



## Limited X-Ray Machine Operator (LXMO) Diploma - 40 credits

Program Area: Health (Fall 2024)

**THE ELECTRONIC PROGRAM APPLICATION MAY BE FOUND ON THE LSC WEBSITE.  
APPLICATION DATES TO APPLY ARE MARCH 1<sup>ST</sup> – MARCH 31<sup>ST</sup> ANNUALLY.**

### Program Description

A Limited X-Ray Machine Operator (LXMO) is a professional with a restricted scope certificate who performs diagnostic x-ray procedures on specific anatomical sites. Success in this field requires excellent communication, critical thinking, and a compassionate nature, along with a strong aptitude for science. While their knowledge must be on par with general radiographers, LXMOs have limitations in their duties, focusing solely on specific radiography content areas.

Limited X-Ray Machine Operators (LXMO) graduates can apply their expertise in anatomy, physiology, and physics to produce essential images that aid physicians in diagnosing various medical conditions, injuries, and diseases.

Career and continuing education opportunities are diverse. Radiographer R.T.(R) credential completion, hospitals, clinics, health care facilities, industrial plants, educational centers, research centers, and government agencies offer employment.

### Program Outcomes

- Students will analyze images for accuracy and appropriateness.
- Students will develop communication skills for effective clinical competence.
- Students will demonstrate clinical competence in anatomy specific areas.
- Students will demonstrate competency in the principles of radiation protection standard.

General Education courses that are required may be taken prior to entering the program, as long as the specific prerequisites for that course have been met. Please check with your advisor. All pre-program courses in the program need to be completed with a grade of “C” or better to progress into the next semester. To be considered program ready for fall, the minimum cumulative GPA of pre-program courses must be 3.0 or better.

### Pre-Program Courses

Course	Course Title	Credits	Term
ALTH 1410	Medical Terminology	1	
ALTH 1440	Medical Ethics and the Law	1	
BIOL 1140	Human Anatomy and Physiology I	4	
BIOL 1141	Human Anatomy and Physiology II	4	
RADT 1402	Introduction to Medical Imaging	1	

### Required Courses

Course	Course Title	Credits	Term
ENGL 1106 or ENGL 1109	College Composition I or College Composition II	3	
PSYC 1135 or SOC 1111	Lifespan Developmental Psychology or Introduction to Sociology	3	
RADT 1404	Patient Care in Medical Imaging	1	
RADT 1453	Radiographic Procedures I	3	
RADT 1455	Concepts of Image Production I	1	
RADT 1480	Radiation Biology & Protection	2	
RADT 1463	Radiographic Procedures II	4	
RADT 1559	Clinical Radiography Theory I	0.5	
RADT 1538	LXMO Clinical Radiography I	2.5	
RADT 1560	Concepts of Image Production II	3	
RADT 1548	LXMO Clinical Radiography II	5.5	
RADT 1569	Clinical Radiography Theory II	0.5	

**Total credits**

**40**

**Courses may require a prerequisite. Refer to the course outline or check with an advisor.**



## Limited X-Ray Machine Operator (LXMO) Diploma - 40 credits

Program Area: Health (Fall 2024)

**THE ELECTRONIC PROGRAM APPLICATION MAY BE FOUND ON THE LSC WEBSITE.  
APPLICATION DATES TO APPLY ARE MARCH 1<sup>st</sup> – MARCH 31<sup>ST</sup> ANNUALLY.**

---

### Pre-program Requirements

Successful entry into this program requires a specific level of skill in the areas of English, mathematics, and reading. Program entry will depend, in part, on meeting the prerequisites listed below.

Current certification in American Heart Association: BLS Healthcare Provider or American Red Cross: BLS/CPR for Healthcare Providers is required for all clinical courses. Program students will be required to complete CPR prior to the start of the first semester of the program.

#### English/Reading:

- Eligible for ENGL 1106 – College Composition I, or
- Completion of ENGL/READ 0950/0955 (or equivalent or higher). ENGL/READ 0950/0955 may not be taken concurrently with Semester I coursework.

#### Mathematics:

- Eligible for MATH 0970 - Intermediate Algebra, or
- Completion of MATH 0950/0955 (or equivalent or higher). MATH 0950/0955 may not be taken concurrently with Semester I coursework.

There are other ways to qualify. Visit [Course Placement](https://lsc.edu/course-placement) (lsc.edu/course-placement) to find out more.

**NOTE:** You will need to sign a health declaration form including current immunizations and a current negative Tuberculosis (TB) screening. Current certification in American Heart Association: BLS Healthcare Provider or American Red Cross: BLS/CPR for Healthcare Providers is required for all clinical courses. Program students will be required to complete CPR prior to the start of the first semester of the program. Background Study approval is required from the State of Minnesota and/or Wisconsin. A national criminal background study is required by all clinical sites. Students assigned to a clinical site requiring a criminal background study will be informed of this requirement prior to the start of the clinical experience.

The LXMO certificate plus the addition of 2500 hours worked in-field will qualify a student to apply for the Radiologic Technology, R.T.(R) program at Lake Superior College. Credit for prior learning will be applied for hours worked at the rate of 250 hours/1 credit.

---

For more information about the Limited X-ray Machine Operator (LXMO) diploma including course descriptions, course prerequisites, and potential career opportunities contact the [professional advising team](mailto:advising@lsc.edu) (advising@lsc.edu) at 218-733-7601 or the Director of Radiologic Technology [Britni Hardy](mailto:britni.hardy@lsc.edu) (britni.hardy@lsc.edu) can be contacted at 218-733-7713.



MINNESOTA STATE

CIP Code: 51.0911  
Minnesota State Program ID: 13-502-2023  
LSC Major ID:

Created: 11/1/2023  
AASC Approval: 11/1/2023  
Updated: 2/1/2024

*All courses in diploma and/or certificate programs are acceptable for credit toward Lake Superior College degree programs as indicated on individual program planners. This is not a contract; Lake Superior College reserves the right to change the planner as necessary. This document is available in alternative formats upon request, by contacting Disability Services, [Disability Services](#) or (218) 733-7650 or MRS/TTY (800) 627-3529.*