

# Cardiovascular Sonography

## Associate in Science Degree Program

**Contact Hours:** 2,100

**Semester Credits:** 85.5

**Instructional Weeks – Full Time:** 80

**Average Time to Complete – Full Time:** 20 Months

## Program Overview

Cardiovascular sonographers use special imaging equipment that directs sound waves into a patient's body (in a procedure commonly known as an ultrasound, sonogram, or echocardiogram) to assess and diagnose various medical conditions.

The Cardiovascular Sonography curriculum integrates didactic and clinical instruction with increasing expectations at each level. Clinical sites utilized by the program are geographically dispersed. Students may have to travel outside of the local area for clinical placements.

## Program Delivery

The Cardiovascular Sonography program is delivered in a blended format. Courses will be delivered entirely online, entirely on-ground or with an appropriate blend of both online and on-ground hours in the same course. Of the 2,100 program hours, a maximum of 700 course hours (33.3%) may be offered online (including general education courses). Campuses may have the option to deliver general education courses either online or on-ground depending on local need and availability specific time, regardless of their eligibility status upon enrollment.

## Program Objectives

To prepare competent entry-level sonographers in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains for the following concentration(s) it offers:

- Adult cardiac sonography

Graduates of this program will develop skills to:

1. Be clinically competent to perform appropriate procedures and record anatomic, pathologic, and/or physiologic data;
2. Apply critical thinking and problem solving skills to exercise discretion and judgment in performance of diagnostic sonography;
3. Demonstrate appropriate communication skills; and
4. Demonstrate professionalism and growth in the profession.

Course #	Course Title	Theory Hours (Ground/Online)	Lab Hours (Ground/Online)	Clinical Hours (Ground/Online)	Semester Credit Hours
BIOL1405	Anatomy & Physiology	60 ( 0 / 60 )	0	0	4
COMM1310	Elements of Human Communication	45 ( 0 / 45 )	0	0	3
CVSG1210	Scanning Lab I	0	80 ( 65 / 15 )	0	2.5
CVSG1240	Echocardiography Scanning Lab I	0	80 ( 65 / 15 )	0	2.5
CVSG1340	Cardiovascular Pathology	45 ( 20 / 25 )	0	0	3
CVSG1640	Echocardiography I	90 ( 20 / 70 )	0	0	6
CVSG2250	Echocardiography Scanning Lab II	0	80 ( 65 / 15 )	0	2.5

CVSG2251	Cardiovascular Pharmacology	30 ( 0 / 30 )	0	0	2
CVSG2280	Cardiovascular Registry Review	30 ( 20 / 10 )	0	0	2
CVSG2360	Vascular Sonography I	30 ( 5 / 25 )	30 ( 30 / 0 )	0	3
CVSG2370	Vascular Sonography II	30 ( 5 / 25 )	30 ( 30 / 0 )	0	3
CVSG2760	Cardiovascular Clinical Education I	0	0	320 ( 320 / 0 )	7
CVSG2770	Cardiovascular Clinical Education II	0	0	320 ( 320 / 0 )	7
CVSG2780	Cardiovascular Clinical Education III	0	0	320 ( 320 / 0 )	7
CVSG2850	Echocardiography II	120 ( 20 / 100 )	0	0	8
DMSG1810	Physics & Instrumentation	120 ( 60 / 60 )	0	0	8
ECGY1330	Electrophysiology	30 ( 5 / 25 )	30 ( 30 / 0 )	0	3
ENGL1310	English Composition I	45 ( 0 / 45 )	0	0	3
HPRS1320	Foundations for Health Professionals	45 ( 0 / 45 )	0	0	3
MATH1320	College Algebra	45 ( 0 / 45 )	0	0	3
PHYS1311 *	Introductory Physics	45 ( 0 / 45 )	0	0	3
<b>Total</b>		<b>810 (155/655)</b>	<b>330 (285/45)</b>	<b>960 (960/0)</b>	<b>85.5</b>

*\*For students who start on or after September 18, 2023, this course will change from PHYS1310 to PHYS1311*

*These courses may be offered entirely online or entirely on-ground at the campus*