



Program Map

Diagnostic Cardiovascular Sonography

Degree: Associate of Applied Science (AAS) AND Advanced Technical Certificate (ATC)



HEALTH SCIENCES

Program Description: This is the course sequence for students interested in the **Diagnostic Cardiovascular Sonography Program**. It does not represent a contract, nor does it guarantee course availability. All college credit courses in the degree plan must be completed with a grade of 'C' or better. Following this pathway, you will earn an Associate of Applied Science (AAS) and an Advanced Technical Certificate (ATC). Upon completion of the prescribed curricula of these awards, the student is eligible to apply to take examinations for the American Registry for Diagnostic Medical Sonographers (ARDMS) certification in the Adult Echocardiography and Vascular Technology specialties.

Sonographers use high-frequency sound waves (ultrasound) to create images of organs, tissues, or blood flow inside the body for diagnostic purposes. Graduates find work in hospitals, physician offices, or outpatient clinics. Several areas of specialization, including Diagnostic Medical Sonography, Diagnostic Cardiac Sonography, and Vascular Technology, are all available at ACC.

The ACC Sonography Programs are accredited by the Commission on Accreditation of Allied Health Education Programs (25400 U.S. Highway 19 North, Suite 158, Clearwater, FL 33763; 727.210.2350; www.caahep.org) upon the recommendation of the Joint Review Committee on Education in Diagnostic Medical Sonography (6021 University Boulevard, Suite 500, Ellicott City, MD 21043; 443-973-3251; www.jrcdms.org).

Students working toward admission into a Health Sciences Program are required to declare General Studies in Pre-Health Sciences degree as their major until they are officially accepted into a program.

Admission to the College does not guarantee admission to a specific health science program of study as these programs have additional requirements that must be met.

The following items are required by health sciences programs, but deadlines may vary by program. Please see division and program websites for specific details.

- Completed and submitted immunizations prior to submitting an application
- Proof of health insurance
- Criminal background check
- Drug screen
- Current CPR (Cardiopulmonary Resuscitation) American Heart Association (AHA) Basic Life Support (BLS) for Healthcare providers
- Completed health data form
- Verification of annual tuberculosis status
- Completed program information session

Technical Standards:

Health Sciences programs establish technical standards and essential functions to insure that students have the abilities required to participate and potentially be successful in all aspects of the respective programs. Students are required to meet published technical standards and essential functions for the program. See specific program website for details.

Additional Requirements:

Each program has specific admission requirements - see program website for detailed information.

Contact:
Health Sciences
www.austincc.edu/health
Eastview Campus:
Phone: 512.223.5700
or toll-free 888.626.1697
Round Rock Campus:
Phone: 512.223.0220
Email: healthsciences@austincc.edu

Department Website:
www.austincc.edu/health/sono

Use this **Program Map** to choose courses with your college advisor and track your progress towards milestones and completion of program.

Pre-Degree Requirements	
Program Specific	Mathematics Placement <i>Placements based on TSI</i>
<p>PREREQUISITE COLLEGE CREDIT COURSES See Program website Prerequisite and Co-requisite Courses section (http://www.austincc.edu/health/sono/prerequisites2016.php) for allowed substitute courses. Prerequisite courses may be repeated for a higher grade 1 time within 5 years of application date.</p> <ul style="list-style-type: none"> MATH 1314 - College Algebra BIOL 2401 Anatomy & Physiology I (formerly BIOL 2304/2101 - Human Anatomy Lecture & Lab) BIOL 2402 Anatomy & Physiology II (formerly BIOL 2305/2102 - Human Physiology Lecture & Lab) (*Pre-requisite of A & P I required) PHYS 1410 - Applied Physics (*Pre-requisite of MATH 1314 required) <p>Additional requirements to apply – see Sonography Programs website for details.</p>	<ul style="list-style-type: none"> <input type="checkbox"/> MATD-0332 - Basic Math Skills <input type="checkbox"/> MATD-042x/032x – ALEKS Sequence <input type="checkbox"/> MATD-0385/0485 – Developing Mathematical Thinking <i>Not prerequisite for MATH-1314/1324</i> <input type="checkbox"/> MATD-0370 – Elementary Algebra <input type="checkbox"/> MATD-0390 – Intermediate Algebra <i>Take MATD-0370 and 0390 to prepare for MATH-1314/1324</i>
	Reading and Writing Placement <i>Placements based on TSI</i>
	<ul style="list-style-type: none"> <input type="checkbox"/> Basic Developmental Courses <input type="checkbox"/> ESOL Courses <input type="checkbox"/> INRW Courses
<p>SEMESTER-BY-SEMESTER CARDIOVASCULAR SONOGRAPHY ASSOCIATE OF APPLIED SCIENCE PLAN</p>	

