# Radiologic Technology Program



PROGRAM INFORMATION PACKET

Mt. San Antonio College
Health Careers Resource Center
<a href="http://www.mtsac.edu/radiologic/">http://www.mtsac.edu/radiologic/</a>



# **Program Overview**

The Radiologic Technology program, accredited by the Joint Review Committee on Education in Radiologic Technology (JRCERT), is designed to prepare students to function as Certified Radiologic Technologists.

A primary responsibility of technologists is to create images of patients' bodies using medical imaging equipment. This helps doctors diagnose and treat diseases and injuries (ARRT, 2021).

The program provides a complete educational experience. Program curriculum is designed to meet the Radiography didactic and clinical competency requirements set forth by the American Registry of Radiologic Technologist (ARRT). The educational standards established by the American Society of Radiologic Technologists (ASRT) are included in the curriculum. Educational activities include lecture, discussions, group activities, and hands-on clinical training.

Upon completion of the Associate in Sciences (AS) degree in Radiologic Technology, graduates are eligible to apply for certification by the ARRT and the California Department of Public Health.

## **Accreditation**

Mt. San Antonio College is accredited by the Western Association of Schools and Colleges and the State Department of Education. The Radiologic Technology Program is recognized by the California Department of Public Health and is accredited by:

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

The program adheres to standards established by the JRCERT. Individuals interested in reviewing those standards and program compliance can visit: www.jrcert.org



# MT. SAC APPLICATION PROCESS

Before applying to Radiologic Technology Program students must complete the following steps:

# ➤ STEP 1 – Apply to Mt. SAC

Complete and submit a Mt. SAC Admission Application online.

Students transferring from other colleges must have their official transcript sent to Mt. SAC's Admissions and Records Office.

#### > STEP 2 – Orientation and Assessment

#### **Complete the New Student Orientation**

For help with this step contact Counseling

• Online: <a href="http://www.mtsac.edu/counseling">http://www.mtsac.edu/counseling</a>

• **By phone**: (909) 274-4380, or

• In person: At the Counseling Department (located in 9B, 2nd floor)

#### **Complete the Assessment Questionnaire**

For help with this step contact the Assessment Center

• Online: <a href="http://www.mtsac.edu/assessment">http://www.mtsac.edu/assessment</a>

• **By phone**: (909) 274-4265, or

• In person: At the Assessment Center (located in bldg. 9B - Student Services Center – first floor)

#### Complete a Mountie Academic Plan Workshop

For help with this step contact Counseling

• Online: <a href="http://www.mtsac.edu/counseling">http://www.mtsac.edu/counseling</a>

• **By phone**: (909) 274-4380, or

• In person: At the Counseling Department (located in 9B, 2nd floor)

#### > STEP 3 – Meet with a Counselor

#### Make an appointment with counseling

• Online: http://www.mtsac.edu/counseling

• **By phone:** (909) 274-4380, or

• In person: At the Counseling Department (located in bldg. 9B, 2nd floor)

Applicants must meet with a Counselor or an Advisor to review Associate in Science (or "AS") degree requirements and complete an Admission Course Checklist for the Radiologic Technology Program.

- All of the following pre-requisite courses must be completed with a minimum grade of "C" in each course before admittance into the program (see counseling for more information):
  - o ANAT 10A Introductory Human Anatomy or ANAT 35 Human Anatomy
  - o ANAT 10B Introductory Human Physiology or ANAT 36 Human Physiology
  - o PHYS 1 Physics
  - o MEDI 90 Medical Terminology

Applicants must seek variances (or equivalencies) for courses completed at other institutions or repeat the course at Mt. SAC. The course of consideration must be an equivalent course to the course listed (or more advanced lower division course). Transcripts and course outlines/ description must be reviewed by the Department Chair of the appropriate department for approval.

# RADIOLOGIC TECHNOLOGY PROGRAM APPLICATION PROCESS

After completing the Mt. SAC application process, students may apply to the Radiologic Technology (RT) program by completing the following steps:

# > STEP 1 – Apply to RT Program

- Complete and submit a Mt. SAC RT Program Application Online. All applications are dated upon receipt.
- Applicants must be a high school graduate or equivalent. Please provide copy of diploma with application as proof of high school completion.
- Applicant must possess a valid Social Security Card. This is a licensed profession, and a valid Social Security Number is required to obtain state certification and to complete the background check process.
- Upon receipt of the student's application, a file will be started and will be added to the waitlist in the order of the application's date.

