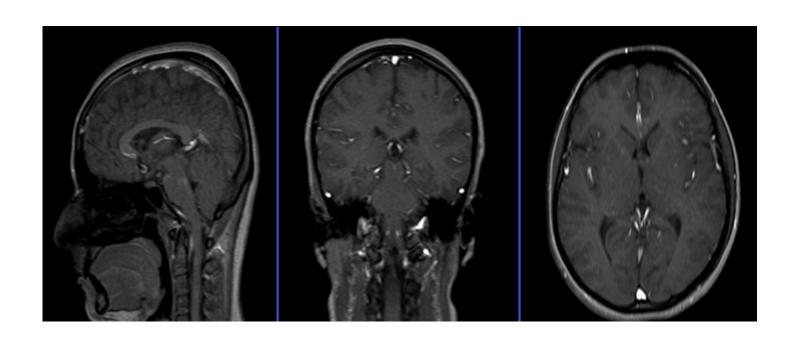


Terre Haute Campus

Medical Imaging Program:

MAGNETIC RESONANCE IMAGING TECHNOLOGY CERTIFICATE



Information and Application Packet 2022 Program



Dear Interested Candidate:

Thank you for your interest in the Medical Imaging Program: MRI Technology Certificate at Ivy Tech Community College Terre Haute Campus. Enclosed you will find the application steps, information about the program, the current suggested curriculum sequence, the application form, and frequently asked questions. Please note our selection process.

MRI is truly an exciting field in healthcare; it is growing and changing every year. We want to help you with your goals to become a part of this healthcare team. Please carefully read through all the information supplied in this packet. This application packet is the most current and replaces any other previously printed application packet. If you have any questions, please contact your Medical Imaging Program Faculty Advisor.

For some health programs, you may not be eligible to be licensed or certified if you have been convicted of a felony. Please check with the Program Faculty Advisor if you have questions concerning this before enrolling in the program or you may contact the American Registry of Radiologic Technologists (ARRT) http://@www.arrt.org

Melanie Castle, MHA, RT(R) (MR)
Program Director
812-298-2376
mcastle@ivytech.edu

LouAnn Wisbey Program Chair 812-298-2242 wisbey@ivytech.edu

FAX: 812-298-2392



Medical Imaging Program: Magnetic Resonance Imaging Technology Certificate

Medical Imaging MRI Technology

CERTIFICATE AVAILABLE:

MRI Certificate

SALARY RANGE:

The mean salary for Indiana is \$63,900 according to the 2017 salary survey by https://www.glassdoor.com/Salaries/indiana-mri-technologist-salary-SRCH IL.0,7 IS2124 KO8,24.htm

ACCREDITATION:

Ivy Tech Community College is accredited by the North Central Association of Colleges, equal opportunity, affirmative action institution of higher education.

The MRI Technology Certificate program will seek accreditation by the Joint Review Committee on Education in Radiologic Technology 20 N Wacker Dr, Suite 2850 Chicago, IL 60606-3182 (312) 704-5300 www.jrcert.org

ADDRESS:

8000 South Education Drive Terre Haute, IN 47802

PHONE:

800-377-4882 (812)298-2239

www.ivytech.edu\terrehaute

MRI is a sophisticated diagnostic imaging modality that captures cross sectional images of the patient. MRI is most commonly used to evaluate many types of disease processes, injuries, and functions of the brain.

The MRI technologist is an integral member of the healthcare team who is proficient in performing cross sectional images using sophisticated diagnostic imaging equipment. This health care professional works closely with patients, fellow technologists, and many other members of the health care team. The MRI technologist can be employed in a number of inpatient and outpatient health care settings that include trauma centers, hospitals, or diagnostic imaging centers.

Ivy Tech offers a Magnetic Resonance Imaging Certificate upon completion of the curriculum for continuing students or a Courses Only option, for employed professionals. Clinical practice and supplemental instruction are provided at the accredited sites. To prepare for testing, MRI candidates for registration and certification must document at least 16 hours of structured education. In order to apply for the MRI Certificate program, a candidate would require either, Certification and Registration with the ARRT in Radiography, Nuclear Medicine (registration through NMTCB is also accepted), Radiation Therapy, or Sonography (registration through ARDMS) is also accepted.

