

# RADIATION SCIENCES

Radiation Sciences professionals provide specialized medical imaging and demonstrate strong patient care skills. Graduates primarily work in hospitals and clinics although positions in research, sales, education, applications, and administration are available.

## ADMISSIONS INFORMATION

All programs require the completion of prerequisite coursework.

Meeting admissions requirements does not guarantee acceptance to the professional program. Top candidates are invited to an on-campus interview. Each spring, the Selection Committees determine the most qualified candidates for the fall class.

### DIAGNOSTIC MEDICAL SONOGRAPHY

#### GENERAL VASCULAR AND CARDIAC VASCULAR

The Diagnostic Medical Sonographer (DMS) uses equipment producing high Frequency sound waves to create diagnostic images and data that help health care professionals diagnose patients with disease.

Ultrasound imaging is used on many parts of the body, including the abdomen, heart, blood vessels, and the developing fetus of a pregnant woman.

General Vascular track students study obstetrical, abdomen, and vascular systems with optional electives in pediatrics (children) and breast.

Cardiac Vascular (echocardiology) track students focus on the heart and the vascular systems.

Three-year curriculum.



### Applicant Tips

- Job shadow locally and at the University of Iowa Hospitals and Clinics
- Gain hands-on patient care experiences (CNA, patient transport, volunteer)
- Apply to Radiation Sciences program by January 15<sup>th</sup> of freshman or sophomore year in college

### Contact Us

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## RADIATION THERAPY

Radiation Therapists administer high doses of radiation to eradicate disease, primarily cancer.

The Radiation Therapist works as a member of the patient's care team consisting of a nurse, radiation oncologist, physicist, and medical dosimetrist to accurately and safely deliver a prescribed course of radiation therapy.

Radiation therapists are responsible for the formation of immobilization devices, daily treatment setup, and delivery of the patient's treatment utilizing various technologies to localize and target the treatment areas.

Two-year curriculum.



## RADIOLOGIC TECHNOLOGY

### CT, MRI, and CVI

Radiologic Technologists make up the third largest group of health care professionals. The primary responsibility is to create images of the human body using x-rays for diagnosis and treatment of the patient. This track is paired with a CT, MRI, or CVI professional program.

Computed Tomography (CT) scans patients using x-rays to produce detailed cross-sectional images.

Magnetic Resonance Imaging (MRI) utilizes a strong magnet and radio waves to produce cross-sectional images.

Cardiovascular Interventional (CVI) assists physicians with minimally invasive, x-ray guided procedures of heart and blood vessel diseases without surgery.

Three-year curriculum.



## NUCLEAR MEDICINE TECHNOLOGY

Nuclear Medicine Technology is a patient care medical imaging specialty using small amounts of radioactive material for diagnostic, therapeutic, and research purposes.

Procedures use radioactive materials to:

- Perform body function studies and organ imaging, including positron emission tomography (PET) and nuclear cardiology
- Analyze biologic specimens
- Treat disease

Organ imaging in patients requires the intravenous, oral administration, or inhalation of radiopharmaceuticals. When administered, they localize in a specific organ or organ system of the body. Although not used as frequently as diagnostic procedures, therapeutic doses can be administered to treat a specific disease.

Two-year curriculum.

