24 = 66 students).

6. Provide estimated enrollments and completions in the table below and explain the methodology used in developing the estimates (*replace "XX" in the table with the appropriate year*).

		Fiscal Years*		
	1 st 2 nd 3 rd 4 th			
Estimates	FY 25	FY 26	FY 27	FY 28
Students enrolled in the minor (fall)	2	7	12	17
Completions by graduates	0 1 4 7			

^{*}Do not include current fiscal year.

7. What is the rationale for the curriculum? Demonstrate/provide evidence that the curriculum is consistent with current national standards.

There are very few comparable programs around the country, and no national accreditation body. However, this has been a very popular major with excellent post-graduate placement rates. Furthermore, the intended curriculum will supplement, not duplicate, many of our most popular majors.

8. Complete the tables below. Explain any exceptions to Board policy requested.

Minors by design are limited in the number of credit hours required for completion. Minors typically consist of eighteen (18) credit hours, <u>including</u> prerequisite courses. In addition, minors typically involve existing courses. If the curriculum consists of more than eighteen (18) credit hours (including prerequisites) or new courses, please provide explanation and justification below.

A. Distribution of Credit Hours

Cyber Leadership and Intelligence	Credit Hours	Percent
Requirements in minor	6	33.3%
Electives in minor	12	66.6%
Total	18	

¹ "Occupational Employment and Wage Statistics for South Dakota," *US Bureau of Labor Statistics*, May 2022. See https://www.bls.gov/oes/current/oes_sd.htm#15-0000.

B. Required Courses in the Minor

Prefix	Number	Course Title Prerequisites for		Credit	New
		(add or delete rows as needed)	Course Include credits for prerequisites in subtotal below.	Hours	(yes, no)
CLI	101	Introduction to Cyber Leadership		3	No
CLI	420	Cyber Leadership		3	No
			Subtotal	6	

9. Elective Courses in the Minor: List courses available as electives in the program. Indicate any proposed new courses added specifically for the minor.

Choose 2 of the following courses:

Prefix	Number	Course Title (add or delete rows as needed)	Prerequisites for Course Include credits for prerequisites in subtotal below.	Credit Hours	New (yes, no)
POLS	350	International Relations		3	No
CLI	410	National Security Law		3	No
CLI	430	Intelligence Failures		3	No
CLI	440	Cybercrime	`	3	No
			Subtotal	6	

Choose 2 of the following courses:

Prefix	Number	Course Title (add or delete rows as needed)	Prerequisites for Course Include credits for prerequisites in subtotal below.	Credit Hours	New (yes, no)
HIST	468	US Foreign Relations Since 1900		3	No
SOC	370	People and their Cultures		3	No
CLI	320	Religion, Beliefs, and		3	No
		Technology			
CLI	470	Online Radicalization		3	No
			Subtotal	6	

There will be no course overlap between this minor and the majors that are most likely to pursue it.

A. What are the learning outcomes expected for all students who complete the minor? How will students achieve these outcomes? Complete the table below to list specific learning outcomes—knowledge and competencies—for courses in the proposed program in each row. Label each column heading with a course prefix and number. Indicate required courses with an asterisk (*). Indicate with an X in the corresponding table cell for any student outcomes that will be met by the courses included. All students should acquire the program knowledge and competencies regardless of the electives selected. Modify the table as necessary to provide the requested information for the proposed program.

Individual Student Outcome (Same as in the text of the proposal)	CLI 101	POLS 350, CLI 410, CLI 430, and CLI 440	HIST 468, SOC 370, CLI 320, and CLI 470	CLI 420
Explain social, cultural, political, and economic frameworks at a national and international level.	X	X	X	X
Apply reading, writing, critical thinking, and analytical skills to leadership practices.	X	X	X	X
Develop an information security plan or other strategies to mitigate cybersecurity risks.	X			X

Modify the table as necessary to include all student outcomes. Outcomes in this table are to be the same ones identified in the text.

10. What instructional approaches and technologies will instructors use to teach courses in the minor? This refers to the instructional technologies and approaches used to teach courses and NOT the technology applications and approaches expected of students.

All students will complete the university-wide computer science requirements.

11. Delivery Location

Note: The accreditation requirements of the Higher Learning Commission (HLC) require Board approval for a university to offer programs off-campus and through distance delivery.

This will be both an online and a face-to-face major. All classes will be available in both formats.

A. Complete the following charts to indicate if the university seeks authorization to deliver the entire program on campus, at any off-campus location (e.g., USD Community Center for Sioux Falls, Black Hills State University-Rapid City, Capital City Campus, etc.) or deliver the entire program through distance technology (e.g., as an online program)?

	Yes/No	Intended Start Date		
On campus	Yes	Fall	2025	

	Yes/No	If Yes, list location(s)	Intended Start Date
Off campus	No		Choose an item. Choose
•			an item.

	Yes/No	If Yes, identify delivery methods Delivery methods are defined in <u>AAC</u> Guideline 5.5.	Intended Start Date
Distance Delivery (online/other distance delivery methods)	Yes	Online Asynchronous	Fall 2025
Does another BOR institution already have authorization to offer the program online?	No	If yes, identify institutions:	

B. Complete the following chart to indicate if the university seeks authorization to deliver more than 50% but less than 100% of the minor through distance learning (e.g., as an online program)? This question responds to HLC definitions for distance delivery.

	Yes/No	If Yes, identify delivery methods	Intended Start Date
Distance Delivery	No		Choose an item. Choose
(online/other distance			an item.
delivery methods)			

12. Does the University request any exceptions to any Board policy for this minor? Explain any requests for exceptions to Board Policy. If not requesting any exceptions, enter "None."

No

13. Cost, Budget, and Resources: Explain the amount and source(s) of any one-time and continuing investments in personnel, professional development, release time, time redirected from other assignments, instructional technology & software, other operations and maintenance, facilities, etc., needed to implement the proposed minor. Address off-campus or distance delivery separately.

None. All proposed classes are already being taught as part of the regular rotation for the major.

- 14. New Course Approval: New courses required to implement the new minor may receive approval in conjunction with program approval or receive approval separately. Please check the appropriate statement (place an "X" in the appropriate box).
 - ☐ YES,

 the university is seeking approval of new courses related to the proposed program in conjunction with program approval. All New Course Request forms are included as Appendix C and match those described in section 7.
 - NO, the university is not seeking approval of all new courses related to the proposed program in conjunction with program approval; the institution will submit new course approval requests separately or at a later date in accordance with Academic Affairs Guidelines.
- 15. Additional Information: Additional information is optional. Use this space to provide pertinent information not requested above. Limit the number and length of additional attachments. Identify all attachments with capital letters. Letters of support are not necessary and are rarely included with Board materials. The University may include responses to questions from the Board or the Executive Director as appendices to the original proposal where applicable. Delete this item if not used.