This MRI Technology Program is an online program with limited enrollment based on clinical site availability. Applicants will be considered until the class maximum enrollment is met and/or the start of the semester. Please contact the Program

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Medical Imaging

MISSION AND GOALS

MAGNETIC RESONANCE IMAGING TECHNOLOGY PROGRAM MISSION STATEMENT

The mission of the MRI Technology Certificate at Ivy Tech Community College in Terre Haute is to provide registered technologists with the opportunity for professional and personal advancement in the medical imaging profession.

PROGRAM GOALS

- 1. Students will demonstrate the necessary skills to function as competent entry-level MRI technologist.
- 2. Students will model the importance of professionalism and life-long learning.
- 3. Students will develop problem solving and critical thinking skills.
- 4. Students will demonstrate effective communication skills.

PROGRAM OUTCOMES

- 1. Students will apply positioning and technical skills.
- 2. Students will demonstrate patient care skills.
- 3. Students will demonstrate MRI safety.
- 4. Students will demonstrate professionalism.
- 5. Students will learn the value of life-long learning.
- 6. Students will adapt standard procedures for non-routine procedures.
- 7. Students will critique and analyze images for diagnostic quality.
- 8. Students will demonstrate oral communication skills with patients and healthcare workers.
- 9. Students will demonstrate written communication skills with patients and healthcare workers.



Medical Imaging

*PHYSICAL DEMANDS AND REQUIREMENTS

- **Standing** Standing is required 95-100% of the time throughout the assigned clinical hours. Essentially, the position cannot be performed without the ability to stand for long periods of time.
- Walking Walking is required 90-100% of the time during the course of the assigned clinical hours.
- Climbing Climbing is not required except for stairs.
- <u>Pushing</u> Pushing is required for moving the patients to and from the MRI table.
- <u>Pulling</u> Pulling is required for both short and long durations when moving patients onto tables and when transporting to and from units.
- Lifting Up to 50 lbs. Most significant: must be able to assist patient to and from MRI table.
- Carrying Students consistently carry oxygen tanks, linens, and monitoring equipment. See lifting.
- Exposure to Disease On a daily basis, involves caring for the patients with known and potential infections.
- <u>Handling Repulsive Tasks</u> Involves handling and disposing of body secretions, blood, stool, emesis, etc. The
 general cleaning and maintenance of an incontinent patient is not uncommon.
- Working in Confined Places Confined places included the processing workstation and MRI suite, which is
 frequently used each day. Each time being several minutes in duration. Must be able to work around loud,
 persistent, knocking noises for prolonged periods.
- Exposure to Potentially Harmful Radiation Depending on clinical location, daily contact with radiation producing devices in some instances.
- <u>Visual</u> –20/100 vision, correctable (with glasses or contacts) to 20/30 in one eye or 20/100 vision correctable (with glasses or contacts) to 20/40 in both eyes.
- <u>Auditory and Speech</u> Student must be able to respond to auditory codes, phones, equipment noise, and/or verbal expressions from patients and physicians for proper patient care. The student must be able to verbally communicate medical information to the patient, staff, physicians, and general public.
- * If you do not meet these requirements, check with the disability representative at your campus for assistance and contact the program director to discuss the program.



