New Academic Degree Program
Full Proposal Application
South Dakota Board of Regents
Academic Affairs Forms

Internal Ticket ID: 30020
Created: 10/17/2025
Modified: 6/4/2026

Use this form to propose a new degree program. 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 Academic Officer (through the online submission process).

Note: Within the proposal, all references to external sources should be documented with a footnote (including web addresses where applicable).

University NSU - Northern State University
Degree AS : Associate of Science
Name of Major X999 : New Major Requested **Radiologic Technology**
Specialization Required? No
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 5A : NSU College of Arts & Sciences/NNUR : Nursing
Planned CIP Code 51.0911
WICHE WRRGP Eligibility

Program Description

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

The Associate of Science (AS) in Radiologic Technology program provides students with the technical knowledge, clinical experience, and professional preparation necessary for entry-level positions in diagnostic imaging.

This program combines rigorous coursework in anatomy, physiology, patient care, and radiation physics with hands-on clinical training in affiliated healthcare facilities. Students learn to safely produce diagnostic images, apply radiation protection standards, and communicate effectively as members of the healthcare team.

Graduates of the program are prepared to sit for the national certification examination offered by the American Registry of Radiologic Technologists (ARRT) and pursue licensure required for professional practice. The degree also provides a strong foundation for students who wish to continue their studies toward a bachelor's degree in related fields such as healthcare administration, public health, or advanced imaging modalities.

2. Does the university request any exceptions to any Board policy for this program?
Explain any requests for exceptions to Board Policy. If not requesting any exceptions, indicate ***"None."***

None

Strategic Impact

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

Mission Alignment:
Northern State University's mission is 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." The proposed AS in Radiologic Technology aligns closely with that mission. The program provides students with a strong foundation in professional education and prepares them for meaningful work in the healthcare field, which is essential to the health and growth of our region. By training students to deliver skilled and compassionate imaging care, the program supports Northern's commitment to developing graduates who contribute to their professions and to the communities they serve.

Strategic Plan and Academic Priorities:
This program fits directly within Northern's strategic priorities to expand access to professional and workforce-aligned programs, strengthen partnerships with healthcare providers, and meet high-need employment areas across the state. Healthcare consistently ranks among South Dakota's most critical workforce needs, and this program responds directly to that demand. It also reflects Northern's focus on connecting the liberal arts with professional preparation, helping students develop not only the technical skills needed for radiologic technology but also the communication, critical thinking, and ethical reasoning skills that make them effective healthcare professionals.

Program Array:
Within Northern's existing academic program array, the AS in Radiologic Technology complements programs such as Nursing, Biotechnology, and Biology and expands the university's offerings in the health sciences. The program strengthens Northern's ability to meet regional workforce needs by creating a direct, career-ready route into diagnostic imaging while maintaining the flexibility for those who wish to continue their studies toward a bachelor's degree. By adding Radiologic Technology, Northern broadens its role in preparing students for healthcare professions and reinforces its mission to serve the people and communities of northeastern South Dakota and the surrounding region.

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

N/A

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

Providing an Associate of Science degree in Radiologic Technology helps fulfill Goals 2 to 5 in the Board of Regents Strategic Plan.

Goal 2: A two-year degree that minimizes time and cost to students makes college education affordable and lays a foundation for access to further education. A compelling strategy to address access and affordability.

Goal 3: A two-year program that leans into certificates and other Board of Regents credentialing efforts creates an attainable, stackable educational journey. This ensures students are successful in completing their degree(s).

Goal 4: Creating a two-year program that addresses a workforce need helps ensure the Board of Regents is responsive to the demands of the health care field and facilitate economic viability of industry partners.

Goal 5: A two-year program in a critical need area where few programs exist helps the Board of Regents be efficient and effective in providing educational services to students. This helps improve financial health of the system and ensure viability of all six state universities.

Program Summary

5. 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

6. 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	Clinical sites - hospitals and clinics	Fall 2026

	Yes/No	Delivery Method(s)	Intended Start Date
Distance Delivery	Yes	HyFlex and Online	Fall 2026

	Yes/No	Identify Institutions
Does another BOR institution already have authorization to offer the program online?	Yes	USD offers the BS Radiologic Technology online with the radiologic technology courses taught at Avera or Sanford. SDSU has a AA or BS in Radiologic Technology in concert with Avera's School of Radiologic Technology.

