# Radiologic Technologist



# What do they do?

Operate imaging equipment to perform a large variety of x-ray procedures, and present images for the physician to diagnose a patient's medical condition.



\* Data sourced in 2022 & is based on a 100 mile radius from Mt. SAC.

# Sample Job Duties

- Provide patient care, including explaining medical procedures and positioning patients for examinations.
- Operate radiologic equipment to produce images of the body for diagnostic purposes.
- Critique x-ray images to determine diagnostic quality and corrective measures.
- Use radiation safety measures and protection devices to comply with government regulations and to ensure safety of patients and staff.



Radiologic Technology Program

# Radiologic Technology (AS Degree S1206)

# **Technology and Health Division**

The Radiologic Technology program, which is accredited by the Joint Review Committee on Education in Radiologic Technology (JRCERT), is designed to prepare students to function as certified radiologic technologists. Students will gain knowledge and understanding of the diagnostic uses of x-ray, as well as the technical skills to use x-ray equipment in both laboratory and clinical settings. The courses are developed to enable students to operate x-ray equipment, assist in the diagnosis of disease, and to observe proper medical ethics. Students will learn the nature of radiation, the principles of electricity, the structure of x-ray machines, and the operation of a clinical x-ray department.

Upon completion of the Associate in Sciences degree in Radiologic Technology, graduates are eligible to apply for the registry examination through the American Registry of Radiologic Technologists and the California Certification of Radiologic Technology. This is a licensed profession, and a valid Social Security number is required to obtain state certification and national licensure.

This degree requires the completion of General Education coursework plus the following:

#### **Required Courses**

Course Prefix	Course Name	Units
RAD 1A	Clinical Experience 1A	4.5
RAD 1B	Clinical Experience 1B	2.5
RAD 2A	Clinical Experience 2A	4.5
RAD 2B	Clinical Experience 2B	2.5
RAD 3A	Clinical Experience 3A	7
RAD 3B	Clinical Experience 3B	2.5
RAD 3C	Clinical Experience 3C	7
RAD 4	Clinical Experience 4	4
RAD 30	Radiographic Pathology	1.5
RAD 31	Fluoroscopy and Radiobiology	4
RAD 32	Digital Imaging in Radiology	2
RAD 50	Introduction to Radiologic Science and Health Care	3
RAD 61A	Theory of Radiologic Technology	4
RAD 61B	Radiographic Procedures I	3
RAD 61C	Radiographic Procedures I Laboratory	1.5
RAD 62A	Theory of Radiologic Technology	4
RAD 62B	Radiographic Procedures II	3
RAD 62C	Radiographic Procedure II Laboratory	1.5
RAD 63	Theory of Radiologic Technology	1
RAD 64	Theory of Radiologic Technology	4
RAD 91	Patient Care in Radiologic Sciences	3
Total Units		70

# **Admission Requirements**

In addition to meeting Mt. San Antonio College's academic standards for admission, applicants must be in good standing and satisfy the following requirements **prior** to program admission:

- 1. Be 18 years of age upon entrance into the program.
- 2. Possess a valid Social Security Card. This is a licensed profession, and a valid Social Security Number is required to obtain state certification and national licensure.
- 3. Complete the Steps to Apply and Enroll at Mt San Antonio College.
- 4. Submit a Radiologic Technology Program application to be placed on the waiting list. All applications are dated upon receipt. A program begins each summer intersession.
- 5. Meet with a Counselor or Advisor to review AS degree requirements and complete an Admission Course Checklist for the Radiologic Technology Program.
- 6. Complete all AS degree general education requirements to include program prerequisites listed below with a minimum grade of "C" in each course. Students must complete prerequisite courses prior to program admission. Students may seek variances for courses completed at other institutions. Course must be an equivalent course or higher to the courses listed below.

Course Prefix	Course Name	Units
ANAT 10A or ANAT 35	Introductory Human Anatomy or Human Anatomy	4
ANAT 10B or ANAT 36	Introductory Human Physiology or Human Physiology	4
PHYS 1	Physics	4
MEDI 90	Medical Terminology	3

7. Attend a mandatory program orientation.

8. Meet the following Essential Functions for Success in the Radiologic Technology Program:

#### **Physical Demands**

- Perform prolonged, extensive, or considerable standing/walking, lifting positioning, pushing, and/or transferring patients
- Possess the ability to perform fine motor movements with hands and fingers
- Possess the ability for extremely heavy effort (lift/carry 50 lbs. or more)
- Perform considerable reaching, stooping, bending, kneeling, and crouching
- Respond rapidly to situations involving the health and safety of patients
- Function adequately under stressful situations

#### **Sensory Demands**

#### (May be corrected with adaptive devices.)

- Color vision: ability to distinguish and identify colors
- Distance vision: ability to see clearly 20 feet or more
- Depth perception: ability to judge distance and space relationships
- Near vision: ability to see clearly 20 inches or less
- Hearing: able to recognize a full range of tones