# > STEP 2 – Complete Required Courses

Refer to your Educational Plan (MAP) provided by your Counselor/Advisor in Step 3 of the Mt. SAC Application Process. These courses include:

- ANAT 10A Introductory Human Anatomy or ANAT 35 Human Anatomy
- o ANAT 10B Introductory Human Physiology or ANAT 36 Human Physiology
- o PHYS 1 Physics
- o MEDI 90 Medical Terminology
- General Education Courses & Other Requirements

# > STEP 3 – Respond to General Interest Letter by November 30

- Applicants on the waitlist will receive a letter in November of every year inquiring if the applicant is still interested in the program.
- Interested applicants shall respond as instructed and by the due date specified in the letter to be considered for admission to the program for the following summer intersession.
  - Failure to respond by the due date will result in the application being discarded and the applicant will need to reapply to the program.
- The letter will include instructions on how to delete an application for applicants who are no longer interested in the program and wish to be removed from the waitlist.

# RADIOLOGIC TECHNOLOGY PROGRAM ADMISSION PROCESS

To gain admission to the Radiologic Technology (RT) program, all applicants must complete the following steps:

# ➤ STEP 1 – Complete RT Program/ Admission Course Checklist by February 1

- Applicants must meet with a Mt. SAC Counselor or an Advisor to complete a Radiologic Technology Program /
  Admission Course Checklist by February 1. The Counselor/Advisor will verify completion of all Associate in
  Science (AS) degree requirements including general education and science prerequisites for the RT program.
- Applicants must complete the checklist on an annual basis unless all AS degree and program prerequisites have been verified on a previously completed checklist.
- Applicants who fail to complete the checklist by February 1 will not be considered for admission due to an incomplete file.
- To ensure completion of the checklist by the deadline, applicants should contact counseling for an appointment by December 15
  - o Online: <a href="http://www.mtsac.edu/counseling">http://www.mtsac.edu/counseling</a>
  - o **By phone:** (909) 274-4380, or
  - o **In person:** At the Counseling Department (located in bldg 9B, 2nd floor)

## > STEP 2 – Selection

- Selection of applicants is based upon the completion of admission requirements and the date of application. Only completed application packets including the checklist will be considered for admission.
- Applicant must be 18 years of age to be eligible for selection

# > STEP 3 – Respond to Provisional Admission Letter

- In early Spring, a provisional admission letter will be sent via mail to the selected applicants
- Applicants shall respond as instructed and by the due date specified in the letter with their "decision" to
  accept or decline admission. At this point, applicants accepting admission shall be provisionally admitted to
  the program beginning in the Summer intersession.
  - Applicants can defer admission up to two times. Applicants who do not accept admission after two
    deferrals will be removed from the waitlist and will need to reapply to the program.
- The provisional admission letter will include an invitation to a **mandatory** *RT Program Orientation* scheduled during the Spring Semester.

## > STEP 4 – Admission

- Once mandatory attendance to the RT Program Orientation is met, the applicant is eligible to move from "provisional" to "admitted" status.
- The applicant will receive a letter of formal admittance to the RT Program from the Health Careers Resource Center.

## **Program Mission**

The mission of the radiologic technology program is to prepare competent and professional entry-level radiographers able to meet the needs of the healthcare community.

# **Program Goals**

- 1. Students will be clinically competent.
- 2. Students will communicate effectively.
- 3. Students will develop critical thinking skills.

# **Program Effectiveness Data**

The JRCERT requires accredited programs to report program effectiveness data (PED) on a yearly basis. The data is posted and available to the public on the <u>program's website</u> and the <u>JRCERT website</u>. PED includes annual program completion rate, five-year average credentialing examination pass rate, and five-year average job placement rate.

# **Career Brief**

Radiologic Technologists

- Use radiation to make images of internal parts of a patient's body.
- Use radiation to provide treatment for disease. Review physician's instructions.
- Prepare the patient for examination (physical assistance, verbal instructions, reassurance).
- Position the patient for imaging with the x-ray machine.
- May administer drugs necessary to make organs visible.
- Set/operate controls.
- May operate computerized head or body scanners.

