Intent to Plan for a New Program
South Dakota Board of Regents
Academic Affairs Forms

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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 - Northern State University
Degree	BS : Bachelor of Science
Name of Major	X999 : New Major Requested
Analytics	
Specialization Required?	Yes *Note: If the new proposed program includes specific specializations within it, complete and submit a New Specialization Form for each proposed specialization and attach it to this form. Since specializations appear on transcripts, they require Board approval.*
College/Department	5B : NSU School of Business/NABF : Accounting/Banking/Finance/Economics
Intended Date of Full Proposal	Fall 2025
Planned CIP Code	30.7102

Program Description

1. Provide the working program description that may appear in the university catalog.

The Bachelor of Science in Analytics at Northern State University prepares students to collect, analyze, and interpret data to address real-world challenges and support informed decision-making. Students build a strong foundation in statistical analysis, programming, data visualization, and predictive modeling, while also developing critical thinking, communication, and ethical reasoning skills.

The program combines classroom learning with applied experiences through projects, internships, and partnerships with regional businesses, government agencies, and nonprofit organizations. Students gain proficiency in modern analytics tools such as Python, R, SQL, and industry-standard data platforms, applying these skills to fields including business intelligence, marketing, and sports analytics.

Strategic Impact

2. Describe how the program fits in with the institutional mission, strategic plan, existing institutional program array, and academic priorities.

The Bachelor of Science in Analytics fits Northern State University's mission by preparing students to use data to solve problems and improve decision-making in ways that benefit both their careers and the communities they serve. It supports Northern's vision to be a student-centered community dedicated to excellence in teaching, learning, creativity, and global awareness by blending rigorous coursework with applied experiences that connect students to regional businesses, government agencies, and nonprofit organizations. The program aligns with Northern's strategic plan by offering a transformational academic program in a high-demand field, expanding access through multiple modes of delivery, and fostering partnerships that strengthen the regional economy. It complements existing programs in business, management information systems, mathematics, and sports management. By meeting South Dakota Board of Regents priorities for growing the STEM workforce, increasing degree attainment, and ensuring graduates are career-ready, the program advances Northern's values of community, discovery, and integrity and positions graduates to thrive in a data-driven world.

If the program does not align to the strategic plan, provide a compelling rationale for the institution to offer the program.

N/A

3. How does the program connect to the Board of Regent's Strategic Plan?

Northern's BS in Analytics advances the South Dakota Board of Regents' Strategic Plan. It supports Goal 1: Student Success by providing students with high-demand skills in statistical analysis, programming, and data visualization, along with applied learning opportunities that strengthen career readiness and degree completion. It contributes to Goal 2: Academic Quality and Performance through a curriculum grounded in rigorous, relevant coursework and real-world projects developed in collaboration with employers, ensuring graduates meet state and national workforce expectations. The program aligns with Goal 3: Affordability, Access, and Delivery by offering both on-campus and HyFlex delivery formats, expanding access for rural students and working professionals while maintaining affordability through existing tuition structures. It meets Goal 4: Research and Economic Development by fostering partnerships with regional businesses, government agencies, and nonprofit organizations, using data-driven solutions to address local challenges and strengthen South Dakota's economy.

Program Summary

4. If a new degree is proposed, what is the rationale?

This question refers to the type of degree, not the program. For example, if your university has authorization to offer the Bachelor of Science and the program requested is a Bachelor of Science, then the request is not for a new degree.

N/A

5. What modality/modalities will be used to offer the new 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 2026

	Yes/No	Location(s)	Intended Start Date
Off Campus Location	Yes	Huron Community Campus	Fall 2026

	Yes/No	Delivery Method(s)	Intended Start Date
Distance Delivery	Yes	Online, HyFlex	Fall 2025

	Yes/No	Identify Institutions
Does another BOR institution already have authorization to offer the program online?	Yes	University of South Dakota: Business Analytics: https://catalog.usd.edu/preview_program.php?catoid=37&poid=8325 Dakota State University: Business Analytics: https://dsu.edu/programs/cis-business-analytics-bs.html South Dakota State University: Data Science: https://www.sdstate.edu/programs/undergraduate/data-science-bs

6. If the program will be offered through distance delivery, identify the planned instructional modality:

Both / HyFlex

Academic Quality

7. What peer institutions and current national standards will be referenced to develop the curriculum for this program? Include links to at least 3 comparable programs at peer institutions and links to national or accreditation standards, if any.

Three regional comprehensive state universities that are not land-grant colleges will serve as the peer institutions for Northern State University's BS in Analytics.

