



Radiologic Technology and Technicians

Course Overview: Focuses on careers in planning, managing, and providing therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development.

Career Goal (O*NET Code): (29-2034) - Radiologic technologists perform diagnostic imaging examinations, such as x rays, on patients.

Student Name: _____

Grade: _____

School: _____

SUGGESTED COURSEWORK

EXTENDED LEARNING EXPERIENCES

Middle School	8th	HS Courses:	(Local districts may list high school credit courses here)			<p>Curricular Experiences: *** Health Occupations Students of America</p> <p>Career Learning Experiences: Career Preparation Internship Job Shadowing Clinical Rotations Certifications Clinical Volunteer Work (local hospitals & medical facilities)</p> <p>College Credit Opportunities -- High School Students should take Advanced Placement (AP), International Baccalaureate (IB), dual credit, Advanced Technical Credit (ATC), or locally articulated courses (Tech Prep), if possible. List those courses that count for college credit on your campus.</p>	<p>Extracurricular Experiences:*** Language Immersion Programs National Youth Leadership Forum on Medicine School Newspaper Student Council UIL Academic Competitions Yearbook</p> <p>Service Learning Experiences: Boy/Girl Scouts Campus Service Organizations Community Service Volunteer Medical Mission Trips Peer Mentoring / Peer Tutoring Special Olympics</p>
	High School	9th	Courses*:	English I Algebra I or Geometry Biology	World Geography Foreign Language I Physical Education or Athletics		
Career-Related Electives:			Principles of Health Science				
10th		Courses:	English II Geometry or Algebra II Chemistry	World History Foreign Language II Elective			
		Career-Related Electives:	Medical Terminology and Pathophysiology				
11th		Core Courses:	English III Algebra II or Pre-Calculus Physics	United States History Foreign Language III ** Professional Communications or Speech	Elective		
		Career-Related Electives:	Health Science				
12th	Core Courses:	English IV Pre-Calculus or Calculus 4th Science	Government/Economics Elective Elective				
	Career-Related Electives:	Practicum in Health Science					
Postsecondary	<p>How to Become a Radiologic Technologist An associate's degree is the most common educational path for radiologic technologists. Technologists must be licensed or certified in most states; requirements vary by state.</p>						
	<p>Texas Southmost College South Texas College Texas State Technical College</p>						
	<p>Radiologic Technology (AAS) Radiologic Technology (AAS)</p>						
	<p>The University of Texas at Brownsville The University of Texas - Pan American</p>						

* Students must meet local & state high school graduation requirements. ** Required course for the Distinguished Graduation Plan (in addition to other measures). *** Based on campus availability. Students may select other elective courses for personal enrichment purposes.

This plan of study serves as a guide, along with other career planning materials, for pursuing a career path and is based on the most recent information as of 2009. All plans meet high school graduation requirements as well as college entrance requirements.



Radiologic Technology and Technicians

TEA Industry Cluster	Health Science
SOC Code	29-2034
Identified by	Tech Prep Occupations
Projected Growth (2018)	24%
BISD Magnet School Available	Yes

Source: Demand Occupations by Cluster, updated June 27, 2012

Description

What Radiologic Technology and Technicians Do

Radiologic technologists perform diagnostic imaging examinations, such as x rays, on patients.

Duties

Radiologic technologists typically do the following:

- Adjust and maintain imaging equipment
- Precisely follow orders from physicians on what areas of the body to image
- Prepare patients for procedures, including taking a medical history and answering questions about the procedure
- Protect the patient by shielding exposed areas that do not need to be imaged
- Position the patient and the equipment in the location needed to get the correct image
- Operate the computerized equipment to take the images
- Work with radiologists reading the images to determine whether other images need to be taken
- Keep detailed patient records

Healthcare professionals use many types of diagnostic equipment to diagnose patients. Radiologic technologists specialize in x-ray, computed tomography (CT), and magnetic resonance imaging (MRI) equipment. They may be called CT technicians or MRI technicians, depending on the equipment they work with. Radiologic technologists might also specialize in mammography. Mammographers use low-dose x-ray systems to produce images of the breast.

Technologists may be certified in multiple specialties.

Healthcare professionals who specialize in other diagnostic equipment include nuclear medicine technologists, diagnostic medical sonographers, cardiovascular technologists and technicians, and vascular technologists. For more information, see the profiles on [nuclear medicine technologists](#), [diagnostic medical sonographers](#), and [cardiovascular technologists and technicians and vascular technologists](#).

Some radiologic technologists prepare a mixture for the patient to drink that allows soft tissue to be seen on the images that the radiologist reviews.