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

Both / HyFlex

8. What are the student learning outcomes for this program?

1. Clinical Competence: Students will perform radiologic procedures safely and accurately. Position patients correctly and select appropriate technical factors to produce diagnostic-quality images. Apply radiation protection for patients, self, and public to ensure safety and health of all groups.
2. Cognitive Knowledge and Critical Thinking. Students will demonstrate mastery and knowledge of radiographic anatomy and positioning, radiation physics and imaging principles, exposure factors and image evaluation, radiation biology and protection, pathology and its impact on imaging, and equipment use and quality control. Analyze clinical situations and modify procedures for patient condition, trauma or pathology, and be able to solve imagining problems effectively and independently.
3. Communication Skills. Students will communicate effectively with patients, families, radiologists, nurses, physicians, and other members that are a part of the care team. Explain procedures clearly and compassionately and accurately document patient care.
4. Professionalism and Ethical Behavior: Students will demonstrate professional conduct and accountability, ethical behavior and integrity, respect for patient privacy (HIPAA), cultural sensitivity and patient advocacy, and adherence to the scope of practice and professional standards.
5. Radiation Safety. Students will demonstrate radiation safety, which is a distinct, required outcome where students must demonstrate safe equipment operation, protect patients and staff from unnecessary radiation, apply “as low as reasonably achievable” (ALARA) principles, and properly use shielding and exposure controls.

9. For associate's and bachelor's degree proposals, identify the 3-5 AAC&U Essential Learning Outcomes that have been selected for this program.

Use the chart below to indicate the student learning outcomes that align to the selected ELOs (See BOR Policy 2.11 and Guideline 8.5).

Essential Learning Outcomes (AAC&U)	Student Learning Outcomes
Inquiry and Analysis	Radiation Safety
Critical and Creative Thinking	
Information Literacy	Clinical Competence
Teamwork	Communication Skills
Problem Solving	Cognitive Knowledge and Critical Thinking
Civic Knowledge and Engagement	
Intercultural Knowledge	
Ethical Reasoning	Professionalism and Ethical Behavior
Foundational Lifelong Learning Skills	
Integrative Learning	

10. Enter the number of credit hours required to graduate

Credit Hours	84

11.Complete the following tables to provide a degree program curriculum summary.

A. Table 1 –Total Program Degree Credit Hours

	Credit Hours In Program	
	Hours Per Requirement	**%Total Hours**
System General Education Requirements	25	
Subtotal - Gen Ed Requirements	25	%
Program Requirements		
Required Support Courses	7	
Major Requirements	52	
Major Electives		
Subtotal - Program Requirements	59	%
Free Electives	0	
Subtotal - Free Electives	0	%
Degree Total	84	%

**Board Policy 2:29 requires each baccalaureate level degree program to require 120 credit hours and each associate degree program to require 60 credit hours. Exceptions to this policy require documentation that programs must comply with specific standards established by external accreditation, licensure, or regulatory bodies or for other compelling reasons, and must receive approval by the Executive Director in consultation with the President of the Board of Regents.*

B. Table 2 – Insert Required Program Support Courses Impacting Other Programs (outside department). Do not include General Education courses.

*The individual curriculum tables should be included as a word document **attached** to the TDX ticket.*

C. Table 3 – Insert Major Requirements (within department)

*The individual curriculum tables should be included as a word document **attached** to the TDX ticket.*

D. Table 4 – Insert Major Electives

*The individual curriculum tables should be included as a word document **attached** to the TDX ticket.*

12. New Course Approval

New courses required to implement the new degree program may receive approval in conjunction with program approval or receive approval separately. Please check the appropriate statement:

Yes

Academic Quality

13. What peer institutions and current national standards will be referenced to develop the curriculum for this program?

Peer Institution: Regional and Competitive institutions. Include links to at least 3 comparable programs at peer institutions and links to national or accreditation standards, if any.

Fort Hayes State University (peer) - Fort Hayes State has a well-established associate degree program at a regional public university in Kansas. [1]

Mitchell Technical College (non-peer) – Mitchell Technical College is the only associate degree program in the region that offers a stand alone, two-year degree program to allow students to attain expertise in operating X-ray, MRI, or CT machines to create images for diagnosis and/or treatment. [2]

JRCERT – Joint Review Committee on education in Radiologic Technology. Standards, fees, resources, and information related to Radiologic Technology will be followed according to guidelines and information available on the JRCERT website. Program Faculty at Clinical settings will be identified and solidified.

