

DIAGNOSTIC MEDICAL SONOGRAPHY Information Session



INTRODUCTION TO DIAGNOSTIC MEDICAL SONOGRAPHY ASSOCIATE OF APPLIED SCIENCE

Introduction

Sonography equipment directs non-ionizing, high frequency sound waves into areas of a patient's body to collect reflected echoes that form an image. A physician interprets the image to diagnose a variety of diseases and conditions.

Career Opportunities

According to the Bureau of Labor Statistics, employment of diagnostic medical sonographers, cardiovascular technologists and technicians, including vascular technologists, is projected to grow 24 percent from 2014 to 2024. Most technologists gain employment in hospitals, diagnostic imaging centers, urgent care centers, and doctor offices.

Program Content

The Sonography Program is a 22-month continuous program. There are seven prerequisite courses that must be completed before applying to the Sonography Program. The program covers content for both general and vascular concentrations. The general concentration includes abdomen, ob/gyn, and small parts. The program is a face-to-face program and consists of classroom and clinical instruction. Attendance in both classroom and clinical instruction is critical and is enforced.

Starting Salaries

According to the Bureau of Labor Statistics Occupational Employment and Wages, 2022, the median hourly wage for Diagnostic Medical Sonographers is \$37.60 and the annual wage is \$78,210.

WHERE CAN I LEARN MORE ABOUT THIS PROGRAM? www.tccd.edu/sonography

PATIENT SAFETY AND WELFARE

ALL APPLICANTS MUST HAVE:

Visual acuity (with corrective lenses if needed) to:

- Identify cyanosis
- Observe absence of respiratory movement in patients
- See adverse skin reactions to treatments
- Read physician's orders
- Read very fine print on medication containers
- Visualize displays on monitors and equipment
- Evaluate images for diagnostic quality
- Discern differences in color

Physical ability to:

- Stand for prolonged periods of time
- Exert muscle force with endurance in performing repetitive movements
- Perform cardiopulmonary resuscitation (CPR)
- Transfer patients and objects of 50 pounds or more
- Perform treatment procedures using two hands
- Push patients and pieces of equipment from room to room
- Maneuver in limited spaces

Manual dexterity to:

- Use aseptic and sterile techniques
- Prepare needles, syringes and contrast media
- Manipulate, film, cassettes and equipment
- Move arms and legs quickly
- Keep hand and arm steady while moving other arm to manipulate machine or patient
- Adjust controls of equipment quickly and repeatedly
- Coordinate 2 or more limbs while sitting or standing
- Move fingers and hands precisely to manipulate equipment and/or patient position
- Perform coordinated movements while sitting or standing

Hearing ability (with auditory aids if needed) to:

- Understand the normal speaking voice without viewing the speaker's face
- Hear monitor alarms, emergency signals, call bells from patients, equipment timers and alarms
- Take/hear blood pressure
- Detect differences in sounds, pitch and loudness

SONOGRAPHY PROFESSION

Diagnostic Ultrasound Professionals:

- Perform patient assessments
- Acquire and analyze data obtained using high frequency sound to evaluate the internal organs, structures and vasculature of the body
- Provide a summary of findings to the physician to aid in patient diagnosis and management
- Use independent judgment and systematic problem-solving methods to produce high quality diagnostic information and optimize patient care.

Major Areas of Specialization

- Abdominal and superficial structures
- Obstetrics and gynecology
- Vascular
- Echocardiography-potential future offering

Students must:

- Have critical thinking skills
- Must be able to think in 3-D

TCC is accredited by the
Southern Association of Colleges and Schools

The TCC DMS program is accredited by the
Commission on Accreditation of Allied Health
Education Programs (www.caahep.org) upon the
recommendation of the Joint Review Committee on
Education in Diagnostic Medical Sonography.

Commission on Accreditation of Allied Health
Education Programs 254000 US Highway 19 North,
Suite 158 Clearwater, FL 33763

www.caahep.org

DIAGNOSTIC
MEDICAL
SONOGRAPHY
PROGRAM
ACCREDITATION

PROGRAM SEATS, COSTS, AND AVERAGE SALARY INFORMATION

How many seats per application period?

The TCCD Sonography program currently accepts UP TO 12 students per application period. Those selected will begin classes in the Fall semester. Approximately 120 students apply each year.

Program Cost

\$5,363

This includes uniforms, books, tuition and other miscellaneous costs.

How does this compare to other local A.A.S. Sonography programs?

- Parker University (Dallas): approx. \$50,000
- College of Healthcare Professions (CHCP): approx. \$39,500
- Weatherford College: approx. \$8,000

SELECTION AND NOTIFICATION

When Will I Be Notified?

3 to 4 weeks after the application deadline, the top 25 candidates are selected for an interview.

Selection Into Program

Notification of the selected 12 applicants are sent within 10 days after the interviews.

Alternates

The remaining applicants within the Top 25 are designated as alternates.

HOW CAN I BE MORE COMPETITIVE?

Applicants with higher GPA's, USA scores and science grades will be the most competitive.

Applicant Scores are made up of:

- 1/3 – BIOL 2401 and 2402 GPA
- 1/3 – Overall GPA in other 5 courses
- 1/3 – USA score



ELIGIBILITY

Must have a TCCD ID Number

- To be eligible to apply for the Diagnostic Medical Sonography program, the student must first be a current TCCD student. This means that the student has a TCCD student ID number and has already applied and been accepted to the college.
- Individuals that have not applied to the college may follow this link:
<https://www.tccd.edu/admission/how-to-apply/> to begin the process.
- ALL official transcripts from a college or university other than TCCD, must be received and evaluated by TCCD at the time of Application to the Diagnostic Medical Sonography program.
- First, submit your transcripts to the Transcript Office or your local Registrars office.
- This process can take up to two months, please keep this in mind.
- Also remember to include an official transcript with your application IF your evaluation has not yet been completed.