Training Opportunities Linked to Those Jobs (Degree Types and Colleges/Universities)

How to Become a Radiologic Technologist

An associate's degree is the most common educational path for radiologic technologists. Technologists must be licensed or certified in most states; requirements vary by state.

Education

There are formal training programs in radiography that lead to a certificate, an associate's degree, or a bachelor's degree. Associate's degree programs are the most common. Certificate programs typically last 6 to 12 months. Typical programs include both classroom training and clinical training. Coursework includes anatomy, pathology, patient care, radiation physics and protection, and image evaluation.

The [Joint Review Committee on Education in Radiologic Technology](#) (JRCERT) accredits educational and training programs in radiography. Completing an accredited program is required for licensure in some states.

High school students who are interested in radiologic technology should take courses that focus on science and math. Suggested courses include anatomy, biology, chemistry, physiology, mathematics, and physics.

Licenses and Certification

Radiologic technologists must be licensed or certified in most states; requirements vary by state. To be licensed in most states, radiologic technologists must have graduated from an accredited program and must pass a certification exam from the state or from [The American Registry of Radiologic Technologist](#) (ARRT). For specific state requirements, contact your state's health board. To keep their certification, radiologic technologists must meet continuing education requirements.

Important Qualities

Detail oriented. Radiologic technologists must follow exact instructions to get the images needed to diagnose and treat the patient.

Interpersonal skills. Radiologic technologists must work closely with patients. Patients may be in extreme pain or mental stress and the technologist must get cooperation from the patient to make usable images.

Science and mathematical skills. Radiologic technologists must understand anatomy, physiology, and other sciences. They may also need to mix the right dose of chemicals used in imaging procedures.

Stamina. Radiologic technologists often work on their feet for long periods and must be able to lift and move patients who need assistance.

Technical skills. Radiologic technologists must understand how to operate complex machinery.

Texas Southmost College	South Texas College	Texas State Technical College	The University of Texas at Brownsville	The University of Texas - Pan American
Radiologic Technology (AAS)	Radiologic Technology (AAS)			

Local Employers

Employers	City	Employers	City
Abc Pediatrics	Brownsville	Children's Clinic-Harlingen	Harlingen
Anesthesia Consultants	Brownsville	Clark Orthopedics	Harlingen
Arthritis & Osteoporosis Ctr	Brownsville	Clinical Pathology Lab	Harlingen
Asthma Center	Brownsville	Department-State Health Svc	Harlingen
Boys & Girls Pediatric Clinic	Brownsville	Family Health Specialists	Harlingen

Career Options (Specific Job Types)

Sample of reported job titles:

- Radiologic Technologist (RT)
- X-Ray Technologist
- MRI Technologist (Magnetic Resonance Imaging Technologist)
- Computed Tomography Technologist (CT Technologist)
- Mammographer
- Radiology Technologist
- Mammography Technologist
- Radiographer
- Radiological Technologist
- Computed Tomography Radiologic Technologist (CT Rt)

Salary Ranges

The wage occupation **Radiologic Technologists and Technicians** aggregates data for these 2 occupations: Magnetic Resonance Imaging Technologists ----- **Radiologic Technologists**

Location	Pay Period	2011				
		10%	25%	Median	75%	90%
United States	Hourly	\$17.96	\$21.59	\$26.50	\$32.31	\$37.39
	Yearly	\$37,400	\$44,900	\$55,100	\$67,200	\$77,800
Texas	Hourly	\$17.42	\$21.04	\$25.79	\$31.05	\$35.40
	Yearly	\$36,200	\$43,800	\$53,600	\$64,600	\$73,600
Brownsville-Harlingen, TX MSA	Hourly	\$12.68	\$19.66	\$25.26	\$29.17	\$34.43
	Yearly	\$26,400	\$40,900	\$52,500	\$60,700	\$71,600

Location	Pay Period	2011				
		10%	25%	Median	75%	90%
McAllen-Edinburg-Mission, TX MSA	Hourly	\$18.74	\$21.98	\$27.35	\$33.18	\$37.82
	Yearly	\$39,000	\$45,700	\$56,900	\$69,000	\$78,700

Professional Associations Linked to the Careers

For information about radiologic technology, visit

[American Society of Radiologic Technologists](#)

[Joint Review Committee on Education in Radiologic Technology](#)

[The American Registry of Radiologic Technologists](#)

Sources

The information provided in this document was collected from the following sources:

- Occupational Outlook Handbook (<http://www.bls.gov/ooh/>)
- O*NET OnLine (<http://www.onetonline.org/>)
- Texas CARES (<http://www.texascaresonline.com/>)
- CareerOneStop (<http://www.careeronestop.org/>)