## **Employment Outlook**

Employment of Radiologic Technologists is projected to grow 7% from 2019 to 2029, faster than the average for all occupations. As the population grows and ages, there will be an increasing demand for diagnostic imaging. With age comes increased incidence of illness and injury, which often requires diagnostic imaging for diagnosis. In addition to diagnosis, diagnostic imaging is used to monitor the progress of disease treatment. With the increasing success of medical technologies in treating disease, diagnostic imaging will increasingly be needed to monitor progress of treatment.

Although hospitals will remain the principal employer of radiologic technologists, a number of new jobs will be found in offices of physicians and diagnostic imaging centers. As technology advances many imaging modalities are becoming less expensive and more feasible to have in a physician's office. With additional training, opportunities exist in various modalities, such as magnetic resonance imaging (MRI), computerized tomography (CT), sonography, radiation therapy, and angiography, as well as medical sales, management, and education. Technologists with multiple certifications will have the best job prospects. (Bureau of Labor Statistics, Occupational Outlook 2021)

https://www.bls.gov/ooh/healthcare/radiologic-technologists.htm

# **Pay**

Depends on employer, location, and shift On-call, after hours, overtime, increases pay California hourly mean wage \$45.68 (source Bureau of Labor Statistics 2020)

National hourly mean wage \$29.76 (source Bureau of Labor Statistics 2020)

California mean full-time income – \$87,323 (source ASRT Wage and Salary Survey 2019)

#### **Academic Preparation**

This is a licensed occupation. Students must complete RT major course requirements, and Associate in Science (AS) Degree requirement to earn a Certificate of Completion in Radiologic Technology. AS Degree requirements are listed in the Mt. SAC catalog. Upon completion of the AS Degree in Radiologic Technology, graduates are eligible to apply for certification by the ARRT, and the California Department of Public Health.

# **Typical Employers**

Hospitals
Outpatient Clinics
Imaging Centers
Federal, state, and local government health agencies

## Cost

MtSAC has an enrollment fee of forty-six dollars \$46 per unit (subject to change) plus material fees, health service fees, college service fees, parking fees, etc. Nonresident students are also required to pay nonresident tuition fees. Please visit the college's <a href="Fees website">Fees website</a> or the college catalog for current fee information. The expense of enrollment, annual physical examinations, parking, uniforms, textbooks and related expenses, (i.e. transportation to school and to and from the clinical facilities) are at the student's expense. Scholarships and loan funds are available. Please contact <a href="Mt. SAC's Financial Aid Office">Mt. SAC's Financial Aid Office</a> for further information.

Program students have program specific fees in addition to college fees. The following is a list of expenses and approximate costs:

#### Student Expenses

Background Check Approx. \$42
Drug Screening Approx. \$20
Film Markers Approx. \$12 each
Uniforms Approx. \$20 to \$40 each

Physical examination Approx. \$115 for first year; \$50 following semesters

Textbooks Approx. \$400 for first semester; \$160 following semesters

Licensing Fees Approx. \$500 CPR course \$65 (renewal \$45)

Transportation Must have own transportation

Meals Not provided by the hospitals or the college

<sup>\*</sup> College fees and student expenses are subject to change each year

# **Essential Functions for Success**

Students must meet the following Essential Functions for Success in the Radiologic Technology Program:

#### **Communication Skills**

Must possess effective English communication skills (speaking, reading, and writing)

# **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

#### **Work 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

## **Clinical Requirements**

# **Physical Examinations**

A physical examination, including specific immunizations and drug testing, is required prior to entering the clinical education phase. Physical examinations are required by the program's clinical affiliates. Procedures will be provided upon admission.

## **CPR – Basic Life Support Provider Card**

Students are required to possess current American Heart Association: Basic Life Support (BLS) for Healthcare Providers CPR Certification (valid 2 years). Certification is required prior to entering the clinical education phase.

