MAGNETIC RESONANCE IMAGING: CP

Certificate of Proficiency | 42 credit hours minimum

Area of Interest: Health Professions

Academic Advising

Program Description:

The Magnetic Resonance Imaging (MRI) Certificate of Proficiency provides training in MRI technologies and procedures for graduates of an associate degree program or two-year hospital-based program in another health science area. Students attend full-time and complete classroom work on campus, while clinical education is completed in an affiliated MRI department. The MRI certificate provides the student with the required didactic and clinical competencies to perform as a Magnetic Resonance Imaging Technologist in medical imaging departments of hospitals, medical centers, and free-standing diagnostic imaging facilities. Upon successful completion of the program, students are eligible to complete the American Registry of Radiologic Technologists (ARRT) MRI registry examination.

Program Prerequisite Requirements:

- Completion of all program prerequisites prior to submitting an application. Must earn a "C" or higher in the following courses:
  - BIO 111 Introductory Biology I or BIO 140 Principles of Biology I or CHM 101 Fundamentals of Chemistry I
  - BIO 207 Anatomy and Physiology I
  - BIO 208 Anatomy and Physiology II
  - PHY 111 College Physics I or PSI 101 Physical Science or XRT 107 Radiologic Physics I
  - MTH 160 Precalculus Algebra or MTH 180 Introductory Statistics
  - HIM 101 Medical Terminology and Language
  - ENG 101 College Composition or ENG 102 College Composition II
  - COM 101 Oral Communications or COM 107 Public Speaking
- Associate degree or higher
- Cumulative GPA of 2.7 or better for all coursework; cumulative GPA of 3.0 or better for Mathematics and Sciences courses (Physics or Physical Science, Anatomy and Physiology I and II, Precalculus Algebra or Introductory Statistics)
- Only one repeat of a course prerequisite is allowed over a five-year period
- Complete 4 hours of job shadowing
- Complete 40 hours in a patient care setting (can be voluntary service within a hospital or nursing home)
- Mathematics and science prerequisite courses must have been completed within five years of entering the program
  - Students who have graduated within the last 2 years from a JRCERT-accredited Radiologic Technology program are not required to retake math or science courses that are more than 5 years old. All required courses and other prerequisites must have still been completed to be eligible to apply.
  - If a student's math prerequisite was taken over 5 years ago, they may take the math placement test and do not have to retake the math prerequisite if the score is 264 or higher on Accuplace Next-Gen QAS.

All applicants must complete a criminal background check and drug screen through a college-approved background screening company prior to the beginning of the fall semester of admission. The student will be responsible for the cost of the background check and drug screen. Students not passing the criminal background check and/or drug screen may be prohibited from participating in clinical education. This will prevent the student from being able to complete all program requirements for graduation.

Students are required to complete a health history, immunization record, physical exam, essential functions acknowledgment form, criminal background check, drug screen, and American Heart Association Basic Life Support (BLS) for Healthcare Providers CPR certification prior to the first day of class.

Location. This program is offered in its entirety at Wildwood.

Licensure. This program meets the educational requirements for state licensure in the following states: North Dakota, New Hampshire, New Mexico, Oregon, and West Virginia. Students interested in pursuing licensure in a different state should contact the program coordinator for more information.

Cost of Attendance. For more information on cost of attendance visit **MoSCORES (https://scorecard.mo.gov/Search/)**.

Program Career and Salary Information. Pursuant to Missouri HB 1606 (2018), information regarding the number of credit hours, program length, employment rate, wage data, and graduates employed in careers related to their program of study at St. Louis Community College can be found at the following URL: **https://scorecard.mo.gov/scorecard/(https://www.google.com/url/?q=https://scorecard.mo.gov/scorecard/&sa=D&ust=1555536894857000&usg=AFQjCNG1xf3E_i2lO96zEytILO-s5xaJCQ)**. Search using School / Program “St. Louis Community College” and choose the degree or credential type of interest.

The following limitations to the data apply: Information provided is based on the most recent cohorts available. Typically, most recent cohorts for wage and completion data are six years prior to the current academic year. Time to complete a program of study varies depending on the number of credit hours students earn per semester.

