



Take a **Closer Look**

At Careers in
Radiologic Technology







Introduction

What makes a career in radiologic technology worth a closer look?

As a radiologic technologist, you'll be on the **cutting edge of modern medicine**, working with the latest technologies in patient care. You'll also be a member of a **growing profession**, as the number of medical imaging examinations and radiation therapy procedures increases in the U.S. every year. But most importantly, you'll be a **vital member of the patient care team**, providing the care that leads to diagnosis, treatment and cure.



Practice Areas

If you've ever had an x-ray, you've probably met a radiologic technologist. But did you know that these medical imaging and radiation therapy professionals can specialize in different practice areas?

Radiography

Radiographers use radiation (x-rays) to produce 2D, grayscale images of a patient's anatomy. These images are produced digitally with state-of-the-art equipment.



Computed Tomography

CT technologists use a rotating x-ray unit to observe “slices” of anatomy within the body and view the inside of organs layer by layer. These images can create a 3D representation of the anatomy of interest.

Mammography

Mammographers produce diagnostic images of breast tissue using specialized x-ray equipment. These 2D or 3D images are used as a screening tool to detect breast cancer.

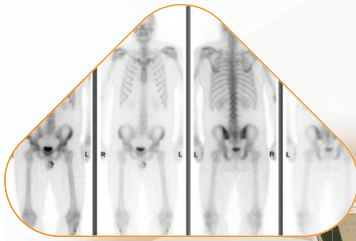


Magnetic Resonance Imaging

MR imaging technologists are specially trained to operate equipment that uses radiofrequency pulses and a powerful magnetic field to create detailed 2D and 3D images of anatomy.

Interventional Radiography

Vascular and cardiac interventional technologists use sophisticated imaging techniques to guide interventional tools through blood vessels and other body systems, treating medical conditions internally.



Nuclear Medicine Technology

Nuclear medicine technologists administer radiopharmaceuticals into the body and use special cameras to detect emitted radiation and produce images of organs, tissues and bone to reveal their function or identify tumors.

Bone Densitometry

Bone densitometry technologists use low-dose x-ray equipment to measure bone mineral density to evaluate bone loss due to osteoporosis and to estimate a patient's risk of fracture.



Radiation Therapy

Radiation therapists administer targeted doses of radiation to a patient's body to treat cancer or other diseases.

Medical Dosimetry

Under the supervision of a medical physicist, medical dosimetrists determine how much radiation will be delivered to a tumor site in accordance with the radiation therapy treatment plan developed by a radiation oncologist.



Sonography

Sonographers use high-frequency sound waves to obtain images of organs and tissues in the body. Images can be produced in 2D, 3D and 4D.

Radiologist Assistant

Radiologist assistants are experienced, registered radiographers who have obtained additional education and certification that qualifies them to serve as radiologist extenders.



Career Environment and Opportunities

Radiologic technologists are needed in nearly every health care setting.





You can work at

- a hospital
- an outpatient or pain clinic
- a physician's office
- an imaging center
- an urgent care center

You can specialize in

- prenatal care
- pediatrics
- orthopedics
- neuroradiology
- breast health
- oncology

You can become

- a traveling technologist
- a lead technologist or supervisor
- a department manager
- an educator
- an equipment manufacturer representative
- an imaging informatics professional



Education Options

The American Registry of Radiologic Technologists requires students to have a **minimum of an associate degree** and to **pass a certification examination** to become a certified and registered radiologic technologist. There are several paths you can take to meet your education requirements.



Associate Degree

Two Years

Community colleges

Technical schools

Hospital-based programs



Bachelor's Degree

Four Years

Universities

Colleges

There are more than 1,200 accredited radiologic technology programs in the United States. For a list of programs near you, visit the websites below.



American Registry of Radiologic Technologists

arrt.org



Joint Review Committee on Education in Radiologic Technology

jrcert.org



Joint Review Committee on Educational Programs in Nuclear Medicine Technology

jrcnmt.org



Joint Review Committee on Education in Diagnostic Medical Sonography

jrcdms.org



Required Skills

Radiologic technology is a science and an art. Students practice both during their classroom and clinical, hands-on training.



In your program you will study

- patient care
- anatomy and physiology
- radiation physics and protection
- biological effects of radiation
- image production
- imaging procedures

You will learn to operate

- modern imaging or therapeutic equipment
- specialized computer software

You'll develop your skills in

- accurate and compassionate patient care
- effective communication
- critical thinking
- teamwork



Earning Potential

Wages of radiologic technologists are competitive with other health professionals with similar educational backgrounds.



Average Full-time Salary*

Entry-level radiographers

\$60,649

Entry-level radiation therapists

\$75,823

* Data from ASRT 2024 Salary Survey.
asrt.org/SalarySurvey

The average salary for all radiologic technologists is \$86,484, considering different disciplines, experience, education levels and supervisory responsibilities.

In addition to full-time positions, many employers offer flexible schedules, including part time or evenings and on-call pay or incentives.



Do You Want an Even Closer Look?

For additional information about careers in medical imaging and radiation therapy, contact your school's guidance counselor or career advisor. Or start your own investigation!



Visit the profession's largest membership association to learn more.

American Society of Radiologic Technologists

asrt.org/Careers

R.T. 101 Introduction to Medical Imaging and
Radiation Therapy Modalities

asrt.org/RT101



American Society of
Radiologic Technologists

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