

CARDIOVASCULAR TECHNOLOGY

The cardiovascular technologist assists physicians in the invasive cardiovascular laboratory. Procedures in the cardiovascular lab include coronary angiography and intervention, ventriculography, atherectomy, peripheral vascular angiography and intervention, structural heart, and electrophysiology, as well as other heart and vascular diagnostic and therapeutic studies.

The cardiovascular technologist also provides extensive personal care to the patient before, during and after a cardiovascular procedure. Cardiovascular technology is a rapidly expanding field and has become an essential and integral component of the health care continuum.

Program Description

The Cardiovascular Technology program offers a two-year Associate in Applied Science degree or a 14-month academic certificate program for qualified students. The program provides the student with classroom and online theory courses and supervised clinical experiences. Clinical instruction offers a variety of experiences whereby students apply theoretical knowledge to develop clinical skills in the treatment of cardiovascular disease, peripheral disease and cardiac electrophysiology.

Prospective students who have completed a two-year, post-secondary allied health program; have earned an associate or baccalaureate degree; or will have met the degree requirements from their primary educational institution upon completion of this program are eligible to enter the 14-month Academic Certificate program. Prerequisite coursework includes Human Anatomy & Physiology I and II.

Students are required to take the Registered Cardiovascular Invasive Specialist credentialing examination offered by Cardiovascular Credentialing International prior to graduation.

Program Mission

The mission of the Cardiovascular Technology program is to create a compassionate, competent and professional cardiovascular technologist. The program will provide an education that encompasses theory, professionalism and ethical concepts relating to clinical practice. The program facilitates independent learning and critical thinking and promotes technical skill development, enabling graduates to function effectively as team members who provide quality client care in the cardiovascular environment.

Learning Goals and Objectives

Goal 1: Be prepared as a competent entry-level cardiovascular technologist in the cognitive (knowledge), psychomotor (skills) and affective (behavior) learning domains for cardiovascular technology.

Goal 2: Utilize theoretical knowledge and critical thinking as the basis for professional practice.

Goal 3: Practice responsibly within the ethical and legal realm of cardiovascular technology.

Goal 4: Assume responsibility for lifelong personal learning and professional growth.

Goal 5: Provide quality care as a competent and compassionate professional in the dynamic cardiovascular environment.

Associate Requirements

Code	Title	Hours
General Education		
BIO 175	A&P for Nursing & Allied Health	4
BIO 175L	A&P Nursing & Allied Health Lab	0
BIO 176	A&P Nursing & Allied Health II	4
BIO 176L	A&P Nursing & Allied Hlth II Lab	0
ENG 101	Craft of Language	3
MAT 112	College Algebra	3
CSS 101	College Studies Seminar	3
PHL 490	Ethical & Legal Dimen Hlth Sci	1
PHY 200	Survey of Physics	3
PHY 200L	Survey of Physics Laboratory	1
SOC 101 or SOC 270	Intro to Sociology Special Topics	3
INT 103	Methods of Patient Care	1
HSC 390	Medical Terminology	1
Cardiovascular Technology		
CVT 203	Rhythm & 12 Lead ECG Analysis	3
CVT 204L	Cardiovascular Simulation Lab	1
CVT 205	Cardiac Invasive Procedures	3
CVT 202	Intro to Rad Physics & Safety	1
CVT 206	Cardiac A&P	3
CVT 207	Advanced Procedures	3
CVT 212	Cardiovascular Clinical I	6
CVT 217	Cardiovascular Hemodynamics	3
CVT 216	Cardiac Device Theory	3
CVT 219	Cardiac Arrhythmia Therapies	3
CVT 225	Cardiac Pharmacology	3
CVT 222	Cardiovascular Clinical II	6
CVT 232	Cardiovascular Clinical III	3
CVT 200	Advanced Cardiac Life Support	1
CVT 228	Radiation Biology	1
Total Hours		70

Certificate Requirements

Code	Title	Hours
HSC 390	Medical Terminology	1
INT 103	Methods of Patient Care	1
PHL 490	Ethical & Legal Dimen Hlth Sci	1
CVT 203	Rhythm & 12 Lead ECG Analysis	3
CVT 204L	Cardiovascular Simulation Lab	1
CVT 205	Cardiac Invasive Procedures	3
CVT 202	Intro to Rad Physics & Safety	1
CVT 206	Cardiac A&P	3
CVT 207	Advanced Procedures	3
CVT 217	Cardiovascular Hemodynamics	3
CVT 212	Cardiovascular Clinical I	6
CVT 216	Cardiac Device Theory	3

CVT 219	Cardiac Arrhythmia Therapies	3
CVT 225	Cardiac Pharmacology	3
CVT 222	Cardiovascular Clinical II	6
CVT 232	Cardiovascular Clinical III	3
CVT 200	Advanced Cardiac Life Support	1
CVT 228	Radiation Biology	1
Total Hours		46

CVT 200	Advanced Cardiac Life Support	1
Hours		5
Total Hours		70

Typical Course Sequence

Course	Title	Hours
First Year		
Fall		
Associate Degree Only		
BIO 175 & 175L	A&P for Nursing & Allied Health and A&P Nursing & Allied Health Lab	4
ENG 101	Craft of Language	3
CSS 101	College Studies Seminar	3
MAT 112	College Algebra	3
PHL 490	Ethical & Legal Dimen Hlth Sci	1
Hours		14
Spring		
Associate Degree Only		
BIO 176 & 176L	A&P Nursing & Allied Health II and A&P Nursing & Allied Hlth II Lab	4
PHY 200 & 200L	Survey of Physics and Survey of Physics Laboratory	4
SOC 101 or SOC 270	Intro to Sociology or Special Topics	3
HSC 390	Medical Terminology	1
INT 103	Methods of Patient Care	1
Hours		13
Summer		
Associate Degree and Certificate Program		
CVT 204L	Cardiovascular Simulation Lab	1
CVT 203	Rhythm & 12 Lead ECG Analysis	3
CVT 205	Cardiac Invasive Procedures	3
CVT 202	Intro to Rad Physics & Safety	1
Hours		8
Second Year		
Fall		
Associate Degree and Certificate Program		
CVT 206	Cardiac A&P	3
CVT 207	Advanced Procedures	3
CVT 217	Cardiovascular Hemodynamics	3
CVT 212	Cardiovascular Clinical I	6
Hours		15
Spring		
Associate Degree and Certificate Program		
CVT 222	Cardiovascular Clinical II	6
CVT 219	Cardiac Arrhythmia Therapies	3
CVT 225	Cardiac Pharmacology	3
CVT 216	Cardiac Device Theory	3
Hours		15
Summer		
Associate Degree and Certificate Program		
CVT 232	Cardiovascular Clinical III	3
CVT 228	Radiation Biology	1