



**SOUTH DAKOTA BOARD OF REGENTS
ACADEMIC AFFAIRS FORMS**

Intent to Plan for a New Program

Use this form to request authorization to plan a new baccalaureate major, associate degree program, or graduate program; formal approval or waiver of an Intent to Plan is required before a university may submit a related full proposal request for a new program. The Executive Director and/or their designees may request additional information. After the university President approves the Intent to Plan, submit a signed copy to the Executive Director through the System Academic Officer through the proper process. Only post the Intent to Plan to the university website for review by other universities after approval by the Executive Director, System Academic Officer or designee. This form is meant to capture critical elements for stakeholders to review prior to a full proposal.

UNIVERSITY:	NSU
DEGREE(S) AND TITLE OF PROGRAM:	Associate of Science in Digital Entrepreneurship
INTENDED DATE OF FULL PROPOSAL:	Spring 2022
PLANNED 6-DIGIT CIP CODE:	11.0401
COLLEGE/DEPARTMENT:	College of Professional Studies/School of Business/Dept. of Management, Marketing and Management Information Systems

Please check this box to confirm that:

- The individual preparing this request has read BOR Policy 2:23 and AAC Guideline 2.4.3 which pertains to new intent to plan requests for new programs, 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, System Academic Officer, or designee

University Approval

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

Michael Wenous
President (or Designee) of the University

2/2/2022
Date

Note: This submission should be no longer than 5-6 pages. The full Board Proposal will require a full accounting of the budget and enrollment projections and additional information not included in the Intent to Plan.

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

PURPOSE/PROGRAM SUMMARY:

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

Northern State University's Associate of Science in Digital Entrepreneurship prepares students to enter the digital economy ecosystem within 2 years and is built on a set of courses that stacks into Northern's Bachelor of Science in Management Information Systems. Digital Entrepreneurship prepares students to "create new business ventures or transform existing businesses through development of novel digital technologies or the innovative application of such technologies."¹ The AS in Digital Entrepreneurship includes 24 credits in general education, a 2 credit first year seminar, and 34 credits in business entrepreneurship, marketing, and information systems. Students will develop a base understanding of information systems and applied computer science along with a sequence of courses in entrepreneurship and digital marketing, preparing them to develop new digital business ventures and create and implement innovative technologies to grow existing businesses.

Northern State University's Associate of Science in Digital Entrepreneurship creates a workforce supply to meet the needs of the growing digital economy ecosystem in Aberdeen. The Aberdeen Development Corporation and Northern State University are working together through an intensive process with the Center on Rural Innovation (CORI) [see next question] to meet the gap between digital economy jobs and digital economy workforce in rural America. A 2-year program in Digital Entrepreneurship, offered fully online or face to face, is one of several recommendations made by CORI to develop a workforce pipeline with strong tech skills.

Northern's Associate of Science in Digital Entrepreneurship is fully stackable with the University's Bachelor of Science in Management Information Systems. Graduates of Northern's associate degree program may contribute to Aberdeen's digital economy through full time employment and choose to pursue the additional 60 credits needed to earn their BS in Management Information Systems.

STRATEGIC IMPACT:

2. How does the proposed program relate to the university's mission as provided in South Dakota Statute and Board of Regents Policy, and to the current Board of Regents Strategic Plan?

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](#)

SDSU: [SDCL § 13-58](#) [BOR Policy 1:10:2](#)

USD: [SDCL § 13-57](#) [BOR Policy 1:10:1](#)

Board of Regents Strategic Plan – Under Development.

Under SDCL 13-59-1, Northern State University is charged by the Board of Regents with "promoting excellence in teaching and learning; supporting research, scholarly and creative activities; and providing service to the state of South Dakota, the region, and beyond."² Northern is offering the Associate of Science in Digital Entrepreneurship to develop a workforce pipeline with strong tech skills, which directly supports the state of South Dakota and the Aberdeen region's commitment to the Center on Rural Innovation (CORI) initiative to develop a digital economy ecosystem. SDCL 13-59-1 specifically authorizes

¹ Hattingsh, M., M. Matthee, H. Smuts, I. Pappas, Y. Dwivedi, and M. Mantymaki, 2020. The Characteristics of Digital Entrepreneurship and Digital Transformation: A Systematic Literature Review. Responsible Design, Implementation, and Use of Information and Communication Technology.
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7134220/>

² South Dakota Board of Regents Policy Manual. Northern State University Mission Statement.
<https://www.sdbor.edu/policy/documents/1-10-6.pdf>

Northern to provide “preprofessional, one-year and two-year terminal and junior college programs.”³ To that end, Northern is proposing a two-year terminal program that can be stacked to a Bachelor of Science in Management Information Systems.

