### RADIATION THERAPY

**Degrees Offered**

Bachelor of Science in Medical Imaging & Therapeutic Sciences  
Post-Baccalaureate Professional Certificate in Radiation Therapy

**Length of Program**

The didactic component is composed of 40 semester hours and complies with the American Society of Radiologic Technology curriculum. Some of the courses in the curriculum include Treatment Planning, Patient Care, and Radiation Therapy Physics.

A UNMC radiation therapy student gains clinical experience by rotating through the following cancer centers:

- CHI Health - Bergan Mercy
- CHI Health - Immanuel
- CHI Health - Lakeside (Midwest Cancer Center)
- CHI Health - Saint Elizabeth Regional Medical Center
- Jennie Edmundson Hospital
- Nebraska Methodist Hospital
- Shenandoah Medical Center
- Southeast Nebraska Cancer Center
- Mary Lanning Medical Center
- Nebraska Medicine
- Nebraska Medicine Village Pointe Cancer Center

**Degree Requirements**

Required courses, totaling 40 semester hours, are completed as part of a 12-month curriculum. All required courses must be completed with a minimum passing grade of 70% unless specified otherwise in the syllabus to meet graduation requirements. A minimum total of 120 semester credit hours is required for the Bachelor of Science in Medical Imaging & Therapeutic Sciences degree, and completion of the 40 semester hours in radiation therapy for the Post-Baccalaureate Professional Certificate.

The UNMC radiation therapy program has a first time ARRT pass rate of over 99.9% and 100% pass rate over the last 20 years.

Radiation Therapy is a rewarding profession with ever-changing technology and extensive patient care. This career allows for a challenging work day as well as time for a personal life. If you feel you are a compassionate, motivated person who appreciates technical precision, this career may be for you.

**Technical standards** required to be a Radiation Therapist.

**Certification**

The American Registry of Radiologic Technologists (ARRT) is the credentialing organization that recognizes individuals qualified in the use of ionizing and non-ionizing radiation to promote high standards of patient care in diagnostic medical imaging, interventional procedures and therapeutic treatment. The ARRT tests and certifies therapists and administers continuing education and ethics requirements for their annual registration.

Upon completion of the Radiation Therapy program at UNMC, graduates are eligible to apply for the national examination for certification offered by the ARRT.

For more information about the ARRT and requirements for certification and registration please contact:

The American Registry of Radiologic Technologists (http://www.arrt.org/)  
1255 Northland Drive  
St. Paul, MN 55120-1155  
Phone: 651.687.0048

**About the Profession**

A radiation therapist is an integral part of the cancer care team that manages and cares for cancer patients and is responsible for simulation, daily treatments, and patient evaluation. Utilizing state-of-the-art technology and developing supportive bonds with patients and their families are truly rewarding aspects of this challenging career.

Radiation Therapy is a clinical specialty using high energy x-rays to treat different types of cancer and non-malignant conditions. Radiation therapy may be used alone or in conjunction with surgery and/or chemotherapy.

**Career Outlook**

The number of cancer patients in the United States is projected to increase due to the aging population. Approximately 60% of all cancer patients will receive radiation therapy as part of their course of treatment. Over the next decade, the need for certified radiation therapists is expected to increase.

Career opportunities available to certified radiation therapists include clinical patient care, administration, education, research, medical dosimetry, and equipment applications and sales.

**Admissions**

**Radiation Therapy**

**Admission Requirements**

1. Graduate from an accredited Radiography program. Students in their final months of study are eligible to apply.
2. Current certification by the ARRT (http://www.arrt.org/).
3. Undergraduate cumulative GPA of at least 2.5 on a 4.0 scale.
4. Radiography program GPA of at least 3.0 on a 4.0 scale.


Enrollment in the program is limited and competitive. The admissions committee is composed of program faculty and clinical staff.

For admittance into the Radiation Therapy program at UNMC, the technologist must have completed an accredited radiography program, be certified, registered, and in good standing in their profession (ARRT). Admission to the Radiation Therapy Program requires the applicant to successfully complete the following prior to matriculation:

**University / College Required Prerequisites**

Successful completion of 21 semester hours at an accredited college or university. The required semester hours must include the following:

- 8 semester hours of college-level chemistry, with a laboratory component.
- 5 semester hours of college-level physics, with a laboratory component.
- 5 semester hours of college-level English composition.
- 4 semester hours of college-level biology, with a laboratory component.
- 4 semester hours of college-level mathematics.

For additional requirements, please consult the CAHP Handbook (https://www.unmc.edu/cahphandbook/index.php/Admission_Policies_and_Procedures/).
Language/Social Sciences (9 semester hours)

- English Composition required
- Oral Communication required

Course work used to meet this requirement may include but is not limited to literature, composition, communication, speech, foreign language, philosophy, psychology, sociology, art, history, religion.

Mathematics (3 semester hours)

- College Algebra, Statistics, or higher mathematics

Natural Sciences (9 semester hours)

- College Physics required
- Human Anatomy & Physiology required

Course work used to meet this requirement may include, but is not limited to, anatomy, physiology, biology, chemistry, physics, or earth sciences.

*Advanced Placement:
A maximum of 6 College Level Examination Program (CLEP) or Advanced Placement (AP) semester hours will be accepted for transfer. CLEP semester hours in math and science will not be accepted & no more than 3 CLEP or AP hours of English Composition will be accepted.

All science courses must be basic science courses for science majors.

College prerequisites, course requirements, and program requirements are subject to change.

All required didactic and clinical courses must be completed with a minimum letter grade of C- or better to meet requirements for graduation from the program.

Clinical Environment

- Accepted students are guaranteed timely and appropriate clinical placement.
- Accepted students will be required to complete a background check and substance abuse testing prior to matriculation into the program.
  Depending on clinical site, additional requirements may need to be met or updated.

Get complete application details on How to Apply (https://www.unmc.edu/alliedhealth/education/rtt/admission/apply.html).

Application Deadline (https://www.unmc.edu/alliedhealth/education/deadlines.html)

Curriculum

The content of the Radiation Therapy curriculum follows the ASRT Radiation Therapy Professional Curriculum. The courses provide extensive didactic and clinical components to prepare the graduate for an exciting career in the field of radiation oncology.

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<tr>
<th>Fall</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>MITS 405T or MITS 605T</td>
<td>ORIENTATION TO RADIATION THERAPY</td>
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<td>MITS 408T or MITS 608T</td>
<td>RADIATION THERAPY PHYSICS</td>
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<tr>
<td>MITS 415T or MITS 615T</td>
<td>ONCOLOGY SECTIONAL ANATOMY &amp; PATHOLOGY I (Online)</td>
</tr>
<tr>
<td>MITS 425T or MITS 625T</td>
<td>CLINICAL ONCOLOGY II</td>
</tr>
<tr>
<td>MITS 435T or MITS 635T</td>
<td>TREATMENT PLANNING &amp; DELIVERY</td>
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<tr>
<td>MITS 439T or MITS 639T</td>
<td>RADIATION THERAPY CLINICAL EDUCATION II</td>
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<td>RADIATION THERAPY CLINICAL EDUCATION III</td>
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<tr>
<td>MITS 444T or MITS 644T</td>
<td>OPERATIONAL ISSUES IN ONCOLOGY</td>
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<td>MITS 445T or MITS 645T</td>
<td>REVIEW</td>
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| Total Credit Hours | 40 |