Semester 1	CR	Advising Notes
HPRS 1206 - Medical Terminology	2	Petition/Departmental Registration Approval required for all Sonography courses in all semesters of the Program.
DSAE 1291 - Special Topics: Foundations of Echocardiography	2	
DMSO 1302 - Basic Ultrasound Physic	3	
DSAE 1415 - Principles of Adult Echocardiography	4	
DSAE 1160 - Clinical - Diagnostic Medical Sonography/Sonographer and Ultrasound Technician - DCS Clinical	1	
	12	Program Semester Hours
Semester 2		
SPCH 1318 – Interpersonal Communication	3	SPCH 1311 Intro to Speech Communication; Communication for Health Care Professionals is acceptable substitute for SPCH 1318.
DMSO 1342 - Intermediate Ultrasound Physics	3	
DSAE 2404 - Echocardiographic Evaluation of Pathology	4	
DSAE 2303 - Cardiovascular Concepts	3	
DSAE 1261 - Clinical - Diagnostic Medical Sonography/Sonographer and Ultrasound Technician DMS Clinical II	2	
	15	Program Semester Hours
Semester 3		
ENGL 1301 - English Composition I	3	SOCI 1300 Introduction to Sociology is acceptable substitute for PSYC 2301. DO THIS – Apply to take ARDMS SPI exam (www.ardms.org).
PSYC 2301 - Introduction to Psychology	3	
DSAE 2337 - Echocardiographic Evaluation of Pathology II	3	
DSAE 2262 - Clinical - Diagnostic Medical Sonography/Sonographer and Ultrasound Technician DCS Clinical III	2	
	11	Program Semester Hours
Semester 4		
PHIL 2306 - Ethics	3	
DSAE 1291 - Special Topics: Introduction to Pediatric Echocardiography	2	
DSVT 1300 - Principles of Vascular Technology	3	

DSAE 2363 - Clinical - Diagnostic Medical Sonography/Sonographer and Ultrasound Technician - DCS Clinical IV	2	
DSVT 1160 - Clinical - Diagnostic Medical Sonography/Sonographer and Ultrasound Technician: VT Clinical	1	DO THIS – Apply for AAS in Diagnostic Cardiovascular Sonography. ACHIEVEMENT: Associate of Applied Science degree
	12	Program Semester Hours
Total Associate of Applied Science Hours:		65

SEMESTER-BY-SEMESTER CARDIOVASCULAR SONOGRAPHY ADVANCED TECHNICAL CERTIFICATE		
Semester 5		
DSVT 2300 - Vascular Technology Applications	3	Must hold AAS in Diagnostic Cardiovascular Sonography.
DSVT 2461 - Clinical - Diagnostic Medical Sonography/Sonographer and Ultrasound Technician - VT Clinical II	4	
DSAE 2235 - Advanced Echocardiography	2	
DSAE 2166 - Practicum (or Field Experience) - Diagnostic Medical Sonography/Sonographer and Ultrasound Technician - DCS Practicum I	1	
	10	Program Semester Hours
Semester 6		
DSVT 2335 - Advanced Non-Invasive Vascular Technology	3	DO THIS – Apply for Advanced Technical Certificate in Diagnostic Cardiovascular Sonography.
DSVT 2362 - Clinical - Diagnostic Medical Sonography/Sonographer and Ultrasound Technician - VT Clinical III	3	
DSVT 1291 - Special Topics in Diagnostic Medical Sonography Technician	2	ACHIEVEMENT: Advanced Technical Certificate
DSAE 2255 - Echocardiography Professionalism and Registry Review	2	
DSAE 2167 - Practicum (or Field Experience) - Diagnostic Medical Sonography/Sonographer and Ultrasound Technician - DCS Practicum II	1	DO THIS – Apply to take ARDMS Adult Echocardiography and Vascular Technology exams.
	11	
Total Advanced Technical Certificate Hours:		21