TSI Requirements

- Meet TCCD's Texas Success Initiative (TSI) requirements. For additional information on TSI requirements, please search TSI at [tccd.edu](https://www.tccd.edu).

Minimum 2.5 GPA is required to apply

REQUIRED IMMUNIZATIONS

- Hepatitis A – 2 doses
- Hepatitis B – 3 doses
- MMR – 2 doses
- TDAP – in last 10 years
- Varicella – 2 doses
- Influenza – in last year
- TB Skin Test/Gold Test – in last year

Some take up to 6 months to complete

A titer test showing full immunity will also be accepted

Renew TB annually and Flu seasonally

Check with your physician and the CDC for proper immunization protocols.



COVID 19 STATEMENT

The health and safety of our Tarrant County College District (TCCD) community are responsibilities that we all share. TCCD does not require the COVID-19 vaccine to access TCCD properties or to participate in campus activities.

However, TCCD's partners may require vaccination for students enrolled in technical programs that require the fulfillment of onsite practicum/clinical coursework at one of our partnering facilities. Students in technical programs with a practicum/clinical component may be required by the partnering facility to have the vaccine to complete the practicum/clinical requirement at the partnering facility. Several hospitals require technical program students to be fully immunized against COVID-19 before arrival at the facilities.

As a result, practicum/clinical sites for unvaccinated students may be limited; therefore, graduation may be delayed if students decline clinical/practicum assignments at sites requiring vaccination.

DID YOU ATTEND HIGH SCHOOL OR COLLEGE OUTSIDE OF THE US?

- TOEFL-Internet Based Test score of 83 or higher.
- IELTS-Academic version Band Score of 6.5 overall with a min. score of 6 in all areas.



PREREQUISITE COURSES

You must have completed the following 7 prerequisite courses with a grade of C or higher before applying to our program.

- BIOL 2401 (Anatomy and Physiology I)
- BIOL 2402 (Anatomy and Physiology II)
- Elective: Language, Philosophy and Culture or Creative Arts
- ENGL–1301 English Composition I
- MATH–1314 College Algebra
- PHYS–1401 General Physics or PHYS 1415
- PSYC–2301 Introduction to Psychology

BIOL courses must have been completed within 5 years from the time of deadline. You have a maximum of two attempts per course. SCIT COURSES are not accepted replacements for the BIOL courses. There are absolutely NO exceptions.

Please note that the 7 prerequisite courses listed above, USA exam, immunizations and all TSI Requirements must be completed prior to application.

ULTRASOUND STUDENT ASSESSMENT (USA) EXAM

The evaluation of inherent abilities crucial to the sonography occupation is carried out in the USA. There are no supplementary resources, such as study materials and sample assessments. You can find further information at: tccd.college/UltrasoundStudentAssessment

There is no preparation because the USA program is designed as a genuine aptitude test. The exam measures inherent abilities such as hand-eye coordination and visualization, which are crucial for mastering ultrasonography's fundamental concepts.

Test basics:

- 1 ½ - 2 hours in length
- One attempt



PROGRAM SCHEDULE AND LENGTH

Course & Clinical Hours

Program courses and clinicals usually (tentatively) meet weekdays between 7am and 5pm. While in the program the potential exists for afternoon, evening and weekend clinical rotations.

This is a Full-Time Program

Students need to be able to commit to a full-time schedule for six consecutive semester (2 YEARS). Part-time or evening learning options are not available. You can expect to attend 5 days per week in the Fall and Spring semesters and 4 days per week in the Summer semester.

DIAGNOSTIC MEDICAL SONOGRAPHY PROGRAM

Coursework in the First Fall Semester

DMSO 1110 Introduction to Sonography

DMSO 1441 Abdominopelvic Sonography

DMSO 1302 Basic Ultrasound Physics

DMSO 1266 Practicum: Diagnostic Medical Sonography/Sonographer and Ultrasound Technician

Coursework in the First Spring Semester

DSVT 1103 Introduction to Vascular Technology

DMSO 2305 Sonography of Obstetrics/Gynecology

DMSO 2243 Advanced Ultrasound Physics

DMSO 1366 Practicum

DIAGNOSTIC MEDICAL SONOGRAPHY PROGRAM (CONT'D)

Coursework in the First Summer Semester

DMSO 2253 Sonography of Superficial Structure

DMSO 2242 Sonography of High Risk Obstetrics

DMSO 1267 Practicum

Coursework in the Second Fall Semester

DMSO 1355 Sonographic Pathophysiology

DSVT 1300 Principles of Vascular Technology

DMSO 1367 Practicum

Coursework in the Second Spring Semester

DSVT 2335 Advanced Vascular Technology

DMSO 2130 Advanced Ultrasound and Review (Capstone)

DSVT 1364 Practicum

APPLY TO THE PROGRAM

The application will be open from September 2 – March 1 each year.

Link take you to the application page tccd.college/DMSO-HowToApply



POST APPLICATION REQUIREMENTS

You will be required to meet the following requirements once you are notified of your acceptance into the program and 30 days before the first day of class.

- Criminal background check: If you have any criminal charges, you need to email the Program Director to discuss whether you can apply for the program. Felonies, assault, domestic violence and drug charges automatically bar you from eligibility.
- Drug screen
- Keep CPR current (American Heart Association certified BLS for Healthcare Providers)
- Health insurance
- Renew TB annually and Flu seasonally

FOR MORE INFORMATION

If you have any questions, please contact:

TR.HealthCareAdvising@tccd.edu

Program Director

brandie.bach@tccd.edu

Application Questions

TR.HealthSciencesApplication@tccd.edu