[1] https://www.fhsu.edu/alliedhealth/academic-programs/asdegree/
[2] https://www.mitchelltech.edu/programs/radiologic-technology
[3] http://www.jrcert.org.

14. What program accreditation is available, if any?

JRCERT – Joint Review Committee on education in Radiologic Technology. The United States Department of Education (USDOE) recognizes the JRCERT as the only agency for the accreditation of traditional and distance delivery educational programs in radiography, radiation therapy, magnetic resonance, and medical dosimetry.

15. 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

16. Did the university engage any developmental consultants to assist with the development of the curriculum? Did the university consult any professional or accrediting associations during the development of the curriculum? What were the contributions of the consultants and associations to the development of the curriculum?

Developmental consultants are experts in the discipline hired by the university to assist with the development of a new program, including content, courses, and experiences, etc. Universities are encouraged to discuss the selection of developmental consultants with Board staff.

No consultants were utilized. We used existing programs to identify coursework, and aligned courses with student learning outcomes and accreditation requirements.

17. Inclusion of High Impact Practices (HIP) across all undergraduate programs is a strategic priority of the Board of Regents to enhance academic quality and increase student engagement. For associate's and bachelor's degree proposals, which HIPs will faculty embed into the program?

Mark all that apply. To be considered as a HIP program, two or more should be selected and required in the program.

High Impact Practices	Included
Capstone courses and projects	Yes
Collaborative assignments and projects	Yes
Common intellectual experiences	Yes

High Impact Practices	Included
Diversity/global learning	Yes
ePortfolios	No
First year experiences	Yes
Internships	Yes
Learning communities	No
Service learning, community-based learning	Yes
Writing intensive courses	Yes
Undergraduate research	No

18. For associate's and bachelor's degree proposals, discuss how HIPs will be embedded into the program

Your discussion should provide examples and include whether the HIP is required or an optional component. It should also indicate at what point the experience is offered or required. (eg "students will be required to participate in an internship during their third year of enrollment in order to develop skills in…").

The radiologic technology program is built around practical experiences. All clinical courses embed strategies that are High Impact Practices (HIPs). These courses include Radiologic Science Clinical I, II, III, IV, V, and VI.

Students receive HIPs as a part of their course load, starting in their first semester of their education. HIPs remain prevalent in the core curriculum until their final semester of their educational journey.

Learning outcomes centered on "analyze" and "assess" lean into HIPs, thus the students will learn techniques where critical thinking and independent thought are the norm. Learning outcomes #1 and #2, as defined in question 8, specifically focus on assessment and analyses. Courses linked to these inherently implement HIPs, and these include:

* Radiologic Science Ethics and Patient Care
* Image Formation, Processing & Display
* Image Analysis and Quality Improvement

Student Success

This section outlines the university's plan to assess student achievement of the program learning outcomes.

19. Complete the table below to provide evidence of a preliminary assessment plan. Place an asterisk next to assessments that are national or state-level instruments.

Note: It is only necessary to indicate the summative assessment for each outcome, not the formative assessments used throughout the program.

Program Learning Outcome	Course	Summative Assessment
Clinical Competence	Radiologic Science Clinical VI	Final Observation and Exam
Cognitive Knowledge and Critical Thinking	Image Analysis and Quality Improvement	Final Exam
Communication Skills	Radiologic Science Seminar	Presentation
Professionalism and Ethnical Behavior	Radiologic Science Ethics and Patient Care	Written Evaluation
Radiation Safety	Radiobiology and Radiation Protection	FInal Observation and Exam

20. How will outcomes for graduates of the program be assessed?

Outcomes may include employment and placement rates, licensure examination pass rates, acceptance rates to graduate school, student or employer surveys, or other assessments of graduate outcomes.

The outcomes of this program will be determined by first-time pass rate on the ARRT (American Registry of Radiologic Technologists) certification exam. This outcome is important to determine student understanding but also for program accreditation and state licensure. We will also look at the percentage of students who start and successfully complete the program within the expected time frame.

Duplication and Competition

21. 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.***

USD offers the BS Radiologic Technology online with the radiologic technology courses taught at Avera or Sanford.

SDSU has a AA or BS in Radiologic Technology in concert with Avera's School of Radiologic Technology.

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

Meetings with workforce development leaders at Avera, Sanford, and Monument revealed high demand for radiologic technologists in the state and especially in northeastern South Dakota.

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

No because the clinical sites have to be coordinated by one specific program.

22. Do any related programs exist at any non-Regental college or university within 150 miles of the university?
List those programs here:

Yes, the University of Jamestown offers a degree in Radiologic Technology.