# **Background Check and Drug Testing Requirements**

The use of background checks and drug testing on individuals working in clinical settings is one of the mechanisms agencies use to help protect their clients/patients. Thus, students are required to complete a background check and drug testing prior to entering the clinical education phase. This requirement is supported by the Joint Commission Standard (HR.1.20). The standard states organizations can require non-employees (students) working in the same capacity as staff providing care, treatment, and services to hold the same qualifications as staff. The program's background check and drug testing requirements are commensurate with the qualifications required if students were employed by the clinical sites.

# **Background Check**

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.

#### **ARRT Ethics Review Pre-Application**

Any applicant with a criminal or disciplinary history should complete the <a href="Ethics Review Pre-Application">Ethics Review Pre-Application</a> offered by the American Registry of Radiologic Technologists (ARRT) before applying to the program or anytime as needed. Visit the ARRT website for information on cost. The Ethics Review Pre-Application is the process for an early ethics review of offenses that would otherwise need to be reported on your Application for Certification after completion of the program. More information on this process may be found at: <a href="https://www.arrt.org">www.arrt.org</a>, click on the Educators and Students tab, then click on the Ethics Review Pre-Application link. The program strongly recommends students self-report criminal or disciplinary history prior to program admission or anytime as needed, and complete the ARRT's pre-application. This process can help avoid delays or denial of clinical placement, and denial of licensure.

# **Drug Test**

A drug test is required prior to entering the clinical education phase. Drug screening is a component of the physical exam. Drug testing procedures will be provided upon admission. Testing is available at the MtSAC Student Health Center.

# **Social Security Number**

Students are required to possess a valid Social Security Card. This is a licensed profession, and a Social Security Number is required to obtain state certification and national licensure. In addition, a Social Security Number is required to complete the background check process.

# **College Assistance**

#### **Student Support Services**

MtSAC offers a number of support programs for students in all different types of situations. For example, students can learn about financial aid opportunities, various counseling services, career services, CalWORKS, and disabled student services.

Students and the public can access the services through the <u>Student Support Services Website</u> or by the visiting the appropriate student service building on campus.

## **Financial Aid**

Mt. SAC offers a variety of financial aid programs funded by the federal and state governments and private sources, including the Mt. SAC Foundation. Information is available on the college's <u>Financial Aid</u> webpage.

# **Academic Support and Achievement**

The Academic Support and Achievement Center places the success of students and the support of faculty at the heart of our mission by providing quality supplemental learning opportunities, instructional resources and a highly qualified and trained staff to enhance the learning process and increase academic success. Information is available on the college's <u>Academic Support and Achievement Center webpage</u>.

## English as a Second Language (ESL)

To succeed in the program, students must possess effective communications skills. Thus, applicants who are non-native speakers should seek assistance from MtSAC's ESL program. The program is designed to help improve student language, study skills, job skills, and general English communication skills. Information is available on the college's <u>ESL</u> page.

#### Students with Disabilities

Students with disabilities may need counseling, instruction, and special accommodations while enrolled in the program. Information on services is available on the college's Accessibility Resource Center webpage.

## Family Educational Rights And Privacy Act (FERPA)

The Family Educational rights and Privacy Act affords students certain rights with respect to their educational records. See the college's <u>Student's Rights and Policies</u> webpage to review these rights.

## **Additional Information**

#### **Vacation Periods**

Students will have break periods between semesters and intersessions. No other vacation periods are scheduled.

#### **Outside Work**

Outside work is not recommended due to the long hours required by the program. Work schedules must not adversely affect the student's ability to meet posted class schedules and comply with attendance policies.

Students may only perform duties as student radiographers during regularly assigned clinical course hours. Students may never be used in lieu of staff radiographers or outside of regularly scheduled class times.

Students shall be informed that working in a Diagnostic Imaging Services Department and utilizing ionizing radiation on humans without State Certification is a violation of the <u>California Radiation Control Regulations</u>, <u>Title 17</u>, and punishable as a misdemeanor. Students may hold positions in the imaging department such as transporters or clerical workers without jeopardizing their student status.

# **Transportation**

Each student is responsible for providing his/her own transportation to school and to clinical facilities.

