

# ECHOCARDIOGRAPHY AND VASCULAR ULTRASOUND, ASSOCIATE IN SCIENCE DEGREE

Financial Aid Eligible  
Banner Code: 1\_AS\_CTEV  
Control Number: 04043

Completion of this associate degree will allow students to pursue career opportunities such as noninvasive cardiovascular technologists, echocardiographer/echocardiography technologists, and cerebrovascular ultrasound technologists.

## Program Outcomes

1. Be prepared for entry-level employment as a professional and competent Cardiovascular Technologist to meet the needs of the local health care community.

## Associate in Science Degree Requirements

1. **UNIT REQUIREMENT** - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.
2. **MAJOR REQUIREMENT** - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.
3. **MATHEMATICS REQUIREMENT** - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of "C" or better or "pass") in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.
4. **GENERAL EDUCATION REQUIREMENT** - Students may choose to complete Option 1 (OCC AA GE) (<https://catalog.cccd.edu/orange-coast/general-education-patterns/associate-arts-general-education-option-1/>), Option 1 (OCC AS GE) (<https://catalog.cccd.edu/orange-coast/pathways/careers-healthcare/cardiovascular-technology/echocardiography-vascular-ultrasound-associate-science-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/>), Option 2 (CSU GE) (<https://catalog.cccd.edu/orange-coast/general-education-patterns/associate-degree-general-education-option-2/>), or Option 3 (IGETC (<https://catalog.cccd.edu/orange-coast/general-education-patterns/associate-degree-general-education-option-3/>))) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.

## Program Prerequisites

Course	Title	Units
ALH A010	Health Occupations	0.5
ALH A111	Medical Terminology	3
BIOL A221	Anatomy-Physiology	4
Total Units		7.5

## Required Prerequisites

Electrocardiography Technician Certificate of Achievement

Course	Title	Units
<b>Year 1</b>		
<b>Fall</b>		
ALH A115	Patient Care	2.5
CVT A100	Introduction to Electrocardiography	2
CVT A150	Advanced Electrocardiography	2
CVT A160	Cardiac Anatomy/Pathophysiology	3
Units		9.5
<b>Spring</b>		
ALH A120	Human Diseases	2
CVT A130	Introduction to Invasive Cardiology	3
CVT A170	ECG Clinical Experience	5
CVT A190	Introduction to Sonography and Imaging Physics	3
Units		13
Total Units		22.5

Course	Title	Units
<b>Year 1</b>		
<b>Fall</b>		
CVT A200	Introduction to Echocardiography	3
CVT A205	Introduction to Echocardiography Lab	1
CVT A210	Echocardiography Clinical Lab 1	5
CVT A220	Ultrasound Sonographic Physics and Instrumentation	3.5
Units		12.5
<b>Spring</b>		
CVT A250	Advanced Echocardiography	3
CVT A255	Advanced Echocardiography Lab	1
CVT A260	Cerebrovascular and Peripheral Ultrasound	2.5
CVT A265	Echocardiography Clinical Lab 2	6
Units		12.5
Total Units		25

Requirement	Units
Program Major Units	30
AS General Education Option 1, 2, or 3	Varies
Transferable electives to satisfy unit requirement	Varies
Total Degree Units	60

## Electrocardiography Technician Suggested Elective

Course	Title	Units
PHIL A120	Ethics	3