

# MEDICAL IMAGING, MAGNETIC RESONANCE IMAGING, ADVANCED TECHNICAL CERTIFICATE



## Program Information

Are you fascinated by technology and the inner workings of the human body? If so, a career in computed tomography, mammography, or Magnetic Resonance Imaging (MRI) may be the right path for you. These imaging professionals are qualified to provide patient imaging using technology and equipment for CT, mammography, and MRI under the supervision of a medical doctor to examine anatomic structures.

The San Jacinto College Advanced Imaging Modality programs:

- Prepare the American Registry of Radiologic Technologists (ARRT) or American Registry for Diagnostic Medical Sonography (ARDMS) registered students to work in advanced modality positions in hospitals and other health care facilities through various clinical rotations;
- Educate students to produce images used for assessment and diagnosis of various medical conditions; and
- Encourage students to be clinically competent, possess critical thinking skills, communicate effectively, and exhibit ethical and professional behavior.

## Career Opportunities

Employment outlook is excellent, and many of our students gain field employment before completing this certificate program.

Graduates of this program are employed in hospitals, clinics, and imaging centers.

## Earning Potential

Magnetic Resonance Imaging Technologists : \$80,049 per year<sup>1</sup>

<sup>1</sup> Source: texaswages.com (<http://texaswages.com>), median salary Gulf Coast region, 2021

For more information, students may contact 281-476-1871 or Saleha.zafar@sjcd.edu (cassandra.gossett@sjcd.edu) or [advancedimagingmodalityprograms@sjcd.edu](mailto:advancedimagingmodalityprograms@sjcd.edu).

## Links

Application procedures; students must:

- Apply for admission to San Jacinto College;
- Submit an application for the Advanced Imaging Modality program; and
- Submit copies of transcripts from the Radiography or Sonography program completed.

Must be a registered technologist with ARRT certification or a registered sonographer with ARDMS certification by the first class date to participate in the program. Students may review the links on the Medical Imaging (<https://www.sanjac.edu/programs/areas-of-study/health/medical-imaging/>) webpage for program information for all Advanced Imaging Modality programs and programs applications.

## Campus

Central Campus

## Information

Medical Imaging Technology consists of two Associate of Applied Science (AAS) degrees and three certificate programs.

The AAS degree programs are:

- Medical Radiography,
- Diagnostic Medical Sonography

The advanced or enhanced certificate programs are:

- Computed Tomography,
- Magnetic Resonance Imaging, and
- Mammography.

Students selected for any of the Medical Imaging programs are required to submit a physical exam prior to admission. This physical exam must be consistent with the requirements of the teaching hospitals and agencies the student is assigned during clinical assignments and the performance standards required to function as a student imaging technologist. The exam will also include documentation of any communicable diseases along with immunity to Rubella, Measles, Mumps, Varicella, and Hepatitis B. Additionally, completion of an updated Tetanus vaccine, an annual TB screening, and a seasonal flu vaccine are required. Clinical affiliates may require additional immunizations, titers, and documentation.

In addition to meeting all other requirements, a criminal background check and drug and alcohol screening are required for all health science students attending imaging courses, and are required prior to admission to the program. Students entering a Medical Imaging program will also be required to show proof of health insurance and current CPR (American Heart Association-Health Care Provider) certification. Students may contact the Medical Imaging department for details regarding the criminal background check and drug screening requirements.

Students enrolling into San Jacinto College programs with external learning experiences (i.e., clinical, practicum, externship, cooperative, etc.) will be required to comply with the immunization requirements and policies of the clinical/external learning sites to engage in all clinical/external learning experiences. Vaccination requirements at clinical/external learning sites are implemented pursuant to the independent authority of such facilities and are not mandated by San Jacinto College.

Failure to meet the immunization requirements mandated by clinical/ external learning sites may limit a student's ability to complete the program and/or may delay the student's graduation date. San Jacinto College does not process exemptions, and students should address potential vaccination exemptions directly with the clinical/external learning site.

## Advanced Technical Certificate

The MRI program builds a foundation of general principles for learning to operate magnetic resonance imaging equipment. The program focuses on building a sound understanding of the underlying scientific theory and routine clinical practice leading to the MRI certification exam. The MRI program also emphasizes the fundamental principle of magnetism and interaction of living matter with magnetic fields as well as introducing the concepts and scientific principles employed in MRI.

## Minimum Program Admission Criteria

Applicants must be registered with the American Registry of Radiologic Technologists (ARRT) in radiography, nuclear medicine, radiation therapy, sonography, or vascular sonography or registered with the American Registry for Diagnostic Medical Sonography (ARDMS) in sonography or vascular sonography. The applicant must complete and submit an application to the Medical Imaging department. Upon provisional acceptance, the applicant must also submit required health records, proof of health insurance, CPR certification (American Heart Association-Health Care Provider), criminal background check, and drug and alcohol screen as stated for all Medical Imaging students. Acceptance into the MRI program is determined after review of the application and completion of requirements. Application to the program does not guarantee acceptance due to limited clinical availability. Prospective participants should call the Medical Imaging department at 281-476-1871 for additional information.

Students selected for any of the Medical Imaging programs are required to submit a physical exam after they have received provisional acceptance to the program. The department will provide instructions. This physical exam must be consistent with the requirements of the teaching hospitals and agencies the student is assigned during clinical assignments and the performance standards required to function as a student imaging technologist. The exam will also include documentation of any communicable diseases along with immunity to Rubella, Measles, Mumps, Varicella, and Hepatitis B. Completion of an updated Tetanus, an annual TB screening, and the current seasonal flu vaccine are required. In addition to meeting all other requirements, students entering a Medical Imaging program will be required to submit a criminal background check and drug and alcohol screening completed by designated companies, show proof of health insurance, and CPR (American Heart Associate-Health Care Provider) certification. Clinical affiliates may require additional immunizations, titers, and documentation.

In accordance with Texas House Bill 1508, the College informs all students in this program who may have a criminal background that a criminal history could keep graduates from being licensed by the state of Texas. Students with any questions about their background and licensure may speak with the Department Chair.

## Plan of Study

AMRAD-MRI

First Term		Credits
MRIT 2330	Principles of Magnetic Resonance Imaging	3
MRIT 2360	Clinical I - Radiologic Technology/Science - Radiographer	3
RADR 2340	Sectional Anatomy for Medical Imaging	3
<b>Credits</b>		<b>9</b>
Second Term		Credits
MRIT 2334	Magnetic Resonance Equipment and Methodology	3
MRIT 2461	Clinical II - Radiologic Technology/Science - Radiographer	4
<b>Credits</b>		<b>7</b>
<b>Total Credits</b>		<b>16</b>

**Capstone Experience:** MRIT 2461 Clinical II - Radiologic Technology/ Science - Radiographer

Students must earn a C or better in all Magnetic Resonance Imaging (MRIT) and Medical Imaging (RADR) courses and maintain an overall cumulative GPA of at least 2.0 to remain in and/or graduate from the program.