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

University of Jamestown does not list a Radiologicial Technology degree in its reported graduates on College Navigator (IPEDS), and neither does South Dakota State University. This is because the certification in radiologic technology comes from the program at Sanford, Avera, or another medical partner. Graduates are likely listed with a general studies associate or bachelor's degree.

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?

Students who enroll in Northern's gateway to health sciences certificate while in high school or in Northern's pre-nursing program as degree-seeking undergraduates are expressing an interest in health professions. Northern's AS in radiologic technology will provide students in health professions and pre-nursing programs another opportunity for a career in a health profession. Students can complete the degree in a shorter timeframe and enter a high demand field quickly.

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

23. 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.

Approximately, 569 jobs are expected in 2026 in South Dakota, 16% above the national average. In addition, among Radiologic Technologists jobs are expected to grow 3.9% in South Dakota, with a 6.3% growth on the national level, from 2026-2035. In December 2025, there were 25 unique postings - Sanford and Avera were the top companies posting positions. [4]
[4] LightCast

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

see above.

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

The median earnings is $65,400/year for South Dakota. Nationally, the median is $33/hour or $68,640. [5]

[5] LightCast

26. 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...

Northern had conversations with Monument Health, Sanford Health, and Avera Health regarding need in Radiologic Technology. All facilities said there was need with minimal educational opportunities for students. Each supported Northern State University's efforts to create an associate degree to meet the demands, suggesting their facility as a clinical site.

Student Demand

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

Peer Institution: Regional and Competitive institutions. 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)
Fort Hays State University	KS : Kansas	AS in Radiologic Technology	35	78
Mitchell Technical Institute	SD : South Dakota	AAS Radiologic Technology	25	350
St. Catherine's University	MN : Minnesota	AAS Radiography	25	167

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

With the exponential growth in Northern's Nursing program, up to 105 pre-nursing and nursing students in a matter of 1.5 years, there is a need to continue to support additional pathways for students pursuing something in the health care field. Educational pathways, like Radiologic Technology, provide an opportunity to students in case nursing is not feasible based on time, money, or academics for students. Radiologic Technology meets an area of high workforce demand for students who want to minimize cost yet obtain a degree in an area of critical need.

Enrollment

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

We expect both new and redirected students. In the first years, approximately, five students will be existing students at Northern State University, while 20 will be new students to the university.

30. Complete the enrollment worksheet to provide an enrollment projection for the next six academic years

Worksheet Completed	Yes

31. What is the minimum number of students required in this program to break even, with respect to the budget?

26

32. Discuss the assumptions informing your enrollment estimates.
(e.g. current enrollment and trends in similar programs, IPEDS data, recruitment strategies, partnerships)

These projections are based on the following data/information:
- Regional workforce demand (e.g., projections from the U.S. Bureau of Labor Statistics and impacts of COVID-19)
- Clinical placement capacity (availability of sites and preceptors)
- Program capacity and resources (faculty, labs, accreditation limits by JRCERT)
- Historical yield and retention rates
- Competitive landscape (other regional programs)
- Recruitment pipeline (feeder schools and outreach effectiveness)

33. If projected program enrollment is not realized in year two, what actions is the university prepared to take?

The university plans to seek external resources, whether through donation, grant funding or other such sources, to support health care at Northern. These resources could provide scholarships for students and financial support for the degree program.

34. Discuss the marketing and recruitment plan for the program
Include information on partnerships and pipelines (e.g. articulation agreements with BOTE, collaboration with partner university, community partnerships).

NSU will partner with Avera, Sanford, and other area hospitals and clinics to promote the AS Radiologic Technology degree. We will work with high school dual credit students who are interested in the gateway certificate in health sciences. We will recruit for the AS Radiologic Technology at events attracting high school students interested in health sciences careers, and we will work with area high school counselors to make our degree offering known to them.
Additionally, we will promote the AS Radiologic Technology degree to adult learners interested in careers in health sciences and who have either not started college or are some college/no degree.

Financial Health

35. Complete the budget worksheet to provide a budget projection for the next six academic years.

Worksheet Completed	Yes

Financial Health Summary						
	1st FYxx	2nd FYxx	3rd FYxx	4th FYxx	5th FYxx	6th FYxx
Tuition & Fee Revenues	77794	272278	379244	680695	816834	816834
Program Expenses	325832	373278	373273	378491	386442	394631
NET	-248038	-101000	5971	302204	430392	422203
Other Supporting Revenues						
NET (Other)	-248038	-101000	5971	302204	430392	422203

36.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 and software, other operation and maintenance expenses, facilities, etc., needed to implement the proposed major.

