

# **DEL MAR COLLEGE**

## **ECHOCARDIOGRAPHY PROGRAM APPLICATION**

The Echocardiographer is a skilled person qualified by academic and clinical education to provide patient services using diagnostic ultrasound under the supervision of a qualified medical doctor, whose responsibility is the use and interpretation of ultrasound procedures. The Echocardiographer scans the patient and provides the physician with adequate information to make the best possible diagnosis.

### *CAREER OPPORTUNITIES*

Students completing the Echocardiography Program may choose a wide variety of careers as sonographers in hospitals, clinics, and doctors' offices. In addition, opportunities may be found as technical and sales representatives or research personnel.

### *ACCREDITATION*

This program is accredited by the Joint Review Committee on Education for Diagnostic Medical Sonography, the Committee on Accreditation of Allied Health Education Programs (CAAHEP), the Texas Education Agency, and the Veterans Administration.

### *GRADUATE CERTIFICATION*

Upon completion of the program in Echocardiography, the student will be awarded an Associate of Applied Science (AAS) degree in Echocardiography. Graduates of the eighteen-month program are qualified to take the national examination for registration by the American Registry of Diagnostic Medical Sonographers (ARDMS).

### *FACULTY*

Kennith Hanna, MS, RDMS, RDCS, RVT  
Echocardiography Program Director  
(361) 698-2832  
[khanna@delmar.edu](mailto:khanna@delmar.edu)

Christin Vega, MS, RDMS, RVT  
DMS Program Director  
(361) 698-2833  
[cvega@delmar.edu](mailto:cvega@delmar.edu)

Veronica Pena, MS, RDMS, RVT  
DMS Clinical Coordinator  
(361) 698-2834  
[vpena20@delmar.edu](mailto:vpena20@delmar.edu)

## ADMISSION REQUIREMENTS FOR DEL MAR COLLEGE

- Application for Admission
- Official high school transcript or GED test scores
- Official college transcripts
- Proof of Texas residency
- Test Scores from TSI

*Note: These documents are admission requirements for Del Mar College*

Del Mar College is an open admissions college; however, acceptance into the Echocardiography Program is by selection. Positions in the Echocardiography Program are limited.

## FINANCIAL AID

Refer to the Del Mar College Catalog for information on financial aid.

## ADVANCED PLACEMENT OPTIONS

Students admitted to the Echocardiography Program will not be given advanced placement options in any of the program courses.

## INFORMATION SHEET

The following information will assist you in applying for the Echocardiography Program. Please follow the instructions.

**IT IS YOUR RESPONSIBILITY TO PROVIDE THE PROGRAM WITH THE PROPER PAPERWORK AT THE PROPER TIME!**

- You must be eligible and applied for admission to Del Mar College.
- You must supply the Registrar's Office with *official* copies of college transcripts.
- You must supply the Echocardiography Program office with *official* copies of college transcripts.
- You must have completed a Echocardiography Program application/data sheet.
- You must have a minimum GPA of 2.5.
- If applicable, supply copies of degrees, certificates, or registries in the health field.
- You must complete all prerequisites.
- All prerequisite courses must be completed by the end of the Del Mar College Fall semester.
- You must have completed a CNA (*Certified Nurse Aid*) certificate program and obtain state certification or show proof of one of the following exemptions:  
CNA certification is NOT required if you have completed one or more of the following direct patient care programs: EMT- Basic, Licensed Vocational Nurse (LVN), Nuclear Medicine Technologist, Occupational Therapy Assistant (OTA), Paramedic, Physical Therapy Assistant (PTA), Radiologic Technologist (RT-R), Registered Nurse (RN), Respiratory Therapist, and Surgical Technologist.
- Active status CNA certification is NOT required.
- You should schedule an advising appointment with Echocardiography program faculty within the first semester of your prerequisites, for information call (361) 698-2832.
- You will be selected on an individual basis by an Admissions Committee.

- The deadline for accepting applications is December 1<sup>st</sup> of each year.
- You will receive written notification upon acceptance to the Echocardiography Program by April 1<sup>st</sup>.
- Students are required to provide their own transportation to clinical sites and navy blue scrubs.
- Students are expected to travel to out of area clinical sites all of which are within a 60 mile radius of the College.

Upon conditional admittance into the Echocardiography Program, the student must pass a Criminal Background Check and Drug Screen as mandated by our accrediting agency and clinical affiliates. A physical exam with shot record and current CPR card must be submitted prior to the first day of class.

