

Nuclear Medicine Technology, BS

Requirements

The Bachelor of Science with a major in nuclear medicine technology requires a minimum of 120 s.h. of credit. Work for the degree includes a set of courses that are prerequisite to entering the major, 60 s.h. of coursework in the major, and elective coursework sufficient to complete the minimum of 120 s.h. required for graduation. Registered nuclear medicine technologists interested in earning a Bachelor of Science degree by distance education should see the Radiation Sciences RT to BS (Online) section of the catalog.

Accepted students enter the professional program, the nuclear medicine technology major, and the Carver College of Medicine the following fall semester. Students must maintain a cumulative grade-point average (GPA) of at least 2.00 and a grade of C or higher in each course required for the major (60 s.h.). Upon completing the program successfully, they are granted a Bachelor of Science degree. Graduates are eligible to apply for the nuclear medicine technology national certification examinations.

The program strongly advises students entering the university to pursue a course of study that is applicable to another major, most commonly biochemistry, biology, chemistry, or microbiology, so that if they are not admitted to the Nuclear Medicine Technology Program, they still may complete a major and receive a bachelor's degree.

Students who have declared a nuclear medicine technology interest but have not yet applied and been accepted to the Carver College of Medicine major are advised by the University of Iowa Academic Advising Center. After they have been accepted to the nuclear medicine technology program, they are advised by the Radiation Sciences Office of Student Affairs.

The Bachelor of Science with a major in nuclear medicine technology requires the following work.

Prerequisites to the Nuclear Medicine Technology Major

Students must complete the following prerequisite courses and must have earned 60 s.h. of college credit with a cumulative GPA of at least 2.50 before they may enter the nuclear medicine technology major.

| Course # | Title | Hours |
|-----------------------------------|--|-------|
| Rhetoric | | |
| RHET:1030 | Rhetoric | 4-5 |
| Chemistry with Laboratory | | |
| CHEM:1110 | Principles of Chemistry I | 4 |
| Anatomy with Laboratory | | |
| One of these: | | |
| HHP:1100 & HHP:1110 | Human Anatomy - Human Anatomy Laboratory | 4 |
| HHP:3115 | Anatomy for Human Physiology with Lab | 5 |
| Physiology with Laboratory | | |
| One of these: | | |

| | | |
|---------------------|--|---|
| HHP:1300 & HHP:1310 | Fundamentals of Human Physiology - Human Physiology Laboratory | 4 |
| HHP:3500 & HHP:1310 | Human Physiology - Human Physiology Laboratory | 4 |
| HHP:3550 | Human Physiology with Laboratory | 5 |

Physics

| | | |
|---------------|-------------------|-----|
| One of these: | | |
| PHYS:1400 | Basic Physics | 3-4 |
| PHYS:1511 | College Physics I | 4 |

Psychology

| | | |
|----------|-----------------------|---|
| PSY:1001 | Elementary Psychology | 3 |
|----------|-----------------------|---|

Mathematics

| | | |
|---------------|---|---|
| One of these: | | |
| MATH:1020 | Elementary Functions | 4 |
| MATH:1440 | Mathematics for the Biological Sciences | 4 |

A more advanced mathematics course

Medical Terminology

| | | |
|-----------|-----------------------------------|---|
| CLSA:3750 | Medical and Technical Terminology | 2 |
|-----------|-----------------------------------|---|

Culture, Society, and the Arts

Students complete two courses for 3 s.h. each in two of these areas (total of 6 s.h.).

- Diversity and Inclusion.
- Historical Perspectives.
- International and Global Issues.
- Literary, Visual, and Performing Arts.
- Values and Culture.

See GE CLAS Core (College of Liberal Arts and Sciences) in the catalog for approved courses in the areas listed.

Coursework in the Major

Students admitted to the nuclear medicine technology major spend two years in a clinical curriculum that is organized in accordance with the Joint Review Committee on Educational Programs in Nuclear Medicine Technology (JRCNMT) Accreditation Standards for Nuclear Medicine Technologist Education. They complete coursework in the following areas: radiopharmacy, radiation safety and radiobiology, patient care, nuclear medicine and positron emission tomography (PET) procedures, radiation physics and instrumentation, administration and management, medical and professional ethics, research methodology, emotional intelligence, magnetic resonance imaging (MRI), and computed tomography (CT). Practical clinical rotations focus on nuclear medicine, PET and CT imaging, nuclear medicine therapy, clinical radiopharmacy, nuclear medicine computer applications, and quantification of radioactivity in vivo and in vitro.

Students must earn a grade of C or higher in each course required for the major.

| Course # | Title | Hours |
|-----------|---|-------|
| RSNM:3120 | Nuclear Medicine and PET Clinical Procedures I | 3 |
| RSNM:3121 | Nuclear Medicine Technology Clinical Internship I | 3 |

| | | |
|--------------------|--|-----------|
| RSNM:3131 | Radiopharmaceuticals | 3 |
| RSNM:3220 | Nuclear Medicine and PET Clinical Procedures II | 3 |
| RSNM:3221 | Nuclear Medicine Technology Clinical Internship II | 3 |
| RSNM:3231 | Nuclear Medicine Instrumentation | 3 |
| RSNM:3321 | Nuclear Medicine Technology Clinical Internship III | 4 |
| RSNM:4121 | Nuclear Medicine Technology Clinical Internship IV | 4 |
| RSNM:4221 | Nuclear Medicine Technology Clinical Internship V | 4 |
| RSNM:4222 | Nuclear Medicine Technology Capstone and Certification Exam Preparation | 6 |
| RSCT:4100 | Sectional Anatomy for Imaging Sciences | 3 |
| RSCT:4130 | Computed Tomography Physical Principles and QC | 4 |
| RSNM:3140 | Foundations in Nuclear Medicine and PET | 1 |
| RSNM:3320 | Foundations in Nuclear Medicine Instrumentation | 2 |
| RSP:2120 | Patient Care for the Radiation Sciences | 3 |
| RSP:3130 | Radiation Safety and Radiobiology | 2 |
| RSP:3210 | Medical Ethics and Law | 2 |
| RSP:3220 | Radiation Sciences Quality Management and Health Care Administration | 2 |
| RSP:4110 | Research Methodology for Radiation Sciences | 3 |
| RSRT:3220 | Emotional Intelligence for the Health Care Professional | 2 |
| Total Hours | | 60 |