MAGNETIC RESONANCE IMAGING - UNDERGRADUATE CERTIFICATE

College of Applied and Technical Studies
www.kent.edu/cats

Examples of Possible Careers*

Magnetic resonance imaging technologists

- 7.0% faster than the average
- 38,700 number of jobs
- $74,690 potential earnings

Contact Information

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- Chat with an Advisor
- Speak with an Admissions Counselor

Fully Offered

- Online
- Salem Campus (hybrid online/on-ground)

***Note**
Source of occupation titles and labor data is from the U.S. Bureau of Labor Statistics' Occupational Outlook Handbook. Data comprises projected percent change in employment over the next 10 years; nation-wide employment numbers; and the yearly median wage at which half of the workers in the occupation earned more than that amount and half earned less.

Description

The Magnetic Resonance Imaging undergraduate certificate program provides coursework in anatomy, patient management, procedures and image production. Students observe magnetic resonance imaging procedures, perform procedures under direct supervision by registered technologists and complete required clinical competencies toward the national certification exam for magnetic resonance imaging or to be applied toward continuing education requirements as deemed by the American Registry of Radiologic Technologists (ARRT).

Magnetic resonance imaging (MRI) scans are ordered on orthopedic, neurological, cardiovascular, cancer and non-trauma patients and is extremely beneficial for examining soft tissue structures. An MRI technologist works in hospitals or outpatient healthcare facilities using an MRI scanner that uses a magnetic field and computer-generated radio waves to create detailed images of the organs and tissues in the body. The images are assembled and reconstructed digitally to create a series of diagnostic images that physicians use to interpret for a patient diagnosis.

The Magnetic Resonance Imaging certificate offers a seamless transfer pathway into the Bachelor of Radiologic Imaging Sciences Technology (B.R.I.T.) degree. Students are able to complete the certificate, sit for the national certification exam, begin working in the profession and then enroll in the B.R.I.T. degree and complete the remaining requirements to earn the bachelor's degree.

Admission Requirements

Admission to this program is selective. Applicants must have graduated from a program in radiologic technology, diagnostic medical sonography, nuclear medicine or radiation therapy and be a registered or registry-eligible radiologic technologist, diagnostic medical sonographer, nuclear medicine technologist or a radiation therapist. Applicants must have a minimum 2.50 overall GPA prior to program entry.

The program begins in fall with an application deadline of July 1 each year.

Program Learning Outcomes

Graduates of this program will be able to:

1. Apply knowledge to the practice of magnetic resonance imaging.
2. Effectively utilize critical thinking, problem-solving and decision-making skills in the practice of magnetic resonance imaging.
3. Effectively communicate in oral and written form with patients, customers and all members of the health care team.
4. Successfully perform magnetic resonance imaging procedures and attain results of high diagnostic value while providing patient care.
5. Exhibit personal and professional attributes and values relevant to the practice of magnetic resonance imaging.

Program Requirements

Certificate Requirements

Code	Title	Credit Hours
Certificate Requirements [1]		
RIS 34084	COMPUTED TOMOGRAPHY AND MAGNETIC RESONANCE IMAGING SECTIONAL ANATOMY I (min C grade)	2
RIS 34086	COMPUTED TOMOGRAPHY AND MAGNETIC RESONANCE IMAGING SECTIONAL ANATOMY II (min C grade)	2
RIS 44003	MAGNETIC RESONANCE IMAGING CLINICAL EDUCATION I (min C grade)	2
RIS 44031	PATIENT MANAGEMENT IN MAGNETIC RESONANCE IMAGING (min C grade)	2
RIS 44044	MAGNETIC RESONANCE IMAGING PROCEDURES I (min C grade)	2
RIS 44045	MAGNETIC RESONANCE IMAGING PROCEDURES II (min C grade)	2
RIS 44051	MAGNETIC RESONANCE EQUIPMENT AND IMAGE ACQUISITION I (min C grade)	2
RIS 44052	MAGNETIC RESONANCE EQUIPMENT AND IMAGE ACQUISITION II (min C grade)	2
RIS 44063	MAGNETIC RESONANCE IMAGING CLINICAL EDUCATION II (min C grade)	2
Minimum Total Credit Hours:		18

[1] Students are encouraged to register for the following courses during summer term: RIS 44066 is a review course for the national certification exam. RIS 44073 allows students to gain added experience in MRI and to complete required clinical competencies for the ARRT exam. The courses are not required to graduate with the certificate.

Graduation Requirements

Minimum Certificate GPA	Minimum Overall GPA
2.000	2.000

- All clinical education courses must be completed and with successful passage of all required clinical competencies.

Roadmap

This roadmap is a recommended semester-by-semester plan of study for this major. However, courses designated as critical (!) must be completed in the semester listed to ensure a timely graduation.

Fall Semester		**Credits**
RIS 34084	COMPUTED TOMOGRAPHY AND MAGNETIC RESONANCE IMAGING SECTIONAL ANATOMY I	2
RIS 44003	MAGNETIC RESONANCE IMAGING CLINICAL EDUCATION I	2
RIS 44031	PATIENT MANAGEMENT IN MAGNETIC RESONANCE IMAGING	2
RIS 44044	MAGNETIC RESONANCE IMAGING PROCEDURES I	2
RIS 44051	MAGNETIC RESONANCE EQUIPMENT AND IMAGE ACQUISITION I	2
	Credit Hours	10
Spring Semester		
RIS 34086	COMPUTED TOMOGRAPHY AND MAGNETIC RESONANCE IMAGING SECTIONAL ANATOMY II	2
RIS 44045	MAGNETIC RESONANCE IMAGING PROCEDURES II	2
RIS 44052	MAGNETIC RESONANCE EQUIPMENT AND IMAGE ACQUISITION II	2
RIS 44063	MAGNETIC RESONANCE IMAGING CLINICAL EDUCATION II	2
	Credit Hours	8
Summer Term		
Optional courses		
RIS 44066	MAGNETIC RESONANCE IMAGING TECHNIQUES	
RIS 44073	MAGNETIC RESONANCE IMAGING CLINICAL EDUCATION III	
	Credit Hours	0
	Minimum Total Credit Hours:	18