**\*\*ONLY COMPLETED FILES WILL BE CONSIDERED FOR SELECTION\*\***

### *PREREQUISITES*

Students are selected by the Admissions Committee based on a point system. Points are given for prerequisite grades, overall GPA, and Lab volunteer hours.

#### Prerequisite Courses:

ENGL 1301 Freshman Reading and Composition

Creative Arts OR Language, Philosophy, and Culture Core Elective

(3 semester hour credits) *One course from the following:*

All ENGL 2300+ Literature courses

All ARTS courses

All DRAM courses

All PHIL courses

All HUMA courses

All MUSI courses

DANC 2303 Dance Appreciation

BIOL 2401 Human Anatomy and Physiology I

BIOL 2402 Human Anatomy and Physiology II

MATH 1314 College Algebra

Communications (SPCH) Core Elective

Social and Behavioral Sciences Core Elective

(3 semester hour credits) *One course from the following:*

All ECON courses

All GEOG courses

All GOVT courses

All HIST courses

All PSYC courses

All SOCI courses

PHYS 1305\* General Physics

\* You may take a different course to meet this requirement. Contact Echocardiography program faculty regarding acceptable course substitutions.

- ALL APPLICANTS MUST HAVE COMPLETED A CNA (CERTIFIED NURSE AID) CERTIFICATE PROGRAM AND OBTAIN STATE CERTIFICATION OR SHOW PROOF OF EXEMPTION

You should schedule an advising appointment with Echocardiography faculty within the first semester of your prerequisites, for information call (361) 698-2832 or (361) 698-2858.

### *Certified Nurse Aid Requirement*

The Del Mar College Echocardiography Program requires completion of a (CNA) Certified Nurse Aid certification program and obtain state certification or show proof of one of the following exemptions:

CNA certification is NOT required if you have completed one or more of the following direct patient care programs: EMT- Basic, Licensed Vocational Nurse (LVN), Nuclear Medicine Technologist, Occupational Therapy Assistant (OTA), Paramedic, Physical Therapy Assistant (PTA), Radiologic Technologist (RT-R), Registered Nurse (RN), Respiratory Therapist, and Surgical Technologist. Active status CNA certification is NOT required.

### Course Descriptions:

#### NURA 1001 Certified Nurse Aide (CNA)

Classroom and Laboratory preparation for entry level nursing assistants to achieve a level of knowledge, skills, and abilities essential to provide basic care to residents of long-term care facilities. Topics include resident's rights, communication, safety, observation, reporting and assisting residents in maintaining basic comfort and safety. Emphasis on effective interaction with members of the health care team. Concurrent enrollment in NURA 1060 is required.

#### NURA 1060 Certified Nurse Aide (CNA) - Clinical

A continuation of NURA 1001 that includes a health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts for entry level nursing assistants. Direct supervision is provided by the clinical instructor and clinical training is conducted at a local long term care facility. Course cost includes the Texas Department of Aging and Disability Services registry examination fee. Concurrent enrollment in NURA 1001 is required. Prerequisites: NURA 1001 and required immunizations.

### Contact Information:

Del Mar College Center for Economic Development  
Continuing Education Department  
Noncredit Health Care Programs  
3209 S. Staples (across from Ray High School)  
(361) 698-1328

Information concerning the Certified Nurse Aid Program can be found on the [CNA website \(www.delmar.edu/cna\)](http://www.delmar.edu/cna).

## *POINT LEGEND*

Del Mar College Lab Volunteer:

½ point per hour, 10 points maximum

Kept on file and valid for five years

(Diagnostic Medical Sonography Lab & Echocardiography Lab)

Overall GPA Points:

2.5 – 3.0 = 1 point

3.0 – 3.5 = 2 points

3.5 + = 3 points

Prerequisite Course Points:

A = 10 points

B = 6 points

C = 4 points

Prospective volunteers call: 361-698-2808 to leave a message

## *PROGRAM CURRICULUM*

A grade of 75 or better must be maintained throughout the program in all courses.

