



LAMAR  
INSTITUTE OF  
TECHNOLOGY



Dear Applicant:

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

Please follow all directions thoroughly and completely, remembering that all materials must be submitted to us electronically by the last day of February.

We look forward to receiving your application. If we may be of any help, please contact us at 409.257.0058 or 409.257.0063

Sincerely,

Deena Boland BS, RDMS, RVT, RT (R)  
Diagnostic Medical & Cardiac Sonography Program Director  
409-839-2924  
[dmboland@lit.edu](mailto:dmboland@lit.edu)

To apply for the Diagnostic Cardiac Sonography program, you will follow all instructions in the initial instruction packet. Below you will find specific requirements and information for the Diagnostic Cardiac Sonography program. These are in addition to what is listed in the original instruction packet.

1. Two additional points will be given to those applicants that hold a current license/certificate in a patient-care related field (examples: CNA, Medical Assisting, EMT, LVN, Radiology, Respiratory).
2. Additional points will be awarded for the completion of HITT 1305 Medical Terminology (“A”=2 or “B”=1, no points will be awarded for a “C”).

## **PHYSICAL REQUIREMENTS FOR DIAGNOSTIC CARDIAC SONOGRAPHY**

Because of the inherent characteristics of this profession, certain physical abilities are required.

### **VISUAL ACUITY**

- To discern sonographic detail and colors on a video monitor and film.
- Perform necessary sonographic procedures that involve seeing and functioning in a low-light setting.
- Read protocol for sonographic procedures in the department.
- Perform data entry tasks using digital and computer terminals.

### **HEARING ACUITY**

- Hearing must be sufficient to communicate with others.
- Hear and retain pertinent information to relay instructions.
- Hear and respond to patient questions and clinical history while processing an exam order.

### **SPEAKING ABILITY**

- Speak clearly and loudly enough to be understood by a person in the ultrasound department or on the phone.
- Good communication skills are also necessary to maintain good interpersonal relationships with patients, peers, and Radiologist.

### **DIGITAL DEXTERITY**

- Grasp and manipulate ultrasound transducer in order to adequately perform job function.
- Arms and hands or functional artificial limbs are essential to maintain balance to accomplish required duties and transport patients.
- Legs and feet or functional artificial limbs are essential to maintain balance to accomplish required duties and transport patients.

### **PHYSICAL ABILITY**

- Sit or stand for the majority of a normal workday.
- Maneuver between floors of an institution.
- Pull/push portable ultrasound equipment.
- To lift and move immobile patients.

**Diagnostic Cardiac Sonography program goals:**

To prepare competent entry-level Cardiac sonographers in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains.

This program of study prepares health professionals to function in a medical office, clinic, or hospital as a cardiac/echo sonographer. The diagnostic cardiac sonographer provides patient services using medical ultrasound under the supervision of a physician responsible for the use and interpretation of cardiac/echo ultrasound procedures. Admission preference is given to individuals with a minimum of one-year previous experience in a related health care field.

The program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) program administered by the Joint Review Committee on Education in Diagnostic Medical Sonography (JRC/DMS).

Students are accepted into the program in the summer of each year. The number of students is limited to space available in clinical agencies. Diagnostic Cardiac Sonography admission forms, criteria and admission procedures are available from the Diagnostic Medical/Cardiac Sonography Program Director by calling 409.257.0058. Applications are due by the last day of February of each year. Admission to the program is based upon academic success and past medical experiences. Applicants not accepted into the program must reapply one year later during the normal admission times.

A minimum grade of 'C' must be earned in all courses required for graduation listed on the degree plan. In addition, a grade point average of 2.5 must be maintained while enrolled in the program. Students successfully completing the program will be awarded the Associate of Applied Science Degree in Diagnostic Cardiac Sonography.

#### **Texas HB 1508 and Texas Occupations Code 58.001:**

As a point of information required by Texas HB 1508 and the Texas Occupations Code 58.001, if you are applying for admission to a program that may prepare an individual for an initial occupational license as defined under Texas Occupations Code 58.001 and/or if you later decide to change to a program that prepares you for an initial occupational license as defined under Texas Occupations Code 58.001, in accordance with state law, please be advised of the following:

1. An individual who has been convicted of an offense may be ineligible for issuance of an occupational license upon completion of the educational program.
2. Each licensing authority that may issue an occupational license to an individual who completes an educational program must establish guidelines which state the reasons a particular crime is considered to relate to a particular license and any other criterion that affects the decisions of the licensing authority.
3. Local or county licensing authorities may issue additional guidelines related to criminal history. Applicants should contact their respective local or county licensing authority for more details.
4. A person may request a criminal history evaluation letter regarding the personal eligibility for a license issued by a licensing authority under Texas Occupations Code 53.102.

Applicants are encouraged to review all applicable eligibility requirements related to the respective occupational license. Questions related to eligibility requirements should be directed to the applicable licensing authority.

## ASSOCIATE OF APPLIED SCIENCE IN Diagnostic Cardiac Sonography

### Pre-requisites/General Education

BIOL 2301 Anatomy & Physiology I	3:3:0
BIOL 2101 Anatomy & Physiology Lab I	1:0:2
BIOL 2302 Anatomy & Physiology II	3:3:0
BIOL 2102 Anatomy & Physiology Lab II	1:0:2
HPRS 1204 Basic Health Profession Skills	2:1:2
PHYS 1305 Elementary Physics Lecture	3:3:0
ENGL 1301 Composition I	3:3:0
MATH 1314 College Algebra	3:3:0
HUMA 1315 Fine Arts Appreciation	3:3:0
PSYC 2301 General Psychology	<u>3:3:0</u>

25:22:6

### Summer I

DMSO 1110 Introduction to Sonography	1:1:1
DMSO 1302 Basic Ultrasound Physics	3:3:0
DMSO 1303 Introduction to Echocardiography Techniques	<u>3:2:2</u> 7:6:3

### Fall I

DMSO 1342 Inter. Ultrasound Physics	3:3:0
DSAE 1340 Diagnostic Electrocardiography	3:2:2
DSAE 2403 Cardiovascular Concepts	<u>4:3:2</u> 10:8:4

### Spring I

DMSO 2351 Doppler Physics	3:3:0
DSAE 1364 Practicum I	3:0:24
DSAE 2404 Echocardiographic Evaluation of Pathology I	<u>4:3:4</u> 10:6:28

### Summer 2

DSAE 1264 Practicum II	2:0:20
DSAE 2437 Echocardiographic Evaluation of Pathology II	<u>4:3:4</u> 6:3:24

### Fall 2

DSAE 2335 Advanced Echocardiography	3:3:0
DSAE 2365* Practicum III	<u>3:0:24</u> 6:3:24

+DORI 0200 is an institutional requirement (unless exempt)

\*DSAE 2365 is a capstone course