

BACHELOR OF SCIENCE IN RADIATION SCIENCES/**BACHELOR OF SCIENCE IN NUCLEAR MEDICINE TECHNOLOGY**

PROSPECTIVE STUDENT GUIDE

**Diagnostic Medical Sonography****Radiologic Technology****Radiation Therapy****Nuclear Medicine Technology**

ABOUT RADIATION SCIENCES AND NUCLEAR MEDICINE TECHNOLOGY

The Radiation Sciences and Nuclear Medicine Technology Bachelor of Science degrees are undergraduate majors offered by the Carver College of Medicine. They encompass the medical imaging fields of radiologic technology, breast imaging, computed tomography, magnetic resonance imaging, cardiovascular interventional, diagnostic medical sonography, radiation therapy, nuclear medicine technology, and positron emission technology.

Radiation sciences and nuclear medicine professionals work with physicians to gather accurate patient information for diagnosis, treatment, and/or research of disease and injury. They provide direct patient care, produce quality images, and deliver treatment using a variety of radiation sources.

Pursuing these on-campus degrees as an undergraduate at Iowa allows students the opportunity to complete the mandatory competencies and courses to apply to take the national board exams required to practice professionally.

WHY IOWA?



LARGE IMPACT IN A SMALL CLASSROOM

The small class size allows hands-on learning experiences with modern technology and the opportunity for one-on-one faculty interactions.

PREPARE FOR YOUR FUTURE

Iowa's medical imaging majors offer multiple areas of study. Once accepted into a professional program, students learn theory and techniques through didactic, laboratory, and clinical experiences. Graduates are eligible to apply for national certification exams.

CAREERS

The career outlook for radiation sciences and nuclear medicine graduates is excellent. The majority of students are employed prior to graduation. Graduates generally find jobs in hospitals, clinics, and imaging centers. A BS degree is required for most radiology management, sales, applications, and education jobs. Median national salary: \$73-\$98K, depending on credentials.

THE BENEFITS OF AN ACADEMIC MEDICAL CENTER

The program is sponsored by the University of Iowa in cooperation with the university's Carver College of Medicine and the Department of Radiology. It is affiliated with University of Iowa Health Care, which includes one of the nation's largest public university teaching hospitals. These connections and the program's location on the University of Iowa health sciences campus provide a wealth of world-class resources and learning opportunities for students at Iowa's only Level I trauma center for both pediatric and adult patients.



APPLICATION AND ADMISSIONS



PREREQUISITES

Students who wish to enter one of the radiation sciences programs must first be admitted to the University of Iowa as College of Liberal Arts and Sciences (CLAS) students with a Radiation Sciences Interest and complete the prerequisite course work. A minimum overall cumulative GPA of 2.50 is required.



JOB SHADOWING

To understand and gain valuable insight into radiation sciences careers, students are strongly encouraged to job shadow radiation sciences professionals. Document the facility, contact person, hours, and activities when including job shadowing experiences on the application.



PATIENT CARE EXPERIENCE

Gain direct patient care experience to learn about the health care setting and patient communication skills. For example, students may choose to work as a certified CNA or volunteer with local hospitals, senior centers, disability camps, health care facilities, etc. Document the facility, contact person, hours, and activities when including patient care experiences on the application.



COMPETITIVE ADMISSION

Admission to the radiation sciences major is competitive and selective, and meeting the requirements for admission does not guarantee acceptance into a professional program or the major. Acceptance requires an application, an essay, and an interview. Previous hands-on patient care and job-shadowing experience are highly recommended.

APPLICATION AND SELECTION PROCESS


- 1. UNIVERSITY OF IOWA APPLICATION**
Apply to the College of Liberal Arts and Sciences, Radiation Sciences Interest. Transfer students: apply by November.
- 2. PROGRAM APPLICATION**
Apply by January 15 to the professional program/track of choice. This is a separate application for competitive selection.
- 3. APPLICATION REVIEW**
Program interviews are held in February. Offers are made in March.
- 4. FINISH COURSES**
Complete all prerequisites by June 1.
- 5. START PROGRAM**
All programs begin the following fall semester.