Interested in this program? Start the enrollment process by visiting the **Apply to STLCC (https://www.stlcc.edu/admissions/apply-to-stlcc/)** page.

At the completion of the program, students are expected to:

1. summarize the principles of magnetic resonance imaging physics, image formation, and data processing.
2. differentiate the characteristics of spin echo and gradient echo pulse sequences.
3. predict the effects of scan parameter adjustment on image appearance.
4. evaluate the appearance of normal anatomical structures and pathological features on magnetic resonance images.
5. diagram the components of magnetic resonance imaging systems.
6. provide safety education to all individuals within the magnetic resonance imaging environment.
7. perform safety screening on all individuals prior to entering the magnetic resonance imaging environment.
8. mitigate safety risks and hazards within the magnetic resonance imaging environment.
9. perform magnetic resonance imaging procedures specific to the head, neck, chest, spine, abdomen, pelvis, and musculoskeletal system.
10. evaluate factors for safe administration of magnetic resonance imaging contrast media.
11. administer contrast media during magnetic resonance imaging procedures.

12. perform quality control procedures on magnetic resonance imaging system components.
13. assess the findings of quality control procedures.

Code	Title	Credit Hours
Program Requirements		
MRI 101	Magnetic Resonance Imaging Clinical Applications I	5
MRI 102	Magnetic Resonance Imaging Anatomy & Pathology I	3
MRI 103	Magnetic Resonance Imaging Instrumentation I	3
MRI 104	Magnetic Resonance Imaging Safety & Patient Care I	3
MRI 105	Magnetic Resonance Imaging Physics I	3
MRI 201	Magnetic Resonance Imaging Clinical Applications II	2
MRI 202	Magnetic Resonance Imaging Anatomy & Pathology II	2
MRI 203	Magnetic Resonance Imaging Instrumentation II	2
MRI 204	Magnetic Resonance Imaging Safety & Patient Care II	2
MRI 205	Magnetic Resonance Imaging Physics II	2
MRI 211	Magnetic Resonance Imaging Practicum I	3
MRI 212	Magnetic Resonance Imaging Practicum II	5
MRI 213	Magnetic Resonance Imaging Practicum III	4
MRI 214	Magnetic Resonance Imaging Capstone	3
Total Credit Hours		**42**

PLEASE NOTE: If you originally enrolled at STLCC prior to Spring 2025, you may need to view an **archived catalog (http://catalog.stlcc.edu/archived-catalogs/)** for your correct program requirements. Please speak with an advisor or the program coordinator for more information.

Code	Title	Hours	Prerequisites	Milestones/Notes
First Year				
Fall				
MRI 101		5		Gateway Course
MRI 102		3		Critical Course
MRI 103		3		
MRI 104		3		Gateway Course
MRI 105		3		Critical Course
	Credit Hours	**17**		
Spring				
MRI 201		2		
MRI 202		2		
MRI 203		2		
MRI 204		2		
MRI 205		2		
MRI 211		3		
	Credit Hours	**13**		
Summer				
MRI 212		5		
	Credit Hours	**5**		
Second Year				
Fall				
MRI 213		4		
MRI 214		3		
	Credit Hours	**7**		
	Total Credit Hours	**42**		

Critical Courses: Critical courses are most important to a student's declared major and most strongly predict later success in the major. A critical course requires a minimal grade to progress to higher-level courses.

Exploratory Courses: Exploratory courses are first-semester courses that introduce the program and career field.

Gateway Courses: Gateway courses are courses in many career pathways that must be completed before progression in higher-level courses. These may be the same as critical and/or exploratory courses.

*Click on the hyperlinked course number to view additional information about the course.

**Students completing a course that has been assigned a MOTR number may transfer that course to any public institution in Missouri. Those who complete CORE 42 requirements will have that verification on their transcript.

*** It is your responsibility to verify that the courses listed above will transfer to the four-year institution of your choice. Maximize your transfer credits/classes by meeting with an academic advisor.