1. Northwest Missouri State University in Maryville, Missouri https://www.nwmissouri.edu/academics/undergraduate/majors/data-science.htm
2. Truman State University (COPLAC institution) in Kirksville, Missouri https://www.truman.edu/majors-programs/majors-minors/data-science-major/data-science-major-requirements/
3. Moorhead State University in Moorhead, MN https://www.mnstate.edu/academics/majors/business-analytics

Northern State University School of Business is accredited by the ACBSP, and the University will follow ACBSP accreditation guidelines in the program curriculum and standards. The three peer institutions have different accreditations. Northwest Missouri State University is accredited by ACBSP. Truman State University and Moorhead State University are accredited by AACSB. ACBSP standards: https://acbsp.org/page/accreditation-standards

8. What program accreditation is available, if any?

Yes, the School of Business programs are accredited by the Accreditation Council for Business Schools and Programs (ACBSP). We will seek accreditation for the B.S. in Analytics as well.

9. Will the proposed program pursue accreditation or certifications?

Yes

If no, why has the department elected not to pursue accreditation for the program?

N/A

Duplication and Competition

10. Do any related programs exist at other public universities in South Dakota?

A list of existing programs is available through the university websites and the RIS Reporting: Academic Reports Database. If there are no related programs within the Regental system, indicate ***none.***

Yes.
University of South Dakota, BS Business Analytics: https://catalog.usd.edu/preview_program.php?catoid=37&poid=8325
Dakota State University, BS Business Analytics: https://dsu.edu/programs/cis-business-analytics-bs.html
South Dakota State University, BS Data Science: https://www.sdstate.edu/programs/undergraduate/data-science-bs

A. If yes, defend the need for an additional program within the state, Include IPEDS enrollment data and additional data as needed.

The demand for a BS in Analytics is driven by rapid growth in both student interest and workforce need. Nationwide, completions in data science and analytics programs have increased by more than 700 percent in the past decade, a surge far outpacing the 9 percent growth across all degree fields [1]. In South Dakota, overall employment is projected to grow 7.7 percent from 2022 to 2032, with data scientists among the state's fastest-growing occupations [2] [3]. The state's data center employment alone has expanded by 179.4 percent since 2018, reflecting the expanding digital infrastructure and the corresponding need for skilled analytics professionals [4]. Current job postings show more than 160 openings in South Dakota, including opportunities in Aberdeen, with salaries for analytics positions averaging over $82,000 and reaching as high as $135,000 in Sioux Falls [5] [6]. Nationally, data science employment is projected to grow 41.9 percent through 2031 [7], underscoring the strength and durability of this career field. This program will position Northern graduates to meet this demand and contribute to the state's economic growth.

[1] Encoura, 2023, https://encoura.org/resources/wake-up-call/the-...
[2] South Dakota Department of Labor and Regulation, 2024, https://dlr.sd.gov/lmic/lb/2024/lbart_sept2024_...
[3] Sioux Falls. Business, 2024, https://siouxfalls.business/what-are-the-states...
[4] Axios, 2025, https://www.axios.com/2025/01/24/data-center-jo...
[5] Indeed, 2025, https://www.indeed.com/q-data-analytics-l-south...
[6] ZipRecruiter, 2025 https://www.ziprecruiter.com/Salaries/Data-Anal...
[7] U.S. Bureau of Labor Statistics, 2024, https://www.bls.gov/ooh/math/data-scientists.htm

B. If yes, would this program be a candidate for Regental system collaboration?

Upper-level electives will be developed in collaboration with faculty from business, Sports Sciences, mathematics, and management information systems to provide advanced, industry-relevant skills in areas such as predictive modeling, business intelligence, and analytics. Partnerships with area businesses will offer students applied projects and internships that integrate classroom learning with real-world problem solving.

11. Do any related programs exist at any non-Regental college or university within 150 miles of the university?

List those programs here:

University of Jamestown: Certificate: Digital Marketing and Analytics Certificate. https://accelerated.uj.edu/academics/programs/digital-marketing-analytics/

A. If yes, use IPEDS to identify the enrollment in those programs.

There are no universities within 150 miles of NSU that offer a BS in Analytics.

B. What evidence suggests there is unmet student demand for the proposed program, or that the proposed program would attract students away from the existing program?

There are no universities within 150 miles of NSU that offer a BS in Analytics.

Market Demand

This section establishes the market demand for the proposed program (eg Regental system need, institutional need, workforce need). Use the following sources for your data:

- South Dakota Department of Labor & Regulation
- O-Net
- US Department of Labor Projections Central
- SDBOR Workforce and Degree Gap Analysis Report

12. What is the expected growth of the industry or occupation in South Dakota and nationally?

Include the number of openings, as well as the percentage of growth when possible.