CONTACT INFORMATION

Radiation Sciences Office of Student Affairs
radiation-sciences@uiowa.edu
(319) 353-8388

 @RadSci

 @UIRadiationSciences

 @UIRadSci

 medicine.uiowa.edu/radsci



PREREQUISITES

The on-campus degrees in radiation sciences and nuclear medicine technology include prerequisites prior to entering the major, completion of one of nine professional programs, and elective coursework sufficient to complete the minimum of 120 semester hours (SH) required for graduation.

Prerequisite example plans:

THREE-YEAR TRACK (DMS AND RT MULTI-CREDENTIAL)

1 ST SEMESTER - FALL	SH
RHET:1030 Rhetoric	4
HHP:1400 Human Anatomy and Physiology or BIOL:1140 Human Biology*	3 - 4
MATH:1440 Math for Biological Sciences	4
UCP, IGI, HP, LVPA, or VS	3
RSP:1100 Introduction to Radiation Sciences**	1
Subtotal	15 - 16

Submit program application by Jan. 15.

2 ND SEMESTER - SPRING	SH
HHP:1100 Human Anatomy	3
HHP:1300 Human Physiology	3
PSY:1001 Elementary Psychology	3
CLSA:3750 Medical and Technical Terminology	2
UCP, IGI, HP, LVPA, or VS	3
Subtotal	14

3 RD SEMESTER - SUMMER	SH
PHYS:1400 Basic Physics ^ (DMS only)	3
Subtotal	3

*Most students will need to complete HHP:1400 or BIOL:1140 prior to Human Anatomy (based on academic strength).

**Strongly recommended.

^Physics for DMS program may be completed in the spring or summer semester. Summer is recommended if both Anatomy and Physiology are taken in the spring.

TWO-YEAR TRACK (THERAPY, NMT, AND RT)

1 ST SEMESTER - FALL 1	SH
RHET:1030 Rhetoric	4
HHP:1400 Human Anatomy and Physiology or BIOL:1140 Human Biology*	3 - 4
MATH:1440 Math for the Biological Sciences	4
UCP, IGI, HP, LVPA, or VS	3
RSP:1100 Introduction to Radiation Sciences**	1
Subtotal	15 - 16

2 ND SEMESTER - SPRING 1	SH
HHP:1100 Human Anatomy	3
HHP:1110 Human Anatomy Lab (NMT required)	1
PSY:1001 Elementary Psychology	3
CLSA:3750 Medical and Technical Terminology	2
UCP, IGI, HP, LVPA, or VS	3
Electives	3
Subtotal	15

*Most students will need to complete HHP:1400 or BIOL:1140 prior to Human Anatomy (based on academic strength)

**Required for two year RT, strongly recommended for remaining tracks

~NMT recommended

+Recommended electives

= Required for Therapy, NMT, and DMS; recommended for RT

1 ST SEMESTER - FALL 2	SH
CHEM:1110 Principles of Chem I (NMT required)	4
PHYS:1400 Basic Physics=	3
HHP: 1300 Human Physiology	3
HHP:1310 Human Physiology Lab (NMT required)	1
Electives	4
Subtotal	15

2 ND SEMESTER - SPRING 2	SH
CHEM:1120 Principles of Chemistry II~	4
STAT:1020 Elementary Statistics and Inference+	3
PSY:1010 Learning about Learning+	1
BAIS:1500 Business Computing Essentials+	2
Electives	5
Subtotal	15

Submit program application by Jan. 15.

PROFESSIONAL PROGRAMS

Three-year tracks:

- Diagnostic medical sonography (general and vascular or cardiac and vascular)
- Radiologic technology with breast imaging, cardiovascular imaging, computed tomography, or magnetic resonance imaging

Two-year tracks:

- Radiologic technology
- Radiation therapy
- Nuclear medicine technology