First Semester

DSVT 1103 Introduction to Vascular Technology

DMSO 1210 Introduction to Sonography

Second Semester

DSAE 1303 Introduction to Echocardiography Techniques

DMSO 1302 Basic Ultrasound Physics

DSAE 1260 Clinical Education I

DSAE 1415 Principles of Adult Echocardiography

Third Semester

DMSO 1342 Intermediate Ultrasound Physics

DSAE 2404 Echocardiographic Evaluation of Pathology I

DSAE 1264 Practicum I

Fourth Semester

DSVT 1300 Principles of Vascular Technology

DSAE 2261 Clinical II

DSAE 2337 Echocardiographic Evaluation of Pathology II

Fifth Semester

DSAE 2355 Registry Review

DSAE 2268 Practicum II

DSVT 2200 Vascular Technology Applications

Total Credit Hours: 38

Total Prerequisite Hours: 27

65 Total Semester Hours for Associate Degree in Applied Science  
(Echocardiography)

#### *CLINICAL REQUIREMENTS*

Throughout the eighteen (18) months in the Echocardiography Program at Del Mar College, the student will attend the Clinical Affiliation in order to:

1. Acquire expertise and proficiency in a wide variety of diagnostic ultrasound procedures by applying classroom theory to the actual practice of technical skills on specified levels of competency.
2. Develop and practice professional work habits and appropriate interpersonal relationships with patients and other members of the health care team.
3. Clinical Proficiencies will be assigned each semester according to curriculum sequence taught.

Students will be scheduled and rotated through various Clinical Affiliation sites within a 60 mile radius of the college. Demonstration of core clinical proficiencies must be established to be eligible for the American Registry of Diagnostic Medical Sonography testing. These requirements are in addition to graduation from an accredited program by the Joint Review Committee of Diagnostic Medical Sonography.

#### *TECHNICAL STANDARDS*

Physical Requirements:

- Must possess emotional and physical health sufficient to meet the demands of the position.
- Must have strength sufficient to: lift some patient, move heavy equipment on wheels (up to approximately 500 lbs), and to move patients in wheelchairs and stretchers.
- Must have ability to maintain prolonged arm positions necessary for scanning.

#### Essential Functions:

- Will perform clinical assessment and diagnostic sonography examinations.
- Will use cognitive sonographic skills to identify, record, and adapt procedures as appropriate to anatomical, pathological, diagnostic information and images.
- Will use independent judgment during the sonographic exam to accurately differentiate between normal and pathologic findings.
- Will analyze sonograms, synthesizes sonographic information and medical history, and communicates findings to the appropriate physician.
- Will coordinate work schedule with Departmental Director and/or scheduling desk to assure workload coverage.
- Will assume responsibility for the safety, mental and physical comfort of patients while they are in the sonographers care.
- Will assist with the daily operations of the sonographic laboratory.
- Will maintain a daily log of patients seen/completes exam billing forms.
- Will maintain ultrasound equipment and work area, and maintain adequate supplies.
- Will participate in the maintenance of laboratory accreditation.
- Will establish and maintain ethical working relationships and good rapport with all interrelating hospitals, referral or commercial agencies.
- Will perform other work-related duties as assigned.

#### Examples of Duties & Responsibilities:

- Will perform all requested sonographic examinations as ordered
- Will prepare preliminary reports and contacts referring physicians when required, according to established procedures
- Will coordinate with other staff to assure appropriate patient care is provided.
- Will address problems of patient care as they arise and makes decisions to appropriately resolve the problems
- Will organize daily work schedule and performs related clerical duties as required.
- Will assume responsibility for the safety and well being of all patients in the sonographic area/department.
- Will report equipment failures to the appropriate supervisor or staff member.
- Will provide in-service education team on requirements of sonographic procedures as requested by other members of the health care team.
- Will perform other related duties as assigned.

### Demonstration of Skills and Abilities:

- Have the ability to effectively operate sonographic equipment.
- Have the ability to evaluate sonograms in order to acquire appropriate diagnostic information.
- Have the ability to integrate diagnostic sonograms, laboratory results, patient history and medical records, and adapt sonographic examination as necessary.
- Have the ability to use independent judgment to acquire the optimum diagnostic sonographic information in each examination performed.
- Have the ability to evaluate, synthesize, and communicate diagnostic information to the attending physician.
- Have the ability to communicate effectively with the patient and the health care team, recognizing the special nature of sonographic examinations and patient's needs.
- Have the ability to establish and maintain effective working relationships with the public and health care team.
- Have the ability to follow established departmental procedures.
- Have the ability to work efficiently and cope with emergency situations.

