

CARDIOVASCULAR TECHNOLOGY

Cardiovascular technology is an allied health profession concerned with the diagnosis and treatment of patients with heart and blood vessel disease. The cardiovascular technologist performs tests at the request of a physician to obtain information about that patient's heart and blood vessel anatomy and function so the physician can make a diagnosis. The profession of cardiovascular technology includes three areas of diagnostic evaluation:

1. Invasive cardiovascular technology (diagnosis of heart disease by cardiac catheterization),
2. Noninvasive cardiovascular technology (diagnosis of heart disease by cardiac ultrasound, exercise, and electrocardiographic testing), and 3) noninvasive peripheral vascular study (diagnosis of blood vessel disease using ultrasound testing).

The Cardiovascular Technology program provides the necessary classroom and clinical courses to allow graduates to work as noninvasive cardiovascular technologists. Specifically, the program objectives include:

1. Graduate qualified ECG technologists.
2. Graduate qualified noninvasive cardiovascular technologists who obtain RDCS within two years of completing the program and who are qualified in all non-invasive tests.
3. Provide an adequate number of graduates to meet the need for employees within the community.

During the first year of the program, students learn basic medical sciences and non-invasive cardiovascular tests including electrocardiography (ECG), exercise testing, Holter monitoring, pacemaker evaluation and continuous cardiac monitoring. Students may exit the program after the first year and obtain a Certificate of Achievement as an Electrocardiography Technician. With this certificate, graduates may obtain employment as an ECG technician, stress testing technician, Holter monitor technician, pacemaker technician and/or monitor (telemetry) technician.

Students wishing to complete the two-year program must complete the first year courses and Diagnostic Medical Sonography 150, and the general education for the Associate in Science degree. Graduates of the Noninvasive Cardiovascular Technology program option may obtain employment as a cardiovascular technologist performing all noninvasive tests, particularly cardiac ultrasound or echocardiography. Additionally, graduates may perform limited cerebrovascular ultrasound tests.

The Cardiovascular Technology program is fully accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP).

Program Admission:

Allied Health 010 course – application and orientation.

The student must complete Associate of Science Degree graduation requirements and the program prerequisites prior to acceptance to the program.

ELECTROCARDIOGRAPHY TECHNICIAN

Employment possibilities include:

- ECG Technician
- Stress Testing Technician
- Holter Monitor Technician
- Pacemaker Technician
- Monitor (Telemetry) Technician

Program Outcome

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

CERTIFICATE OF ACHIEVEMENT

Program prerequisites:

Health Occupations	ALH	A010	(.5)
Anatomy-Physiology	BIOL	A221	(4)

Required Courses

Course			Units
FALL			
Medical Terminology	ALH	A111	(3)
Patient Care	ALH	A115	(2.5)
Intro Info Sys & Appl	CIS	A100	(3)
Intro to Electrocardiography	CVT	A100	(2)
Cardiac Anat & Pathophysiology	CVT	A160	(3)
Technical Math*	TECH	A040	(3)
SPRING			
Human Diseases	ALH	A120	(2)
Intro to Invasive Cardiology	CVT	A130	(3)
Adv Electrocardiography	CVT	A150	(2)
ECG Clinical Experience	CVT	A170	(3)
Total:			(31)

**(or Math A030 or higher or placement at appropriate Math level)*

Suggested elective:

Ethics	PHIL/RLST	A120	(3)
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Students are required to obtain a grade of "C" or better in all required courses.

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ECHOCARDIOGRAPHY AND VASCULAR ULTRASOUND

Associate in Science Degree

Employment possibilities include:

Noninvasive Cardiovascular Technologist

Echocardiographer/Echocardiography Technologist

Cerebrovascular Ultrasound Technologist

Program Outcome

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

Required prerequisites:

Electrocardiography Technician Certificate of Achievement

	Subtotal:	(31)
Required Courses		
Course		Units
FALL		
Intro to Echocardiography	CVT A200	(3)
Intro to Echocardiography Lab	CVT A205	(1)
Echocardiography Clin Lab 1	CVT A210	(5)
Sono Physics/Instrumentation	DMS A150	(4.5)
SPRING		
Adv Echocardiography	CVT A250	(2)
Adv Echocardiography Lab	CVT A255	(1)
Cerebrovascular Ultrasound	CVT A260	(2)
Echocardiography Clin Lab 2	CVT A265	(6)
	Subtotal:	(24.5)
	Total:	(55.5)

Students are required to obtain a grade of "C" or better in all prerequisites and required courses.

COMMERCIAL ART

NARRATIVE ILLUSTRATION

The Illustration Design option places its emphasis on a great variety of drawing and painting courses. The diversity of this curriculum may lead the student into career alternatives, such as illustrating for books, magazines, record album covers, and brochures.

Program Outcomes

Upon completion of this program graduates will be able to:

1. Create a series of illustrations in a variety of mediums demonstrating techniques and applications of current hands-on illustration techniques.
2. Demonstrate skill development in drawing, perspective, and various paint mediums.
3. Create a portfolio utilizing multiple design techniques for the purpose of gaining employment and/or acceptance to an art college or university for advanced learning.

CERTIFICATE OF ACHIEVEMENT

Required Courses			
Course			Units
FIRST SEMESTER			
Color & Design 2-D	ART	A110	(3)
Beginning Drawing	ART	A120	(3)
Introduction to Computer Graphics	DMAD	A181	(3)
Selected Electives			(2-3)
SECOND SEMESTER			
Life Drawing	ART	A121	(3)
Perspective	ART	A125	(3)
Story Illustration 1	ART	A143	(3)
Illustrator/Computer Graphics 1	DMAD	A190	(4)
THIRD SEMESTER			
Drawing 2	ART	A120	(3)
Painting 1	ART	A130	(3)
Figure Composition	ART	A220	(3)
Selected Electives			(2-3)
FOURTH SEMESTER			
Story Illustration 2	ART	A143	(3)
Professional Studies	ART	A180	(2.5)
Arts Internship	THEA	A181	(1-2)
Selected Electives			(2-3)
	Total:		(40.5-43.5)