According to the SD Department of Labor, Data Scientists are number three in the list of the Top 10 Fastest-Growing Occupations to 2032. “New to the fastest grower list, data scientists are expected to analyze, graph, and project their way into the third fastest occupational growth rate for the 2022 to 2032 projections cycle, increasing at almost 41%. This is a good example of a relatively small occupation that will see significant growth and notoriety over the next 10 years. As the amount of data and the need to analyze that data continues to increase, this emerging occupation will become more commonplace in South Dakota. This occupation is also number three on the nation’s fastest-growing list (expected to see a 35% increase) during the same period.” [8]

The BS Analytics will prepare students to contribute in multiple fields, including [9]:

- Data Analysts/ Operations Analysts: Expected growth of about 8-10% between 2020 and 2030.
- Financial Analysts: Projected to grow by about 9%.
- Management Analysts / Consultants: Expected to grow by 13%.
- Marketing Analysts: Among the highest growth in the business sector, with a projection of 27-30% growth.

[8] SD e-labor Bulletin https://dlr.sd.gov/lmic/lb/2024/lbart_sept2024_occ_projections_fastest_growing.aspx

[9] U.S. Bureau of Labor Statistics. https://www.bls.gov/emp/tables/occupational-projections-and-characteristics.htm

13. What evidence, if any, suggests there are unfilled openings in South Dakota or nationally?

- Data Analysts/ Operations Analysts: Estimated average of about 50-70 annual openings statewide.
- Financial Analysts: Estimated 60 annual openings across South Dakota
- Management Analysts / Consultants: Expected 100 job openings per year, making this one of the fastest-growing business fields in the state.
- Marketing Analysts: Estimated 40 annual openings.

[10] SD Department of Labor and Regulation. https://dlr.sd.gov/lmic/lb/2022/lbart_sept22_occupational_projections_2020_2030.aspx

14. What salaries can program graduates expect to earn in South Dakota and nationally?

- Data Analysts/ Data Scientists: Median Salary in United States, 2024: $112,590. Average salary in SD is $44.45 hourly.
- Financial Analysts: Median Salary in United States, 2024: $109,910. No data for SD.
- Management Analysts / Consultants: Median Salary in United States, 2024: $101,190. Average salary in SD is $41.54 hourly.
- Marketing Analysts: Median Salary in United States, 2024: $76,950. Average salary in SD is $33.25 hourly.

[11] U.S. Bureau of Labor Statistics, Occupational Outlook Handbook. https://www.bls.gov/ooh/

[12] SD Department of Labor and Regulation. LMI Data. https://dlr.sd.gov/lmic/menu_occupational_wages.aspx

15. Optional: Provide any additional evidence of regional demand for the program.

e.g. prospective student interest survey data, letters of support from employers, community needs...

To come

Student Demand

16. Provide evidence of student completers/graduates at that degree level at peer institutions that offer the same/similar program using data obtained from IPEDS.

Choose programs not already listed in question 11. Use the most recent year available.

University Name	State	Program Name	Number of Degrees Conferred in Program	Total Number of Conferrals at Level (Undergrad or Grad)
Northwest Missouri State	MO : Missouri	Data Science	1	1074
Truman State University	MO : Missouri	Data Science	0	800
Minnesota State University Moorhead	MN : Minnesota	Business Analytics	4	996

17. What evidence suggests there is interest from prospective students for this program at the university?

During the Spring 2024 semester, Analytics II was offered as a topics course, and 13 students chose to take this course as an elective. Eleven of the students were undergraduate students, and two were graduate students. Data science and data analytics programs are growing in popularity across the United States in direct response to workforce demand. “The National Center for Education Statistics reported a recent 968 percent jump in data science bachelor’s degrees awarded, from 84 in 2020 to 897 in 2022. The job market also shows increasing demand for data science skills, with the Department of Labor projecting 36 percent growth in jobs for data scientists over the next decade, outpacing statisticians, logisticians and research analysts.”

[13] Inside Higher Education. https://www.insidehighered.com/news/tech-innovation/teaching-learning/2024/01/25/data-science-major-takes-across-college-campuses

Enrollment

18. Are students enrolling in this program expected to be new to the university or redirected from existing programs at the university?

Include the number of openings, as well as the percentage of growth when possible.

Students are expected to be new to Northern State University. We may see a few current students switch to the analytics major from other majors on campus.

19. Narrative Description of the preliminary estimates on annual enrollment in this program by year six

Include all students within the program, not just those new to the program.

We expect to have 25 students majoring in analytics in year six. We hope to have 5 graduates in that time as well.