



**LAKE
MICHIGAN
COLLEGE®**



RADIOLOGIC TECHNOLOGY

at Lake Michigan College

lakemichigancollege.edu/radtech





Why Radiologic Technology (Rad Tech) at LMC?

Radiologic Technology Career Opportunities

The radiologic technologist is a skilled person, qualified by a medical and technical education to provide patient services at hospitals, physicians' offices, and imaging centers. A radiologic technologist uses x-ray equipment to produce images of tissues, organs, bones and vessels of the body. A radiologic technology degree requires that you pass a national registry examination. Successful completion of the exam allows the radiographer the opportunity to cross-train into CT, mammography, cath lab, angiography, bone densitometry, quality assurance/control, nuclear medicine and radiation therapy.

Not only are radiologic technologists involved in operating radiologic equipment, they also perform certain administrative tasks. Technologists prepare and maintain the patient's records, keep track of patient images and analyze images for diagnostic quality. They may also maintain paper or electronic files, schedule appointments, prepare work schedules and, in general, manage radiology departments or facilities. Good health, emotional stability and a sincere desire to work with the sick and disabled are important qualifications for this profession.

Radiographers may serve in other capacities such as:

- Technical advisors and application specialists
- Representatives for radiologic equipment and supply manufacturers
- Federal government and Armed Forces
- Public health, educational institutions and clinics

Information about a career in radiologic technology can be obtained at the American Society of Radiologic Technologists website, www.asrt.org.

Employment Outlook

From the U.S. Department of Labor:

- Employment is expected to grow 21% through 2022, faster than average for all occupations.
- As the population grows and ages, the demand increases for diagnostic imaging.
- Hospitals will remain principal employer.
- Also, employment in outpatient diagnostic imaging centers will continue to be available.
- Job openings will arise from the need to replace technologists who leave the occupation and as facilities expand.

Get in touch!

Prospective students are strongly encouraged to set an appointment with an academic advisor before starting any prerequisite testing and coursework.

Contact the OneStop to make an appointment with an academic advisor by calling (269) 927-8128.

Contact the Health Sciences Office for more information about the Radiologic Technology Program.

Health Sciences Office
2755 E. Napier Avenue, Room
Benton Harbor, Michigan 49022
(269) 927-8768
healthsciences@lakemichigancollege.edu



Entrance Requirement Checklist

	Completed @ LMC	Completed via Transfer	To be Completed
Learn about the program			
Obtain and read entire Rad Tech Program brochure (this document) (can be found at lakemichigancollege.edu/radtech)			
Contact an academic advisor to discuss program requirements (Strongly encouraged – call 269-927-8128 to make an appointment)			
Complete an LMC application for admission (lakemichigancollege.edu/apply)			
Have high school transcripts sent to LMC Records Office OR Have official college transcripts sent to LMC Records Office			
Have ACT/SAT scores sent to LMC and/or take Accuplacer Assessment to meet basic college requirements in reading, English, and math			
Complete Prerequisite Courses with a "C" or higher (LMC overall GPA must be 2.5 or greater)			
PHSC 101			
BIOL 205			
MATH 123 (<i>must take the Algebra Proficiency test if math course is older than 5 years</i>)			
ENGL 101			
PSYC 201			
HEAL 103 or READ 110			
*ENGL 102			
*Humanities/Fine Arts			
Apply to the program			
Meet with the Rad Tech Program Director (strongly encouraged - call 269-927-8768 or email healthsciences@lakemichigancollege.edu to make an appointment)			
Successfully complete all paperwork, testing, and coursework by May 12, 2019			
Submit Radiologic Technology Application to LMC Health Sciences Office by May 12, 2019			

*Grades earned in ENGL 102 and Humanities/Fine Arts do not count toward application point total, but **MUST** be successfully completed prior to program application to be considered eligible to apply.

Science coursework **MUST be completed within 10 years of application deadline.

Revised 07/09/2018



The Radiologic Technology Application Process

A student will receive an email acknowledgement upon receipt of their Radiologic Technology application. All prerequisites must be completed before an applicant can be considered for the Radiology Technology program. All eligible applicants' academic records are evaluated by using a numerical point system. Entry into the Radiologic Technology program is competitive and based on total points. Students who are not accepted into the Radiologic Technology program will be required to submit another Radiologic Technology application if they want to be reconsidered for the Radiologic Technology program for the next academic year.

Students must inform Lake Michigan College of changes in address or telephone numbers. If the Health Sciences Office is unable to contact a student related to placement into the Radiologic Technology program, a student may have to forgo placement that year after reasonable attempts have been made to contact the student.

Selection for Admission into the Rad Tech Program

All eligible students will be ranked via a point system and selected based upon a ranking process according to their grades in the prerequisite courses PHSC 101, BIOL 205, HEAL 103/READ 110, MATH 123, ENGL 101 and PSYC 201. Entry into the Radiologic Technology program is competitive and based on total points. Should two individuals qualify for the same seat, the students' cumulative GPAs will determine the ranking.

The ENGL 102 and Humanities/Fine Arts courses **MUST** be completed prior to applying to the Radiologic Technology program.