Total Program Hours: 86

Career & Transfer Resources

ACC's Career & Transfer websites provide detailed, guided information on career exploration and transfer.

www.austincc.edu/career

www.austincc.edu/transfer

For further information regarding this specific program, please see the Career & Transfer Resources supplement provided in the next section of this Program Map.

Program Map

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Career Information

Sonography is a dynamic profession that has grown significantly over the past 20 years. With rapidly developing new technologies and increased use of diagnostic ultrasound procedures, growth is projected to continue in the future with employment opportunities for qualified sonographers in both urban and rural areas nationwide. Sonographers can choose to work in clinics, hospitals, private practice physician offices, and other medical settings.

The [Society of Diagnostic Medical Sonography](#), the [American Society of Echocardiography](#), and the [Society for Vascular Ultrasound](#) offer detailed career information on their websites.

Common Job Titles

Diagnostic Medical Sonographers (includes Cardiac Sonographer, Cardiac/Vascular Sonographer, Diagnostic Medical Sonographer, Medical Sonographer, Registered Diagnostic Medical Sonographer (RDMS), Sonographer, Staff Sonographer, Ultrasonographer, Ultrasound Technician (Ultrasound Tech), Ultrasound Technologist (Ultrasound Tech)

Regional Labor Market Information

Diagnostic Medical Sonographers: New workers generally start around \$56,395. Normal pay for Diagnostic Medical Sonographers is \$74,818 per year, while highly experienced workers can earn as much as \$103,764. Over the last year, 52 companies have posted 587 jobs for Diagnostic Medical Sonographers in this region. There are currently 511 Diagnostic Medical Sonographers that are employed in Austin-Round Rock, TX.

Source: <https://austincc.emsicc.com/careers/diagnostic-medical-sonographer>

Career and labor market research tools (see Quick Reference Guide at <http://www.austincc.edu/career>):

EMSI: <https://austincc.emsicc.com/>, Bureau of Labor Statistics: <http://www.bls.gov/ooh/>, O*NET: <https://www.onetonline.org/>

Career Resources: ACC's career services website provides information on career exploration and employment at <http://www.austincc.edu/career>. Students are encouraged to consult with their area of study advisor for additional career assistance. The above information is provided as a guide and reference tool for occupations related to this program. This is not a guarantee of job placement in any of these occupations after successful completion of an ACC program. The common job titles listed are representative titles and are provided for career research. These are not the only occupations possible in this area of study.

Transfer Information

The Associate of Applied Science in Diagnostic Cardiovascular Sonography prepares students to directly enter the workforce. A Bachelor of Applied Arts and Sciences (BAAS) is an option for students who have earned an AAS degree who want to complete a four-year degree. These degrees apply non-transferable courses and work experience towards the degree. You still must meet general education requirements and take upper level courses.

Transfer Guides: *The universities listed here do not constitute an ACC endorsement. Transfer course evaluations and determination of which courses will count toward a bachelor's degree are made by the receiving transfer institution.*

Texas State University: <http://www.owls.txstate.edu/undergraduate-degrees/applied-arts-sciences.html>

Concordia University Texas: <http://www.concordia.edu/academics/college-of-business-and-communication/baas-in-business.html>

Tarleton State University: <http://www.tarleton.edu/degrees/bachelors/baas-business/>

Texas A&M University - Central Texas: <https://www.tamuct.edu/degrees/undergraduate/business-management.html>

Texas Tech University: https://www.depts.ttu.edu/universitystudies/prospective_students/baas.php

Additional Transfer Resources: ACC's transfer website provides information on additional colleges & universities: <http://www.austincc.edu/transferguides>. Students are encouraged to consult with a faculty advisor, area of study advisor, and/or their chosen transfer institution to ensure courses taken at ACC will apply toward their bachelor's degree program.