#### **Working Environment**

- May be exposed to infectious and contagious disease, without prior notification
- Regularly exposed to the risk of blood borne diseases
- Exposed to hazardous agents, body fluids and wastes
- Exposed to odorous chemicals and specimens
- Subject to hazards of flammable, explosive gases
- Subject to burns and cuts
- Contact with patients having different religious, culture, ethnicity, race, sexual orientation, psychological and physical disabilities, and under a wide variety of circumstances
- Handle emergency or crisis situations
- Subject to many interruptions
- Requires judgment/action which could result in death of a patient
- Exposed to products containing latex

#### **Other Requirements**

- A physical examination, including specific immunizations and drug testing, is required prior to entering the clinical education phase. Drug testing procedures will be provided upon admission.
- A background check, indicating a passing clearance, is required prior to entering the clinical education phase. A valid Social Security number is required to complete this process. Information on background check procedures and clinical affiliate's review of results will be provided upon admission.
- 3. Possess current American Heart Association: Basic Life Support (BLS) for Healthcare Providers CPR certification.

#### **English Skills**

Although proficiency in English is not a criterion for admission into the Radiologic Technology Program, students must be able to speak, write and read English to ensure patient safety and to complete classes successfully.

#### **Selection Procedure**

Selection of students is based upon the completion of the above admission requirements and date of application. The Department will make every effort to notify the applicant of admission no less than one month prior to program commencement.

#### **Program Completion Requirements**

Student must complete all the major course requirements, and the AS general education requirements, to earn a certificate of completion in Radiologic Technology. This certificate will permit the student to apply for the registry exam through the American Registry of Radiologic Technologist and the California Certification of Radiologic Technology.

# **Program Learning Outcomes**

#### Upon successful completion of this program, a student will:

- Apply accurate positioning skills
- Select optimal technical factors
- Utilize appropriate radiation protection
- Demonstrate effective written communication skills
- Demonstrate effective oral communication skills
- Adapt standard procedures as needed
- Critique images to determine diagnostic quality
- Determine corrective measures for non-diagnostic images
- Provide patient-centered, clinically effective care for all patients
- Regardless of age, gender, disability, special needs, ethnicity, or culture
- Demonstrate professional work ethics
- Participate in professional development activities
- Pass the ARRT examination
- Secure employment in the radiology profession
- Be well prepared to function as a competent entry-level radiologic technologist

#### Review Student Learning Outcomes for this program.

## Accreditation

#### The Radiologic Technology program is accredited by:

The Joint Review Committee in Radiologic Technology (JRCERT) 20 North Wacker Drive, Suite 2850, Chicago, IL, 60606-3182 (312)704-5300 www.jrcert.org

# Guided Pathways - AS Degree S1206

This Guided Pathways for Success (GPS) is a suggested sequence of coursework needed for completion of the AS Degree in Radiologic Technology at Mt. San Antonio College. It is not an official educational plan. <u>Schedule an appointment with a counselor or advisor</u> to create an individualized Mountie Academic Plan (MAP) specific to your goals and needs.

#### Year 1 - Fall Semester

Course Prefix	Course Name	Units
RAD 50	Introduction to Radiologic Science and Health Care	3
RAD 91	Patient Care in Radiologic Sciences	3

#### Year 1 - Spring Semester

Course Prefix	Course Name	Units
RAD 61A	Theory of Radiologic Technology	4
RAD 61B	Radiographic Procedures I	3
RAD 61C	Radiographic Procedures I Laboratory	1.5

#### Year 2 - Fall Semester

Course Prefix	Course Name	Units
RAD 1A	Clinical Experience 1A	4.5

#### Year 2 - Winter Intersession

Course Prefix	Course Name	Units
RAD 1B	Clinical Experience 1B	2.5

#### Year 2 - Spring Semester

Course Prefix	Course Name	Units
RAD 62A	Theory of Radiologic Technology	4
RAD 62B	Radiographic Procedures II	3
RAD 62C	Radiographic Procedures II Laboratory	1.5
RAD 2A	Clinical Experience 2A	4.5

#### Year 2 - Summer Intersession

Course Prefix	Course Name	Units
RAD 2B	Clinical Experience 2B	2.5

#### Year 3 - Fall Semester

Course Prefix	Course Name	Units
RAD 63	Theory of Radiologic Technology	1
RAD 30	Radiographic Pathology	1.5
RAD 3A	Clinical Experience 3A	7

#### Year 3 - Winter Intersession

Course Prefix	Course Name	Units
RAD 32	Digital Imagery in Radiology	2
RAD 3B	Clinical Experience 3B	2.5

#### Year 3 - Spring Semester

Course Prefix	Course Name	Units
RAD 64	Theory of Radiologic Technology	4
RAD 31	Fluoroscopy and Radiobiology	4
RAD 3C	Clinical Experience 3C	7

#### Year 3 - Summer Intersession

Course Prefix	Course Name	Units
RAD 4	Clinical Experience 4	4

## All Guided Pathways & Catalog Page

- Guided Pathways Radiologic Technology, AS
- Catalog Radiologic Technology, AS Degree S1206



Radiologic Technology Program www.mtsac.edu/radiologic/radiology