Admission process is nondiscriminatory in regards to age, color, height, weight, creed, disability, marital status, sexual orientation, national origin, political affiliation, race, religion, or gender identity or expression.



Course Sequence – Before Application

	Credit Hours	Contact Hours
Prerequisite Courses		
BIOL 205 Human Anatomy	4	5
PHSC 101 Physical Science: Chemistry and Physics	4	5
PSYC 201 Introduction to Psychology	3	3
MATH 123 Quantitative Reasoning	4	4
ENGL 101 English Composition	3	3
HEAL 103 or READ 110 Medical Terminology	1 or 2	2
ENGL 102 English Composition	3	3
Humanities/Fine Arts	3	3
TOTAL Prerequisite Credit/Contact Hours	28	31



Where will I practice my skills during the program?

In addition to on-campus lab, the clinical facilities used by Lake Michigan College's Radiologic Technology program include hospitals and doctors' offices located in Michigan and Indiana. The hospitals are recognized by nationally known accrediting agencies. Private offices meet the health and safety requirements for the State. The clinical schedule for the Radiology program may not follow the LMC College schedule; students may work all clinical shifts outside of the normal college hours.



Course Sequence – Associate Program

The structured Radiologic Technology curriculum is designed in accordance with the standards from the Joint Review Committee on Education in Radiologic Technology.

	Credit Hours	Contact Hours
Fall 2019 (First Year)		
RADT 130 Introduction to Radiography	3	3
RADT 131 Radiographic Positioning I	6	8
RADT 134 Radiographic Physics	4	4
Spring 2020 (First Year)		
RADT 138 Clinical Experience I*	2	2
RADT 139 Common Equipment and Procedures	4	4
RADT 140 Radiographic Positioning II	3	4
RADT 141 Contrast Studies	3	4
Summer 2020 (First Year)		
RADT 143 Clinical Experience II	3	3
RADT 144 Radiographic Positioning III	3	4
Fall 2020 (Second Year)		
RADT 145 Radiographic Protect/Biology	2	2
RADT 228 Computer Applications in Medical Imaging**	3	3
RADT 229 Clinical Experience III*	4	4
Spring 2021 (Second Year)		
RADT 232 Clinical Experience IV*	3	3
RADT 240 Radiographic Quality	4	4
RADT 241 Sectional Anatomy and Modalities**	3	3
Total Program Credits	50	55

**Please note that some late afternoon/early evening and some weekend shifts may be assigned for clinical experience.*

**RADT 228 and RADT 241 are taught in an online format.



What else do I need to practice as a radiographic technologist?

Upon successful completion of the Radiologic Technology program students will receive an Associate in Applied Science degree in Radiologic Technology (AAS/RT). Graduates are then eligible to sit for the certification examination given by the American Registry of Radiologic Technologists in Radiography. Successful completion of the ARRT exam allows the radiographer to use the initials of R.T., (R) which means Registered Technologist, Radiography. Some states have additional license requirements or use the results from the national certification tests (ARRT) for license issuance.

Any applicant that has been convicted of a felony or misdemeanor, should pre-apply to ARRT for determination of eligibility to sit for the national certification examination. If a student has questions about their specific situation they should contact the Program Director and contact the American Registry of Radiologic Technologists, 1255 Northland Dr., St. Paul, Minnesota, 55120-1155, phone 651-687-0048.



Cost Estimates

Tuition and Fees

See the LMC Tuition and Fees webpage at <https://lakemichigancollege.edu/tuition-fees> for current tuition rates. Total tuition and fees (Beginning Fall 2018) **including** RADT course-specific fees are as follows. For more details regarding program fees, please see the class schedule. Please note that the table below does **NOT** include prerequisite courses. These rates are subject to change without notice.

	In-District (\$150/contact hr)	Out of District (\$211.50/contact hr)	International (\$288/contact hr)
First Semester (15 contact hours)	\$2,746.00	\$3,518.50	\$4,666.00
Second Semester (14 contact hours)	\$2,844.00	\$3,333.00	\$4,404.00
Third Semester (7 contact hours)	\$1,422.00	\$1,666.50	\$2,202.00
Fourth Semester (9 contact hours)	\$1,363.00	\$1,916.50	\$2,605.00
Fifth Semester (10 contact hours)	\$1,775.00	\$2,390.00	\$3,115.00
PROGRAM TOTAL (55 contact hours)	\$10,150.00	\$12,824.50	\$16,992.00

Uniforms/Shoes

Approximately \$360

Initial Drug Screen and Background Check

Approximately \$110

Health Insurance

All Radiologic Technology students are required to have personal health insurance.

Radiologic Technology Books/Lab Packs

Approximately \$800 first semester (most books purchased in the first semester are used throughout the program), less each following semester.

Additional Expenses

Please note that, except for tuition, the above costs are only those related to the Radiologic Technology program. There are also books and supplies to purchase for general education courses. Students may have additional expenses, such as the cost to take the ARRT exam. Travel costs are not included. Tuition, fees, and other expenses are subject to change without notice.