Address off-campus or distance delivery separately.

Initial costs incurred in the first two years of the program will average $350,000 each year. By the third year, it is expected that revenue will begin to be generated. Costs incurred include personnel, equipment use and supplies. Accreditation approval is necessary before full launch of the program.

37. If new faculty are not requested, describe how existing faculty will be utilized and indicate whether this action will impact other existing programs.

N/A Existing faculty will teach general education courses, and we may need to expand numbers of sections in the science-related courses to accomodate the students.

38. Is the university requesting or intending to request permission for a new fee or to attach an existing fee to the program?.

Requesting Permission for Fee?	Yes, new fee
Explanation	Yes, we will request a new fee to match that of the RESP prefix. Radiologic Technology programs require clinical and didactic training. Fees help cover the costs of these practical experiences, which tend to be a bit higher than other disciplines due to the nature of active learning experiences.

39. Use the table below to describe potential risks to the program's implementation over the next four years.

For each risk, identify the severity (low, medium, high), probability of occurrence (low, medium, high) and the institution's mitigation strategy for each risk.

Risk	Severity	Probability	Mitigation Strategy
Enrollment	Low	Low	marketing and recruitment
Initial Cost	Medium	Medium	external funding sources

External Review

40. If this proposal is for a graduate program, provide information below for at least five potential consultants who may be considered to conduct the external review.

Reviewer Name	Title	Institution
/		
/		
/		
/		
/		

Additional Information

41. (Optional) Use this space to provide pertinent information not requested above that may assist the Board in understanding the proposal.

Approvals

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.*

President of the University	Date
	1/1/1970

Academic Affairs, Provost	Date
	1/1/1970

Finance and Administration, Vice President	Date
	5/27/2026

Veronica Paulson

Enrollment Management, Vice President	Date
	5/27/2026

Eric D. Kline

SOUTH DAKOTA BOARD OF REGENTS
ACADEMIC AFFAIRS FORMS
Proposed Curriculum Summary

UNIVERSITY:	Northern State University
PROPOSED PROGRAM:	**Radiologic Technology**

Required General Education Courses Specific to Major
(Please list if any general education courses are required for the proposed major. If not, leave blank.)

Prefix	**Number**	**Course Title** *(add or delete rows as needed)*	**General Education Goal**
CHEM	106/106L or 112/112L	Chemistry Survey or General Chemistry	6
BIOL	220/220L	Anatomy and Physiology I and Lab	6

Required Support Courses Outside the Major
(Not general education requirements)

Prefix	**Number**	**Course Title** *(add or delete rows as needed)*	**Credit Hours**	**New (yes, no)**
NURS	285	Medical Terminology	3	no
BIOL	230/230L	Anatomy and Physiology II and Lab	3	no
BIOL	230L	Anatomy and Physiology II Lab	1	no
		Subtotal	7	

Major Requirements

Prefix	**Number**	**Course Title** *(add or delete rows as needed)*	**Credit Hours**	**New (yes, no)**
RADI	101	Fundamentals of Radiologic Science	3	Yes
RADI	201	Radiologic Science Procedures I	3	Yes
RADI	203	Radiologic Science Procedures II	3	Yes
RADI	205	Radiologic Science Procedures III	3	Yes
RADI	207	Radiologic Science Procedures IV- WI	3	Yes
RADI	209	Radiologic Science Ethics and Patient Care	3	Yes
RADI	211	Radiologic Science Clinical I	3	Yes
RADI	213	Radiologic Science Clinical II	3	Yes
RADI	215	Radiologic Science Clinical III	3	Yes
RADI	217	Radiologic Science Clinical IV	3	Yes
RADI	219	Radiologic Science Clinical V	3	Yes
RADI	221	Radiologic Science Clinical VI	3	Yes
RADI	251	Image Formation, Processing & Display	3	Yes
RADI	253	Image Analysis and Quality Improvement	3	Yes
RADI	255	Radiobiology and Radiation Protection	3	Yes
RADI	257	Radiographic Pathology	3	Yes
RADI	259	Radiation Physics	2	Yes
RADI	290	Radiologic Science Seminar	2	Yes

52	

Major Electives: List courses available as electives in the program. Indicate any proposed new courses added specifically for the major.
Select __ credits from the following list: