



Radiologic technologists, also known as radiographers, typically do the following:

- Adjust and maintain imaging equipment
- Precisely follow orders from physicians on what areas of the body to image
- Prepare patients for procedures, including taking a medical history and answering questions about the procedure
- Protect the patient by shielding exposed areas that do not need to be imaged
- Position the patient and the equipment in the location needed to get the correct image
- Operate the computerized equipment to take the images
- Work with radiologists reading the images to determine whether other images need to be taken

Healthcare professionals use many types of diagnostic equipment to diagnose patients. Radiologic technologists specialize in diagnostic radiology, computed tomography (CT), magnetic resonance imaging (MRI), ultrasound mammography, diagnostic medical sonography, cardiovascular sonography, nuclear medicine and several others. (*Occup. Outlook Handbook*)

The following pre-radiologic technology program will satisfy the requirements for admission to both the Department of Clinical, Diagnostic and Therapeutic Sciences at the University of Nebraska Medical Center (UNMC) and other affiliated professional training programs (see below). Students should check with the specific schools of radiologic technology to which they intend to apply to ensure that requirements are fulfilled. Admission to the professional portion of the program is competitive and is not automatically assured by successful completion of pre-radiologic technology courses.

A. Requirements:

Take all of the following:

BIOL 225	Anatomy and Physiology	4
BIOL 226	Anatomy and Physiology	4
BIOL 325	Medical Terminology	1
ENG 101	Introduction to Academic Writing	3
ENG 102	Academic Writing and Research	3
MATH 102**	College Algebra	3
PSY 203	General Psychology	3
SPCH 100	Fundamentals of Speech Communication	3
STAT 241	Elementary Statistics	3

Take one of the following courses:

CHEM 145	Introductory Chemistry	4
CHEM 148	Introductory Chemistry for the Health Sciences	4
CHEM 160	General Chemistry	4

Take one of the following courses:

PHYS 205	General Physics	5
PHYS 203	Physics for Allied Health	4

B. Program Options: Please see advisor for additional information and to discuss these options.

For Option 1 below: For the specific list of UNMC requirements, please see: [UNMC Requirements](#)

For Option 2 below: Students pursuing a bachelor’s degree from UNK in Applied Health Sciences must complete the remainder of the General Studies requirements and additional elective hours to reach a minimum total of 70 credit hours as part of the pre-radiography program. While in professional clinical training, students must take **HSCI 475 – Internship in Health Sciences: Radiography, 5 credit hours**, every semester of clinical training for a total of 25 credit hours.

C. Professional Training in Radiography

Upon completion of the required coursework, students will apply for a position in a two-year professional training program. Students have two options for professional training.

Option 1: Students may apply to the Department of Clinical, Diagnostic and Therapeutic Sciences at the University of Nebraska Medical Center. If accepted, they will receive a Bachelor's Degree from UNMC following completion of the program. Accepted students will be assigned to a UNMC clinical training site. The options include Kearney, Omaha, and Columbus locations. UNMC offers a 1+2 program, as well as early admission to the post-primary specializations. For more information, please contact UNMC or visit the website:

Program Director: Tammy Webster, PhD, MPA, RT(R)(M) Phone: 402 559-3846 Email: tammy.webster@unmc.edu

Website: <https://www.unmc.edu/alliedhealth/education/rt/index.html>

Option 2: Students may also apply to an affiliated hospital-based clinical training program. The University of Nebraska at Kearney is currently affiliated with five schools of radiography. These include Mary Lanning Hospital in Hastings; CHI Health in Omaha; Regional West Medical Center in Scottsbluff; Sanford Medical Center in Sioux Falls, SD; and Avera Sacred Heart Hospital in Yankton, SD. Students interested in the Bachelor's Degree in Applied Health Sciences may be **awarded 25 hours of credit upon completion of the clinical training program**. Students attending an affiliated hospital program are required to register for HSCI 475 every semester during clinical training as stated above.

Academic Guidelines

While no minimum GPA is required for most professional training programs in radiography, students who are successful in gaining admission to a professional training program typically have at least a 3.0 cumulative GPA. However, a higher GPA is preferred and will result in the student being a more competitive applicant. Each required course must be passed with a grade of “C” or better. A grade of “C-” will not be accepted by some programs.

Students searching for electives outside their major requirements should consider courses from the following areas: biology, chemistry, mathematics, sociology, psychology, business administration, healthcare management, and healthcare economics. See your advisor for suggestions. Students should be aware of prerequisites on all courses and plan their coursework accordingly.

Non-Academic Guidelines

There is no magic formula for acceptance in to professional training. Admission is based on GPA, test scores if required, shadowing and medical experiences, community involvement and volunteerism, leadership qualities, the interview, an essay, and letters of recommendation/list of references. All radiography students are strongly encouraged to shadow radiography. For some programs, a minimum of 20 hours of radiography shadowing is required in order to apply. For these programs, the hours must be documented and students may use the Shadowing Documentation Form located on the Health Sciences website. Please see your advisor for more information on shadowing. Health Sciences offers opportunities to meet these non-academic guidelines through the Shadowing Program, the Health Science Club, and volunteer experiences. Students should plan to be involved in these types of activities and experiences throughout their undergraduate career. Other important non-academic factors include good moral character, excellent interpersonal skills, a deep commitment to healthcare, evidence of leadership potential and service to others.

The Application Process

The applications to the professional training programs are available directly from each program. The applications can be accessed directly through the program's website. The applications should be completed during the fall semester of the student's last year of coursework at UNK. Most applications are due early in the spring semester and the application/interview process is typically complete by April.

Entrance Examination Requirement

A few radiography programs require an entrance examination, such as the HOBET test. These tests are given by the programs themselves early in the spring semester. Students should check the websites of the programs they are applying to in order to determine if a test is required.

Letters of Evaluation/Recommendation

Letters of evaluation or a list of references will be required of applicants. If letters are required, letters from a faculty member, health care practitioner, academic advisor, or employer would be appropriate.

Interviews

Most programs screen applicants with some form of personal interview. The format of the interview may vary depending on the programs to which the student is applying.

Criminal Background Checks

Prerequisite for enrollment into any health science professional program or professional training is consent for an external background check. This check includes, but is not limited to, past criminal offenses and registry information. If there is evidence of arrest for a crime(s), conviction for a crime(s), presence on an abuse registry, or other information which reasonably suggests that patient safety might be compromised, the student will be asked to provide additional information.

Citizenship/International Students

Professional schools in the health sciences vary as to whether they accept non-U.S. citizens. Some programs that do accept non-citizens require a substantial financial commitment up front. Since not all programs accept non-citizens and since the financial commitment of those that do may be substantial, students should thoroughly research and carefully consider such a decision and discuss it with their pre-health advisors early in their undergraduate years.

Websites

Rad Tech – Occupational Outlook
UNK Health Sciences

www.bls.gov/ooh/Healthcare/Radiologic-technologists.htm#tab-1
www.unk.edu/healthsciences

Suggested Sequence of Key Courses

Year 1 of the following sequence will satisfy the requirements for the 1+2 program at UNMC. For the specific list of UNMC requirements, please visit: [UNMC Requirements](#). Following this sequence as outlined will ensure eligibility for all radiography programs, including all affiliated hospital-based programs.

	Fall	Spring
Year 1	CHEM 145, 148, or 160 (LOPER 8) BIOL 103 (for UNMC/Elective) MATH 102 (LOPER 4) ENG 101 (if needed) LOPER 1 17 credit hours	PHYS 203 or PHYS 205 STAT 241 ENG 102 (LOPER 2) SPCH 100 (LOPER 3) PSY 203 (LOPER 7) 17 credit hours
Year 2	BIOL 225 BIOL 325 Radiography Electives/GS Electives – 4 credits LOPER 5 LOPER 6 18 credit hours	BIOL 226 Radiography Electives/GS Electives – 8 credits LOPER 9 LOPER 10 18 credit hours
Year 3	Professional training at UNMC or in affiliated hospital-based radiography program. HSCI 475 – Students must register for this course every semester of professional training if in a hospital program.	Professional training at UNMC or in affiliated hospital-based radiography program. HSCI 475 if applicable
Year 4	Professional training at UNMC or in affiliated hospital-based radiography program. HSCI 475 if applicable	Professional training at UNMC or in affiliated hospital-based radiography program. HSCI 475 if applicable

- Students should be aware of prerequisites for courses and plan accordingly.
- A MATH ACT score of 20 is a pre-requisite for College Algebra (MATH 102).
- A MATH ACT score of 22 or prior completion of College Algebra (MATH 102) or higher is a pre-requisite for CHEM 160.
- A minimum MATH ACT score of 20 or prior completion of College Algebra (MATH 102) (Grade of B+ or better) or higher is required for entry into PHYS 205.

<u>Professional Programs at Affiliated Hospitals</u>	<u>Phone</u>	<u>Program Director</u>	<u>Applications</u>
Mary Lanning Healthcare - School of Radiologic Technology Hastings, NE	402-461-5170	Cristi Engel cengel@marylanning.org	Accepted Oct 1 - Jan 15
CHI Health - School of Radiologic Technology Omaha, NE	402-398-5527	Robert Hughes robert.hughes@alegent.org	Feb 1 Deadline
Regional West Medical Center - School of Radiologic Technology Scottsbluff, NE	308-630-1155	Stephanie Cannon stephanie.cannon@rwhs.org	Feb 1 Deadline
Sanford Medical Center - School of Radiologic Technology Sioux Falls, SD	605-333-7445	Candace McNamara candace.mcnamara@sandfordhealth.org	Jan 31 Deadline
Avera Sacred Heart Hospital - School of Radiologic Technology Yankton, SD	605-668-8158	Annessa VanOsdel anessa.vanosdel@avera.org	Jan 15 Deadline

Notes On Attending a Hospital-Based Professional Radiography Training Program

- **Required Course: HSCI 475:** If attending one of the affiliated hospital-based professional programs and planning to receive a degree from UNK, students are required to register each semester for a five credit hour course titled "Internship in Health Sciences" (HSCI 475). This course is required in order to complete graduation requirements and allow students to receive financial aid from UNK if necessary. The course is a credit/no credit course and students are given credit each semester as long as they are passing their professional program. In order to graduate, students are required to register for the course 5 times – fall and spring semesters of the first year of radiography school, the summer between the first and second year, and the fall and spring semesters of the second year for a total of 25 hours of internship credit. Students will be reminded each semester to register for HSCI

475. If all requirements are complete, students should apply for summer graduation by June of their final year of the professional to receive the Bachelor of Science in Applied Health Sciences Degree from UNK. All Pre-Rad Tech courses and General Studies courses must be complete to receive the degree.

- **Cost of Attendance:** The cost of attending an affiliated radiography program varies by program and can range anywhere from approximately \$3,000 - \$12,000 including the program's tuition, books, fees and uniforms. Housing costs are not included. The UNK tuition and fees for HSCI 475 have been waived.
- **Mode of Delivery:** A professional program in radiography includes both didactic coursework and hands-on training in a clinical setting. The didactic coursework will occur in a classroom setting, however, some of the content may be delivered electronically or via distance education. The hands-on training will occur in person in the clinical setting.

Post-Primary Specialization Opportunities

The University of Nebraska Medical Center offers specialization pathways in the following areas: CT, MRI, Cardiovascular Intervention Technology, Radiation Therapy, and Diagnostic Medical Sonography. Most of these programs are approximately an additional one year in length. For more information, please check the UNMC website at <https://www.unmc.edu/alliedhealth/education/rt/admission/index.html>

**Students pursuing a program of study in pre-radiologic technology are expected to choose a major so that they can be working towards a bachelor's degree concurrently with the pre-radiologic technology program. This requires a major/minor combination or a comprehensive major, as well as completion of the UNK general studies requirements and other degree requirements as set forth in the college catalog. This is encouraged to ensure that students have an alternative plan if not accepted to professional training.