In addition to Northern State University’s statutory mission, the South Dakota Board of Regents (SDBOR) confirms Northern’s authority to offer curriculum in Information Systems in Policy 1:10:6: “Undergraduate Major Level Curriculum Business, Education, Entrepreneurship, Exercise Science, Fine and Performing Arts, General Studies, Humanities, **Information Systems (in accordance with SDCL 13-59-2.2)**, Liberal Arts, Mathematics, Physical/Biological/Environmental Sciences, Social Sciences, and Sport Media and Administration.”⁴

3. How does this program connect to the Campus Strategic Plan and Mission of the Campus?

Northern State University envisions itself as a regional, comprehensive, public liberal arts university with an operational Mission developed through collaborative, campus-wide efforts including students, faculty, staff, alumni and community members and approved by Faculty Senate, Executive Leadership Team, Civil Service Association, and Student Government Association. to “provide diverse academic, civic, social and cultural opportunities that prepare students through the liberal arts, professional education and E-learning for their future endeavors, while also enriching the local and regional community.”⁵

Northern State University’s strategic plan encompasses 5 themes, including distinctive learning that focuses on developing experimental, innovative, interdisciplinary, and relevant programs. One of Northern’s Strategic Priorities and Actions is to “build sustainable collaborative public/private partnerships to advance academic, cultural, health, recreational, and economic opportunities that serve the public good and produce value for NSU, Aberdeen, and the region.”⁶ Partnering with the Aberdeen Development Corporation, Northern State University is developing new curriculum to advance the region’s Digital Workforce Development and Support driver.

4. Are there any institutional priorities that this program will facilitate in meeting?

Northern’s first institutional priority is building “a growth strategy to expand student access, success and educational attainment to increase students’ socioeconomic mobility while serving the public good.”⁷ Northern’s AS in Digital Entrepreneurship advances efforts at growing enrollment by offering an accessible entry-point to information systems and computer programming while encouraging and requiring experiential learning in Aberdeen’s digital economy. Students who may have avoided college all together to set off as entrepreneurs will be well-served through Northern’s 2-year program that prepares them to engage with and grow the digital economy as entrepreneurs and members of the digital workforce.

The Aberdeen Development Corporation and Northern State University are working together through an intensive process with the Center on Rural Innovation (CORI) to shape and build a digital economy ecosystem in Aberdeen. Matt Dunne, Executive Director of the Center on Rural Innovation (CORI),

³ SDCL 13-59-1. https://sdlegislature.gov/Statutes/Codified_Laws/2043065

⁴ South Dakota Board of Regents Policy Manual. Northern State University Mission Statement. <https://www.sdbor.edu/policy/documents/1-10-6.pdf>

⁵ Northern State University Mission and Strategic Planning. <https://www.northern.edu/mission-and-strategic-planning>

⁶ Northern State University Mission and Strategic Planning. <https://www.northern.edu/mission-and-strategic-planning>

⁷ Northern State University Mission and Strategic Planning. <https://www.northern.edu/mission-and-strategic-planning>

founded CORI in 2017 after a successful career in Google and other technology companies. CORI's mission is to close the gap between America's rural workforce and digital economy jobs. Currently, 15% of the population of the United States lives in rural communities, but only 5% of the country's digital economy jobs are in rural areas.

Through analysis of current economic conditions and availability of higher education and potential for technical training, CORI selects 5 to 8 rural communities each year to work through an intensive assessment of the community around 5 direct drivers of the digital economy ecosystem:

- scalable tech, entrepreneur support, and incubation
- access to capital
- inclusive tech culture building
- access to digital jobs
- digital workforce development and support

Dunne and CORI selected Aberdeen as one of 5 CORI communities for 2021-2022, along with communities in Massachusetts, Kansas, Arizona, and Wisconsin. In late August, a core team, including Mike Bockorny, the CEO of the Aberdeen Development Corporation, and Dr. Erin Fouberg, Dr. Hannah Walters, and Blake Day from Northern State University, began working 8 to 10 hours a week with CORI to conduct a deep assessment of these 5 digital economy direct drivers. In late October 2021, CORI leaders presented an assessment of the current state and priorities of the Digital Economy Ecosystem of Aberdeen.