Medical Imaging Program: Magnetic Resonance Imaging Technology Certificate

MRI Technology PHYSICAL DEMANDS AND REQUIREMENTS

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Function	Program-Specific Examples	Program- Specific Examples		
Gross Motor Skills	Move within confined spaces Sit and maintain balance Stand and maintain balance Reach above shoulders (e.g., put away supplies) Reach below waist (e.g., plug electrical appliance into wall outlets)	F		
Fine Motor Skills	Pick up objects with hands Grasp small objects with hands (e.g., syringe, pencil) Write with pen or pencil Key/type (e.g., use a computer) Pinch/pick or otherwise work with fingers (e.g., manipulate a syringe) Twist (e.g., turn objects/knobs using hands) Squeeze with hand (e.g., blood pressure cuff)	С		
Physical Endurance	Stand (e.g., at client side during minor or therapeutic procedure) Sustain repetitive movements (e.g., CPR) Maintain physical tolerance (e.g., work entire shift)	С		
Physical Strength	 Push and pull 50 pounds (e.g., position clients) Support 50 pounds (e.g., ambulate client) Lift 50-100 pounds (e.g., pick up a child, transfer patient) Move light objects weighing up to 10 pounds Move heavy objects weighing from 25 to 100 pounds Defend self against combative client Use upper body strength (e.g., perform CPR, restrain a client) Squeeze with hands (e.g., operate fire extinguisher) 			
Mobility	Twist Bend Stoop/squat Move quickly (e.g., response to an emergency) Climb (e.g., ladders/stools/stairs) Walk	F		
Hearing	Hear normal speaking level sounds (e.g., person-to-person interview) Hear faint voices Hear faint body sounds (e.g., blood pressure sounds) Hear in situations when not able to see lips (e.g., when masks are used) Hear auditory alarms (e.g., monitors, fire alarms)	С		
Visual	See objects up to 20 inches away (e.g., information on a computer screen, skin conditions) See objects up to 20 feet away (e.g., patient in a room) See objects more than 20 feet away [e.g., client at end of hall) Use depth perception Use peripheral vision Distinguish color (e.g., color codes on supplies, charts, bed) Distinguish color intensity (e.g., flushed skin, skin paleness)	С		



Medical Imaging Program: Magnetic Resonance Imaging Technology Certificate

Tactile	Feel vibrations (e.g., palpate pulses) Detect temperature (e.g., skin, solutions) Feel differences in surface characteristics (e.g., skin turgor, rashes)	
	Feel differences in sizes, shapes (e.g., palpate vein, identify body landmarks) Detect environmental temperature (e.g., check for drafts)	
	· Detect environmental temperature (e.g., check for drafts)	F
Smell	Detect odors from client (e.g., foul smelling drainage, alcohol breath, etc.) Detect smoke	
	Detect gases or noxious smells	F
Reading	Read and understand written documents (e.g., policies, protocols)	F

Function	Program-Specific Examples		
Arithmetic	Read and understand columns of writing (flow sheet, charts)		
Aitimicuc	 Read digital displays Read graphic printouts (e.g., EKG) 		
Competence	• Calibrate equipment		
	 Convert numbers to and/or from the Metric System 		
	 Read graphs (e.g., vital sign sheets) Tell time 		
	 Measure time (e.g., count duration of contractions, etc.) 		
	Count rates (e.g., pulse)		
	 Use measuring tools (e.g., thermometer) Read measurement marks (e.g., measurement tapes, scales, etc.) 		
	Add, subtract, multiply, and/or divide whole numbers		
	Compute fractions (e.g., medication dosages)	L	
	Use a calculator		
	Write numbers in records		
Emotional	Establish therapeutic boundaries		
Emononai	Provide patient with emotional support		
Stability	 Adapt to changing environment/stress Deal with the unexpected (e.g., client going bad, crisis) 		
•	Focus attention on task		
And	 Monitor own emotions 		
	 Perform multiple responsibilities concurrently 		
Interpersonal	 Handle strong emotions (e.g., grief) Negotiate interpersonal conflict 		
_	Respect differences in clients		
Skills	Establish rapport with clients	C	
	 Establish rapport with co-workers 		
Communication	Teach (e.g., client/family about health care)		
Communication	• Explain procedures		
Skills	 Give oral reports (e.g., report on client's condition to others) Interact with others (e.g., health care workers) 		
SKIIIS	Speak on the telephone		
	Influence people	\mathbf{C}	
	Direct activities of others		
	 Convey information through writing [e.g., progress notes) 		
Critical	Identify cause-effect relationships		
Cilicai	 Plan/control activities for others 		
Thinking	Synthesize knowledge and skills Sequence information	C	
	'		
Analytical	Transfer knowledge from one situation to another Process information Evaluate outcomes		
•	Problem solve Prioritize tasks		
Thinking	 Use long term memory Use short term memory 	l F	



Medical Imaging

CRIMINAL BACKGROUND CHECKS AND DRUG TESTING INFORMATION

In order to participate at the clinical sites, CRIMINAL BACKGROUND CHECKS and DRUG TESTING*** must be performed and the results must be satisfactory to the clinical sites to complete this portion of the coursework. Although personal information will be kept confidential, names and results of background checks, whether positive or negative, may be shared with any affiliating clinical site for the Imaging Sciences program in order to determine clinical eligibility. Some clinical sites may require you to show your criminal background check results to them.