Eligibility

Physical Exam and Immunization Requirements

All Radiologic Technology students are required to have a physical exam completed **prior** to beginning Radiologic Technology Program classes.

As part of this physical exam, it is essential to provide proof of freedom from communicable diseases. Specific vaccinations must be done or proof of antibody titer immunity provided for the following:

- MMR (Measles, Mumps & Rubella)
- Tdap (Tetanus, Diphtheria, Pertussis)
- Varicella
- Hepatitis B vaccination (Injection series)
- Proof of freedom from Tuberculosis (TB)*
- Flu vaccination*

**Must be completed annually*

Criminal Background Requirements

All Radiologic Technology students are required to pass a criminal background check and a urine drug screen for admission into the program. Students are responsible for paying the non-refundable cost of the background search and drug screen. If a criminal record is found, the student may be asked to forfeit their seat in the Radiologic Technology program.

Any applicant that has been convicted of a felony or a misdemeanor must pre-apply to ARRT for determination of eligibility to sit for national certification examination. If you have questions about your situation, please contact the American Registry of Radiologic Technologists, 1255 Northland Dr., St. Paul, Minnesota, 55120-1155, phone 651-687-0048 or the American Registry.

Requirements for CPR Certification

CPR certification/recertification (BLS Provider through American Heart Association **or** CPR for Professional Rescuer through Red Cross) is required and should be obtained before beginning the Radiologic Technology program (Heart Saver and Race for Life are **not** acceptable). All students must hold a current CPR certification to participate in the Radiologic Technology program.

CPR classes may be taken at Lake Michigan College. Visit www.lakemichigancollege.edu/cpr for details on how to enroll.

**For more information about a career in Radiologic Technology,
please visit the following websites:**

**American Society of
Radiologic Technologists**
15000 Central Avenue, SE
Albuquerque, New Mexico
87123-3917
800-444-2778
www.asrt.org

**The American Registry
of Radiologic
Technologists**
1255 Northland Drive
St. Paul, MN 55102-1155
651-687-0048
www.arrt.org



Program Mission Statement and Outcomes

PROGRAM MISSION STATEMENT AND GOALS

The Radiologic Technology Program of Lake Michigan College will provide for both the personal and professional career development of each student in the field of radiography. The Radiologic Technology Program goals are:

1. The students will demonstrate entry level knowledge and expertise in the field of clinical radiography.
2. Students will grow and develop professionally.
3. Students will demonstrate critical thinking skills.
4. Students will demonstrate appropriate communication skills.
5. Graduates will be employable and meet the needs of the health care community.

The Radiologic Technology Program is committed to providing a sound academic and professional course of study that meets the requirements for qualified radiographers and the requirements of Lake Michigan College for an Associate in Applied Science degree as listed on page 100 of the Lake Michigan College Catalog, 2014-2015. The Radiologic Technology Program provides a sound base of clinical courses and practice along with complimentary supportive course work from the sciences and general education.

The Radiologic Technology Program follows the accreditation policies for Radiologic Technology Education as set forth by the JRCERT (Joint Review Committee on Education in Radiologic Technology). The JRCERT address is 20 North Wacker Drive, Suite 2850, Chicago, Illinois, 60606-3182. Standards for accreditation and annual program effectiveness information may be accessed at www.jrcert.org. The email address is mail@jrcert.org.

PROGRAM STUDENT LEARNING OUTCOMES

The graduate of Lake Michigan College's Radiologic Technology Program will be prepared for an entry level position as a radiographer and shall be able to:

1. Apply knowledge of anatomy, physiology, positioning and radiographic techniques to accurately demonstrate anatomical structures on a radiograph.
2. Determine exposure factors to achieve optimum radiographic technique with minimum radiation exposure to the patient.
3. Evaluate radiographic images for appropriate positioning and image quality.
4. Apply the principles of radiation protection for the patient, self and others.
5. Recognize emergency patient conditions and initiate life-saving first aid and basic life-support procedures.
6. Evaluate the performance of radiologic systems, know the safe limits of equipment operation and report malfunctions to the proper authority.
7. Participate in radiologic quality assurance programs.
8. Provide care and comfort in regard to the holistic health of the patient, self and others.
9. Provide patient education related to radiologic procedures and radiation protection/safety.



Accreditation

Program Accreditation

The Radiologic Technology Program at Lake Michigan College is accredited by JRCERT. The contact information for both accrediting bodies is listed below.

Joint Review Commission on Education in Radiologic Technology (JRCERT)

20 N. Wacker Drive, Suite 2850, Chicago, IL 60606-3182

(312) 704-5300 *phone* | (312) 704-5304 *fax*

jrcert.org *web*

mail@jrcert.org *email*

College Accreditation

Lake Michigan College is accredited by the Higher Learning Commission (hlcommission.org), a regional accreditation agency recognized by the U.S. Department of Education. For more information on College and Program Accreditation, please visit <https://www.lakemichigancollege.edu/home/discover-lmc/about-lake-michigan-college/accreditation>.

The Higher Learning Commission

230 South LaSalle Street, Suite 7-500

Chicago, Illinois 60604-1411

(800) 621-7440 *phone*

hlcommission.org *web*