CORI found that Aberdeen has a strong culture of entrepreneurship, widespread access to broadband, and a growing and relatively young population. According to CORI's assessment, Aberdeen is geographically well-positioned to become a regional technology hub. On the Digital Workforce Development and Support driver, CORI scored Aberdeen as Stage 1, finding that while the community has a strong pipeline coming out of Northern, **the existing pipeline does not have strong enough focus on tech skills.**

Developing a AS in Digital Entrepreneurship and stacking it with the existing BS in Management Information Systems will help draw more students to both degree programs and close the gap in tech skills in the workforce pipeline graduating from Northern. By preparing graduates to thrive in Aberdeen's growing digital economy ecosystem, Northern will help move Aberdeen from Stage 1 in the Digital Workforce Development and Support driver to Stage 3.

Graduates of Northern's AS in Digital Entrepreneurship program may contribute to Aberdeen's digital economy through full time employment, and they may choose either immediately or over time to pursue the additional 60 credits needed to earn their BS in Management Information Systems.

ACADEMIC QUALITY:

5. Complete the following charts to indicate if the university intends to seek authorization to deliver the entire program on campus, at any off-campus location or deliver the entire program through distance technology (e.g., as an on-line program)?

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.

	Yes/No	Intended Start Date
On campus	Yes	Fall 2022

	Yes/No	If Yes, list location(s)	Intended Start Date
Off campus	Choose an item.		Choose an item. Choose an item.
	Yes/No	<i>If Yes, identify delivery methods</i> <i>Delivery methods are defined in AAC Guideline 5.5.</i>	<i>Intended Start Date</i>
Distance Delivery (online/other distance delivery methods)	Yes	Internet, Online	Fall 2022
Does another BOR institution already have authorization to offer the program online?	No	<p>If yes, identify institutions: SDSU offers an AS in Data Science, which focuses on using data to solve problems, not on digital entrepreneurship.</p> <p>Dakota State University offers online AS degrees in Network and Security Administration, Software Development, and Web Development, but not in digital entrepreneurship.</p> <p>University of South Dakota offers no online AS degrees in anything technology related.</p>	

6. Curriculum Example: Provide (as Appendix A) the curriculum of a similar program at another college or university. *All that is needed is the printout or URL link to the program (inserted below); be sure to include the campus, college, department, etc.*

The AS in Digital Entrepreneurship includes 24 credits in general education, a 2 credit first year seminar, and 34 credits in information systems and entrepreneurship. Students will develop a base understanding of information systems and applied computer science along with a sequence of courses in entrepreneurship and digital marketing.

Northern State University is building the curriculum for the AS Digital Entrepreneurship in light of the needs of the digital economy workforce, the courses offered at Northern, and to make the program stackable into the BS in Management Information Systems. The program includes courses foundational to the digital economy in information systems and computer science along with a suite of courses in entrepreneurship and business and will be program housed in the School of Business at Northern.

Sample curriculum:

<https://catalog.nocccd.edu/fullerton-college/degrees-certificates/computer-information-systems/computer-information-systems-associate-science-degree/>

7. Will the proposed program pursue accreditation or certifications? Yes, how will this guide and assist in the academic quality of the program? No, why?

Not at this time. The AS in Digital Entrepreneurship will not be part of the Northern's ACBSP accreditation. The program does stack into Northern's BS in Management Information Systems, which follows IS2020 Competency Model for Undergraduate Programs in Information Systems based on the model curriculum design, published by the Association for Computing Machinery (ACM), "the world's largest educational and scientific computing society."

STUDENT SUCCESS

8. How would the proposed program benefit students? *No more than 250 words.*

Students will benefit from earning an AS degree that prepares them to contribute to a growing digital economy ecosystem. The students who earn this degree will be prepared to contribute to the region's growing digital economy ecosystem. Once employed, graduates may invest in earning a BS in Management Information Systems. Some companies may choose to assist students with tuition as part of the company's efforts toward workforce development. Research in human relations demonstrates that employees with clear career paths and whose companies invest in their development contribute more.⁸

FINANCIAL HEALTH

9. What are the university's plans for obtaining the resources needed to implement the program? *Indicate "yes" or "no" in the columns below.*

	Development/St art-up	Long-term Operation
Reallocate existing resources	Yes	Yes
Apply for external resources <i>If checking this box, please provide examples of the external funding identified below.</i>	No	No
Ask Board to seek new State resources <i>Note that requesting the Board to seek new State resources may require additional planning and is dependent upon the Board taking action to make the funding request part of their budget priorities. Universities intending to ask the Board for new State resources for a program should contact the Board office prior to submitting the intent to plan.</i>	No	No
Ask Board to approve a new or increased student fee	Yes	Yes

10. Financial Budget – provide a summary of how the campus will work toward identifying true costs and revenue for this program. Library, Facilities, Faculty, Administrative Costs, etc.? Has the department completed a Financial Sensitivity Analysis? See template attached.