As per College policy, if clinical site placement of the student is not successful, "...the student will be notified that s/he may not enroll in clinical courses and any co-requisite courses. In most cases, this will mean that the student will not be able to progress in the program, and will therefore not be able to complete the courses required for graduation." Any existing clinical affiliate appeal processes will be shared with the student. The student is then responsible for managing their appeal directly with the clinical affiliate.

ETHICS ELIGIBILITY

Completion of a criminal background check and drug screening for a Health Sciences program <u>does not</u> ensure eligibility for licensure, credentialing, or future employment.

If you should have a criminal matter in your past after you have reached age 18, whether it is recent or not, you must contact the following credentialing body for eligibility that pertains to you:

American Registry of Radiologic Technologists at 651-687-0048

RANDOM DRUG TESTING

Clinical affiliates can conduct additional background checks and drug screenings (including random drug screenings during clinical) at their discretion. These tests may be at the expense of the student.

***Additional criminal background checks and/or drug screenings will be required in programs for students enrolled in clinical courses more than 12 months.

Students who are not continuously enrolled in a program until completion may be required to complete additional checks upon re-entry to a program or admission to a different program in the School of Health Sciences or School of Nursing. Clinical sites or the College may request additional background checks or drug screenings at their discretion.***

CERTIFICATION/LICENSURE TRAINING DISCLAIMER

Ivy Tech Community College – Terre Haute Campus cannot guarantee that any student will pass a certification or licensing exam. Your success will be determined by several factors beyond the instruction you are given in the classroom including your test-taking skills, your willingness to study outside of class, and your satisfactory completion of appropriate practice exams. Certification and licensure exam questions are drawn from databases of hundreds of possible questions; therefore, a thorough understanding of the subject matter is required. The goal of Ivy Tech in providing a certification exam studies class is to assist you in understanding the material sufficiently to provide a firm foundation for your studies as you prepare for the exam. Certification and licensure exam eligibility will also depend on a required amount of performed exams (see ARRT Post-Primary Exam eligibility). Ivy Tech cannot guarantee the exam quantity requirements will be met within the program. You may need to obtain exam quantity requirements after the didactic and clinical requirements of the certificate program is completed in order to meet exam eligibility requirements for the board exam. Beginning January 2020, the ARRT posted a maximum amount of MRI exams that can be reported on the ARRT on-line record of 7 exams per day https://www.arrt.org/pages/educator-update/arrt-



Medical Imaging Program: Magnetic Resonance Imaging Technology Certificate <u>institutes-daily-reporting-limits-for-clinical-experience</u>. (It is important to note that this does not limit the number of procedures a student can perform per day, only what they can submit for competency per day).

MRI Technology Certificate Possible Pathways

CERTIFICATE		COURSES ONLY	
MRI TECHNOLOGY CURRICULUM SUMMER SEMESTER		(COURSES ONLY OFFERED IN THE SEMESTER OFFERED FOR THE CERTIFICATE PROGRAM)	
MRIT 111 – MRI Orientation and Patient Safety	3	MRIT 111 – MRI Orientation and Patient Safety	Summer
CATX 102 – Cross Sectional Anatomy	3	CATX 102 – Cross Sectional Anatomy	Summer
		MRIT 112 – MRI Imaging Procedures	Fall
Total	6	MRIT 113 – MRI Clinical Education I MRIT 117 – MRI Physical Principles, Instrumentation and Informatics	Fall Fall
		MRIT 218 - MRIT Imaging Procedures II (1st 8 weeks)	Spring
MRI TECHNOLOGY CURRICULUM FALL SEMESTER		MRIT 203 – MRI Clinical Education II	Spring
MRIT 117 – MRI Physical Principles, Instrumentation and Informatics	3	MRIT 299 – (2 nd 8 weeks)	Spring
MRIT 112 – MRI Imaging Procedures	3		
MRIT 113 – MRI Clinical Education I	3		
Total	9		
MRI TECHNOLOGY CURRICULUM SPRING SEMESTER			
MRIT 218 – MRI Imaging Procedures II (1st 8 weeks)	3		
MRIT 203 - MRI Clinical Education II (16 weeks)	3		
MRIT 299 – Exam Review (2 nd 8 weeks)	3		
Total	9		
Total Credits	24	Total credits will vary	N/A