#### Resources

American Society of Radiologic Technology 15000 Central Ave. SE Albuquerque, NM 87123

California Society of Radiologic Technology PO Box 14502 Torrance, CA 90503

<u>American Registry of Radiologic Technology</u> 1255 Northland Drive, St. Paul, MN 55120-1165

<u>Joint Review Committee on Education in Radiologic Technology</u> 20 N. Wacker Drive, Suite 2850 Chicago, IL 60606-3182

# Curriculum Sequence & Schedule (26 months total)

Year/Semester	Course	Units	Hours	Professor
Pre-requisite courses required prior to program admission				
	ANAT10A Introductory Human Anatomy	4	Variable	Variable
	ANAT10B Introductory Human Physiology	4	Variable	Variable
	MEDI90 Medical Terminology	3	Variable	Variable
	PHYS1 Physics	4	Variable	Variable
1/Summer	RAD91 Patient Care in Radiologic Sciences	3	M/W 7:00am-12:45pm	Foley
	RAD50 Introduction to Radiologic Science and	3	T/Th 7:00am-11:15am	Engisch
	Healthcare			
1/Fall	RAD61A Theory of Radiologic Technology	4	T/Th 9:55am-12:00pm	Engisch
	RAD61B Radiographic Procedures I	3	M/W 10:30am-11:55	Neel
	RAD61C Radiographic Procedures I Laboratory	1.5	M or W	Neel
			7:50am-10:25am	
			or	
			12:00pm-2:35pm	
	RAD1A Clinical Experience 1A	4.5	T/Th 1:00pm-5:00pm	Engisch, McLaughlin, Neel
			& F 8:00am-4:30pm	
1/Winter	RAD1B Clinical Experience 1B	2.5	M-F 7:30am-12:30pm	Engisch, McLaughlin, Neel
1/Spring	RAD62A Theory of Radiologic Technology	4	T/Th 1:00pm-3:05pm	Engisch
	RAD62B Radiographic Procedures II	3	M/W 10:30am-11:55am	Neel
	RAD62C Radiographic Procedures II	1.5	M or W	Neel
	Laboratory		7:50am-10:25am	
			or	
			12:00pm-2:35pm	
	RAD2A Clinical Experience 2A	4.5	T/Th 8:00am-12:00pm	Engisch, McLaughlin, Neel
			& F 8:00am-4:30pm	
2/Summer	RAD2B Clinical Experience 2B	2.5	M/W/F 8:00am-4:30pm	Engisch, McLaughlin, Neel
2/ Summer	TIVIDED CHINICAL EXPENSIVE ED	2.3	Wy Wy Coodin Noopin	Engisen, Wezaughin, Weer
2/Fall	RAD63 Theory of Radiologic Technology	1	T (8weeks) 1:00pm-	McLaughlin
	DADOO De die een de'e De de de	4.5	3:05pm	A A a La contact to
	RAD30 Radiographic Pathology	1.5	T (8weeks) 1:00pm-	McLaughlin
	RAD3A Clinical Experience 3A	7	4:10pm M/W 8:00am-4:30pm	Engisch, McLaughlin, Neel
	RADSA CIIIICAI EXPERIENCE SA	,	T/Th 8:00am-12:00pm	Engisch, McLaughiin, Neei
			1/111 8.00am-12.00pm	
2/Winter	RAD3B Clinical Experience 3B	2.5	M-F 12:30pm-5:30pm	Engisch, McLaughlin, Neel
	RAD32 Digital Imaging in Radiology	2	T/Th 9:20am-11:20am	McLaughlin
	TADDE DIGITAL IIII AGIII G III NAUIOIOGY		T/Th 8:30am-11:20am	Wickaugiiiii
2/Spring	RAD31 Fluoroscopy and Radiobiology	4	F 7:00am-11:15am	Engisch
	RAD64 Theory of Radiologic Technology	4	T/Th 9:55am-12:00pm	McLaughlin
	RAD3C Clinical Experience 3C	7	M/W 8:00am-4:30pm	Engisch, McLaughlin, Neel
			T/Th 1:00pm-5:00pm	
2/Summer	RAD4 Clinical Experience 4	4	M-F 8:00am-4:30pm	Engisch, McLaughlin, Neel
Total	w/ pre-regs 25 courses	85	Stodair Hoopiii	Z. B. Seri) Wiezaughini, Weel
. 5001	w/o pre-regs 21 courses	70		
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# Subject to Change