



**LAMAR  
INSTITUTE OF  
TECHNOLOGY**

Dear Applicant:

You have indicated an interest in pursuing a career in **Radiologic Technology**. Enclosed are all of the necessary instructions and forms for your application into the Radiologic Technology program at Lamar Institute of Technology.

The LIT Radiologic Technology Program's Mission is to prepare students for entry-level positions in hospitals, clinics, and physician's offices performing procedures that produce images of patients for diagnosis by physicians. A graduate of this two-year program is awarded an Associate of Applied Science Degree.

The LIT Radiologic Technology program is accredited 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](http://www.jrcert.org), and graduates apply for admission for the certification exam administered by the American Registry of Radiologic Technologists.

Program Effectiveness Data is available on the Radiologic Technology program web page which is accessed through [www.lit.edu](http://www.lit.edu). [http://www.lit.edu/depts/allied/PROGRAM\\_EFFECTIVENESS\\_DATA.pdf](http://www.lit.edu/depts/allied/PROGRAM_EFFECTIVENESS_DATA.pdf)

We look forward to receiving your credentials. If I may be of any help, please contact me at (409)241-9829 or e-mail me at [babarrow@lit.edu](mailto:babarrow@lit.edu).

Sincerely,

Brenda Barrow, M.Ed., R.T.  
Program Director

To apply for the Radiologic Technology program, you will follow all instructions in the initial instruction packet. Additional points will be awarded for the following:

- a. passing BIOL 2302/2102
- b. passing MATH 1314 College Algebra
- c. completion of all of the required general education courses before application (ENGL, MATH, SOCI/PSYC, HUMA, BIOL I, HPRS 1204)

Below you will find specific requirements and information for the Radiologic Technology program. These are in addition to what is listed in the original instruction packet.

### **PHYSICAL REQUIREMENTS FOR RADIOLOGIC TECHNOLOGY**

The following are essential physical requirements for any Radiologic Technologist as compiled from observations of a wide variety of job experiences and input from Radiology Department managers from many medical facilities.

#### **1. VISUAL ACUITY**

- Distinguish whether beam is perpendicular, horizontal or angled through center of anatomical area being x-rayed to the center of film.
- Perform necessary radiographic procedures that involve placement of needles, catheters, etc., into proper anatomic structure of patient.
- Perform necessary radiographic procedures in rooms that require dim lighting. (i.e. fluoroscopic or darkrooms)
- Must have adequate or corrected vision to monitor a patient from at least 15 feet.
- Read protocol for radiography procedures in the department.
- Perform data entry tasks using digital and computer terminals.

#### **2. HEARING ACUITY**

- Hear and retain pertinent information to relay instructions.
- Hear and respond to patient questions and clinical history while processing a request.
- Respond to patients in situations where the patient is not facing the student.
- Effectively respond immediately to emergency situations:
  - Monitor patient for impaired breathing.
  - Respond to verbal orders from physician.
  - Respond to codes over hospital intercoms (i.e. fire, child abduction, cardiac arrest...).

#### **3. SPEAKING ABILITY**

- Speak clearly and loudly enough to be understood by a person in the radiology department, surgery, or emergency room.
- Good verbal skills are also necessary to maintain good interpersonal relationships with patients and peers.
- Speak clearly and loudly enough to be understood.
- Speak English clearly and precisely.

#### **4. DIGITAL DEXTERITY**

- Grasp and manipulate small objects required to perform job functions:
  - Draw up contrast media and other medications into syringe.
  - Handle and manipulate lead markers.
  - Assist patient in dressing and undressing.
  - Process film.
  - Use computer keyboard.
- Operate a variety of x-ray equipment.
- Upper and lower extremities or functional artificial limbs are essential to maintain balance to accomplish required duties and transport patients.

## 5. PHYSICAL ABILITY

- Stand for majority of a normal work day.
- Maneuver through congested area(s) or unit(s) to perform positioning procedures and transport patients.
- Raise arm(s) while maintaining balance when positioning a patient, reaching over table, and adjusting x-ray tube.
- Must be able to reach x-ray tube and fluoroscopy tube.
- Pull/push medical equipment and adjust x-ray tubes to standard source image distance.
- Transfer patients to and from radiology department.
- Size must allow free movement:
  - Within small control booth.
  - Move quickly during patient emergencies.
  - Squeeze in small areas while performing portable radiography procedures.
- Use stairs in case of emergency.

## PROGRAM GOALS AND LEARNING OUTCOMES

1. Graduates will demonstrate clinical competence.
  - Students will select appropriate technical factors.
  - Students will apply proper positioning skills.
  - Students will demonstrate proper patient care and education.
2. Students will develop effective communication skills.
  - Students will develop appropriate communication skills in a laboratory course.
  - Students will develop appropriate communication skills in a lecture course.
3. Students will use critical thinking and problem-solving skills.
  - Students will exhibit critical thinking and problem-solving skills on a written test/assignment.
  - Students will exhibit critical thinking and problem-solving skills on a task analyses.
4. The program will satisfy the community's need for qualified radiographers.
  - Students will pass the ARRT exam.
  - Students will complete the program.
  - Students will be adequately prepared to be entry-level technologists.

## ASSOCIATE OF APPLIED SCIENCE IN RADIOLOGIC TECHNOLOGY

### Pre-requisites

BIOL 2301 Anatomy & Physiology I	3:3:0
BIOL 2101 Anatomy & Physiology Lab I	1:0:2
HPRS 1204 Intro to Health Professions	2:1:2
MATH 1332 Contemporary Math I	<u>3:3:0</u> or MATH 1314 College Algebra 3:3:0
	9:7:4

### General Education

DORI 0200 College Success Skills+	2:2:0
ENGL 1301 Composition	3:3:0
SOCI 1301 Introduction to Sociology	3:3:0 or PSYC 2301 General Psychology 3:3:0
HUMA 1315 Fine Arts Appreciation	<u>3:3:0</u>
	11:11:0

### FIRST YEAR

#### Summer II

RADR 1201 Introduction to Radiology	2:2:0
RADR 1203 Patient Care	<u>2:1:4</u>
	4:3:4

#### Fall

RADR 1313 Principles of Rad. Imaging I	3:3:0
RADR 1360 Radiographic Clinical I	3:0:18
RADR 1411 Basic Radiographic Procedures	<u>4:3:4</u>
	10:6:22

#### Spring

RADR 1361 Radiographic Clinical II	3:0:18
RADR 2217 Radiographic Pathology	2:1:2
RADR 2309 Radiographic Imaging Equipment	3:3:0
RADR 2401 Intermediate Rad. Procedures	<u>4:3:2</u>
	12:7:22

### SECOND YEAR

#### Summer 3

RADR 1266 Radiographic Practicum III	<u>2:0:20</u>
	2:0:20

#### Fall

RADR 2305 Principles of Rad. Imaging II	3:3:0
RADR 2333 Advanced Medical Imaging	3:2:2
RADR 2360 Radiographic Clinical IV	<u>3:0:18</u>
	9:5:20

#### Spring

RADR 2313 Radiation Biology & Protection	3:3:0
RADR 2335 Radiologic Technology Seminar	3:3:0
RADR 2361 Radiologic Clinical V	<u>3:0:18</u>
	9:6:18

+DORI 0200 is an institutional requirement (unless exempt)