Medical Imaging Program: Magnetic Resonance Imaging Technology Certificate

Program Costs

The Medical Imaging Program, MRI Technology Certificate is 24 credits total. If clinical would not be required for certification, only 18 credits would be required. Please see www.ivytech.edu/tuition for the most current tuition information.

Check tuition reimbursement eligibility through employer or Work One, etc.

Books costs vary by course.

Consumable fees n/a

Travel- Students are required to attend clinical 15 hours per week, if he/she opted for this course. This means there will be travel expenses for gas and wear-and-tear on vehicles.

Uniforms would include scrubs, (scrubs must have the Ivy Tech logo and must be purchased at the Barnes & Noble bookstore). Cost will vary.

Criminal Background Check and Drug Screening Initial check = \$111.00 (cost will vary.

Physical, Immunizations, and Healthcare Provider CPR Cost will vary.

ALL ITEMS AND COST ARE ESTIMATES AND ARE SUBJECT TO CHANGE.

Program Calendar

The program follows the same academic calendar as Ivy Tech Community College Terre Haute Campus. To view the most current academic calendar please go to https://www.ivytech.edu/calendar/index.html

Policies

Policies are available on the Ivy Tech website please go to www.ivytech.edu

Didactic Instruction

MRI didactic courses are taught entirely online. To participate in the Program all students must have a home computer with updated browser and necessary programs and Internet access. There are tutorial sessions available on-line on the distance education page of the Ivy Tech Community College website. All students must follow all aspects of the program including the program sequence as published.

MRI Technology Certificate Clinical Rotations

Clinical education courses include completion of the ARRT documentation requirements, a minimum of 312 clinical hours (15 hours per week), exam competencies, and performance evaluations in one of Ivy Tech Community College's recognized clinical sites while supervised by a qualified registered technologist. This means there will be travel expenses for gas and wear-and-tear on cars. Clinical location assignments will be determined before each semester begins. Please contact the program director to discuss additional clinical site locations not listed below. The currently approved clinical sites include the following and are subject to change:

IU Health Bedford Hospital
IU Health Paoli Hospital
Monroe Hospital
Regional Imaging Center
Union Hospital
Marion General Hospital
Parkview Health, Ft. Wayne
Rayus (Indiana Statewide)

Logansport State Hospital
CDI Terre Haute location
IU Morgan Health
Terre Haute Regional Hospital
Parkview Hospital
ProScan (State of Indiana & Cincinnati, Ohio)
UofL, (Louisville, Kentucky)



Medical Imaging Program: Magnetic Resonance Imaging Technology Certificate

Clinical Affiliates

The program has clinical affiliates in Ohio, Indiana and Kentucky. Additional sites may be added per request; however, there is not a guarantee that a new clinical site can be added for all prospective students. To add a clinical site for this program, the applicant will request approval of a radiology administrator to complete clinical hours at their hospital/facility and send the following information to the Melanie Castle to initiate an affiliation agreement:

- 1. Complete legal name, physical address, and phone number of the facility.
- 2. Name, title, e-mail address, and phone number of a contact with whom Ivy Tech should work on an affiliation agreement.
- 3. Name, title, e-mail address, and phone number of the person who will sign the affiliation agreement for the hospital/facility
- 4. Name, title, e-mail address, and phone number of the MRI technologist (contact person who would be responsible for approving clinical schedules)

For all affiliation agreement inquiries, please contact:

Melanie E Castle, MHA, RT (R)(MR), CPC Associate Professor of Medical Imaging Director of MRI CT Program 8000 S. Education Blvd. Terre Haute, IN 47802

Phone: (812) 298-2376 Fax: (812) 298-2392

Program Completion

Upon successfully finishing the program, the graduate will receive a transcript and certificate of completion from the Ivy Tech Office of Professional Development. The graduate will complete and document the ARRT clinical experience requirements to be considered a candidate for the ARRT post-primary exam in MRI.