Northern's Management Information Systems Discipline fee will likely increase from Northern's current rate of \$47.70, at a rate agreed approved by the BOR

Northern is well-positioned in terms of staffing to offer the AS and BS. The BS program has, in the past, had inconsistency in faculty and inattention to updating course content. Northern's faculty in Management Information Systems have long-standing connection to Northern and have qualifications to deliver the courses and degrees.

Northern has space in existing courses to accommodate an expanded number of students in the new Associate of Science program. Northern will continually assess enrollments in the courses and program and will only add an additional faculty line when necessary to meet demand. Should Northern need to add a faculty line, the number of students in both the AS and revamped BS will offset the cost of the additional faculty line.

⁸ Society for Human Resources Management (SHRM). Developing Employee Career Paths and Ladders. <https://www.shrm.org/resourcesandtools/tools-and-samples/toolkits/pages/developingemployeecareerpathsandladders.aspx>

The new AS and the existing BS in Management Information Systems are housed in the School of Business and will be part of a larger campus-wide initiative to drive innovation in Aberdeen's digital economy ecosystem.

EXTERNAL/INTERNAL:

11. What is the need for the proposed program (e.g., Regental system need, institutional need, workforce need, etc.)? *Please cite any sources in a footnote. Short summary of findings will be appropriate on the intent to plan, a full description and use of data can be inserted in the Full Proposal.*

Market Demand:

- Is employer demand apparent in target geographic market?
Employer demand will grow as the efforts toward developing a digital economy ecosystem in the Aberdeen region expand.
- What is the expected growth rate of prospective students' target industry or occupation?
Between 9 and 13%. See below.
- What salaries can program graduates expect to earn in our target market?
Graduates of Northern's AS in Digital Entrepreneurship can gain positions as:
 - Computer Support Specialists \$55,510 per year with a 9% projected growth rate between 2020-2030.⁹
 - Web Developers and Digital Designers \$77,200 per year with a 13% projected growth rate between 2020-2030.

Student Demand:

- Are students enrolling in this program expected to be new to the university or redirected from other existing programs at the university? This item can initially be summarized for the intent to plan and must be fully developed in the final program request.

Students enrolling in Northern's AS in Digital Entrepreneurship are expected to be new to the University. The program serves both students looking for a flexible, online program and students looking for an on-campus, face to face experience. Marketing will be primarily to students looking for a residential experience. To best serve workforce development in Aberdeen's digital economy ecosystem, the program needs to also be offered fully online. All courses in the program are already offered fully online.

- What strategies will the campus deploy with the Enrollment Management Team to recruit students? This item can initially be summarized for the intent to plan and must be fully developed in the final program request.

Northern's Enrollment Management Council (EMC) collaborates across campus and works with Admissions and Communications and Marketing to develop marketing materials and pipelines for students into the programs.

12. Do any related programs exist at other public universities in South Dakota? Would approval of the proposed new program create opportunities to collaborate with other South Dakota public universities? A

⁹ U.S. Bureau of Labor Statistics. <https://www.bls.gov/ooh/computer-and-information-technology/computer-support-specialists.htm>

list of existing system programs are available through the university websites and the [RIS Reporting: Academic Reports Database](#). If there are no related programs within the Regental system, enter "None."

No BOR institution offers an associate degree that prepares students to contribute to the digital economy ecosystem and to spark innovation within the economy.

The closest associate degrees in the BOR system include:

- South Dakota State University offers an AS in Data Science, which focuses on using data to solve problems, not on digital entrepreneurship.
- Dakota State University offers online AS degrees in Network and Security Administration, Software Development, and Web Development, but not in digital entrepreneurship.
- University of South Dakota offers no online AS degrees in anything technology related.

13. Additional Information: *Additional information is optional. Use this space to provide information not specifically requested above. This should not be more than 250 words.*