*Information is based on the Society of Diagnostic Medical Sonography (SDMS) requirements for employment.*

### ESTIMATED EDUCATIONAL EXPENSES

*The following fees are only approximate amounts. Fees are TBA throughout the semester as needed.*

Echocardiography Textbooks \$650 (approximately)

Drug Testing \$30

Background Check \$52

Physical with Doctor (check with your Doctor)

Tuberculosis Skin Test (check with your Doctor)

Hepatitis B Vaccine Series (check with your Doctor)

Uniform & Shoes (3 sets) \$150

Uniform Patches (3) \$15

SDMS student membership \$45

ARDMS Sonographic Principles & Instrumentation Registry Exam (SPI) \$250

ARDMS Specialty Registry Exam \$250

Graduation Cap & Gown \$35



EDUCATIONAL EXPENSE LIST

In-District/Out-of-District

If you are a recognized resident of the Del Mar College District, the following list reflects the approximate education cost associated with the Echocardiography Program.

<b>Semester</b>	<b>Hours</b>	<b>In-District Tuition &amp; Fees</b>	<b>Out-of-District Tuition &amp; Fees</b>
Summer	2 semester hrs.	\$245	\$345
Fall	13 semester hrs.	\$1222	\$1872
Spring	10 semester hrs.	\$964	\$1464
Summer	8 semester hrs.	\$768	\$1168
Fall	8 semester hrs.	\$768	\$1168

Approximate total tuition/fees: **\$3,967 (In-District) and \$6,017 (Out-of-District)**

The above approximated tuitions are estimated for a degree in Echocardiography.

Residency requirements are located in the Del Mar College Catalog. You may contact the Del Mar College Business Office for information on relative residency requirements. Call (361) 698-1263.

Tuition and fees are subject to change. See program expense sheet for approximated total expense

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APPLICATION/DATA SHEET Page 1/2  
(December 1<sup>st</sup> deadline to apply)

Date: \_\_\_\_\_ Student ID: \_\_\_\_\_

Last Name: \_\_\_\_\_ First Name: \_\_\_\_\_ Middle: \_\_\_\_\_

Address: \_\_\_\_\_ City, State, Zip: \_\_\_\_\_

Email: \_\_\_\_\_

Home Number: \_\_\_\_\_ Cell Phone: \_\_\_\_\_

In Case of Emergency, please notify:

Name: \_\_\_\_\_ Home Phone: \_\_\_\_\_ Cell Phone: \_\_\_\_\_

Address: \_\_\_\_\_ City, State, Zip: \_\_\_\_\_

Are you currently enrolled this semester? If so, list courses:

**\*\*Applicants accepted into the Echocardiography Program will be required to provide drug testing and a background check.**

**The provisions and information set forth in this statement are intended to be informational and not contractual in nature and are subject to modification without notice, by the Administration or the Board of Regents. For additional explanation see the Disclaimer in the College Catalog.**

**Del Mar College does not discriminate on the basis of race, color, sex, age, national origin, religion, handicap, or any other constitutionally or statutorily impermissible reason. This shall include persons with disabilities.**

Official Transcripts must accompany this application

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<b>Courses</b>	<b>Grade</b>	<b>Course</b>	<b>Institution</b>	<b>Semstr/Yr</b>
ENGL 1301	_____	ENGL 1301	_____	_____
BIOL 2401	_____	BIOL 2401	_____	_____
BIOL 2402	_____	BIOL 2402	_____	_____
SPCH Core Elective	_____	_____	_____	_____
MATH 1314	_____	MATH 1314	_____	_____
Social or Behavioral Sciences Core Elective	_____	_____	_____	_____
Creative Arts OR Language, Philosophy and Culture Core Elective	_____	_____	_____	_____
PHYS 1305*	_____	_____	_____	_____
Composite GPA	_____			
Volunteer Hours	_____			
CNA Certification # or exemption: _____				

I, \_\_\_\_\_, have read and understand the criteria for admissions and the application process for the Del Mar College Echocardiography Program. In addition, I am aware of the requirements that must be met for “Full” acceptance into the Del Mar College Echocardiography Program.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**Mailing Address**

Del Mar College (East Campus)  
 Department of Dental & Imaging Technology  
 Echocardiography Program  
 101 Baldwin Blvd.  
 Corpus Christi, TX 78404

**Physical Address**

Del Mar College (West Campus)  
 Department of Dental & Imaging Technology  
 Echocardiography Program  
 4101 Old Brownsville Rd. HS2-130  
 Corpus Christi, TX 78405  
 (361) 698-2858 voice  
 (361) 698-2811 fax

\* You may take a different course to meet this requirement. Contact Echocardiography program faculty regarding acceptable course substitutions.