Medical Imaging Sciences MRI Technology Certificate

APPLICATION AND SELECTION PROCESS

If You Are Planning To Apply To the Medical Imaging Program, MRI Technology Certificate, *PLEASE* Read This Information Carefully

PRE- MRI STEPS:

Since the Medical Imaging MRI Technology Program is a limited enrollment program, it is important that you closely follow the application steps and the requirements that follow:

- 1. The following steps are required for new Ivy Tech Community College students
 - Complete the application process for Ivy Tech Community College in the Admissions Office at any campus or on-line at www.ivytech.edu/apply-now.
 - Provide ARRT, NMTCB or ARDMS documentation of active and current credentials.
 - The program has clinical affiliates in Indiana. Additional sites may be added per request; however, there is not a guarantee that a new clinical site can be added for all prospective students.
 - To add a clinical site for this program, the applicant will request approval of a radiology administrator to complete clinical hours at their hospital/facility and send the following information to the program director to initiate an affiliation agreement:
 - Complete legal name of facility
 - Physical address and phone number of facility
 - Name, email address, and phone number of a contact with whom I should work on an affiliation agreement
 - Name and email address of an MRI technologist (contact person who would be responsible for approving clinical schedules)
 - For all affiliation agreement inquiries, please contact:

Melanie E Castle, MHA, RT (R)(MR), CPC Associate Professor of Medical Imaging Director of MRI CT Program 8000 S. Education Blvd. Terre Haute, IN 47802 mcastle@ivytech.edu Phone: (812) 298-2376

Fax: (812) 298-2392



Medical Imaging Sciences

MRI Technology Certificate

Program Admission

Upon acceptance into the MRI program, the student will receive an email, from Melanie E Castle, Program Director that includes a list of required textbooks and forms that must be completed prior to the start of the program.

If the student opts for the clinical courses, the following requirements must be met prior to starting the program of study for clinical requirements:

- ✓ Physical exam by a qualified health care provider
- ✓ Immunizations:
 - Requirements will be provided at the time acceptance
- ✓ Current CPR certification by the American Heart Association upon admission and maintained throughout the program. *This must state Healthcare Provider BLS on the card.*
- ✓ Background check (information will be provided at time of acceptance)
- ✓ Drug Screen (information will be provided at time of acceptance)



APPLICATION

ALL ELIGIBLE APPLICANTS MUST HOLD A REGISTRATION OR CREDENTIAL IN ONE OR MORE OF THE FOLLOWING

(Please select at least one):

- Radiography (R) (ARRT)
- Radiation Therapy (T) (ARRT)
- Nuclear Medicine (ARRT or NMTCB)
- Sonography (ARRT or ARDMS)
- Student in one of the primary pathways listed above*
 (*program acceptance is contingent on receiving credential in one of the primary pathways listed above prior to the first day of class)

Name		
(Last)	(First)	(Middle)
Student ID # <u>C0</u>		
Mailing Address		
City	State	Zip
Home Phone #	Daytime or Cell Phone Number #	
Preferred E-Mail Address		
Signature of Applicant		Date
(Submit Application to the contact information	below.)	

Ivy Tech Community College of Indiana provides open admission, degree credit programs, courses and community service offerings, and student support services for all persons regardless of race, color, creed, national origin, religion, gender, sexual orientation, physical or mental disability, age or veteran status.

OFFICIAL USE: Received on

Melanie E Castle, MHA, RT (R)(MR), CPC Associate Professor of Medical Imaging Director of MRI CT Program 8000 S. Education Blvd.
Terre Haute, IN 47802

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