

# Cardiovascular Technology Curriculum

## Contact Us:

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## PROGRAM REQUIREMENTS

### A.A.S., MAJOR IN CARDIOVASCULAR TECHNOLOGY (INVASIVE)

The cardiovascular technologist is a health care professional who, at the direction of a licensed physician, performs diagnostic tests which are used in the diagnosis, treatment and serial follow-up of patients with cardiovascular disease. Cardiovascular Technology is a title used to describe two basic areas of expertise: Invasive Cardiology and Adult Echocardiography.

**Invasive Cardiology** utilizes highly sophisticated equipment to perform procedures on patients for diagnostic and interventional treatment of cardiovascular diseases as part of the cardiac catheterization team. The invasive technologist assists a qualified cardiologist in all aspects of the cardiac catheterization.

**Admission:** Health Science programs have special program admission criteria which must be completed prior to applying for the clinical phase of the program.

A brief description of program admission options is below. For more detailed information, please go to [www.ptc.edu/hsnis](http://www.ptc.edu/hsnis).

The Cardiovascular Technology program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) ) 25400 US Highway, 19 North., Suite 158 Clearwater, FL 33763; (727) 210-2350) [www.caahep.org](http://www.caahep.org), upon the recommendation of The Joint Review Committee on Education in Cardiovascular Technology (JRC-CVT), [www.jrcvt.org](http://www.jrcvt.org), 1449 Hill Street, Whitinsville, MA 01588-1032, (978) 456-5594.

To become eligible for entry into the Cardiovascular Technology major studies coursework, applicants must complete the following:

1. Complete the following courses (minimum "C" grade required):

- AHS 102
- BIO 210
- ENG 101
- MAT 102
- PSY 201

2. Minimum grade point average for the above coursework of 2.5. A GPA calculator can be found on the college website.
3. Good academic standing at the college.

Students are required to maintain a current American Heart Association "Basic Life Support" certification throughout the major studies courses.

**Major Studies Courses:** Completion of the Associate in Applied Science with a major in Cardiovascular Technology requires five (5) semesters upon acceptance to the major studies coursework.

## GENERAL EDUCATION COURSES

COURSES	CREDIT HOURS
BIO 210 Anatomy and Physiology I.....	4.0
BIO 211 Anatomy and Physiology II .....	4.0
ENG 101 English Composition I.....	3.0
MAT 102 Intermediate Algebra.....	3.0
PSY 201 General Psychology.....	3.0
SPC 205 Public Speaking .....	3.0
Elective Humanities/Fine Arts .....	3.0

**SUBTOTAL: 23.0**

## REQUIRED CORE SUBJECT AREAS

COURSES	CREDIT HOURS
CVT 101 Introduction to Cardiovascular Technology...	2.0
CVT 102 Cardiovascular Pathophysiology.....	3.0
CVT 108 Physics for the Invasive Cardiovascular Technologist .....	2.0
CVT 110 Hemodynamics and Cardiac Care Physiology.....	2.0
CVT 112 Cardiovascular Principles .....	3.0
CVT 120 Invasive Cardiology I .....	3.0
CVT 121 Invasive Cardiology II .....	3.0
CVT 122 Invasive Cardiology Clinical I.....	5.0
CVT 124 Invasive Cardiology Clinical II.....	8.0
CVT 223 Invasive Cardiology III.....	3.0
CVT 225 Invasive Cardiology Clinical III .....	8.0
CVT 226 Invasive Cardiology Special Topics.....	2.0

**SUBTOTAL: 44.0**

## OTHER COURSES REQUIRED FOR GRADUATION

COURSES	CREDIT HOURS
AHS 102 Medical Terminology .....	3.0

**SUBTOTAL: 3.0**

**TOTAL CREDIT HOURS: 70.0**

**Note:** Each student is required to complete BIO 211 (before the end of the first semester) and SPC 205 (before the end of the second semester). Students are encouraged to complete all general education coursework prior to beginning program coursework.

## A.A.S., MAJOR IN CARDIOVASCULAR TECHNOLOGY (ADULT ECHOCARDIOGRAPHY)

The cardiovascular technologist is a health care professional who, at the direction of a licensed physician, performs diagnostic tests which are used in the diagnosis, treatment and serial follow-up of patients with cardiovascular disease. Cardiovascular Technology is a title used to describe two basic areas of expertise: Invasive Cardiology and Adult Echocardiography.

**Adult Echocardiography** involves sonographers who perform echocardiograms, or ultrasound imaging, to evaluate different aspects of the heart and blood vessels. While cardiac sonographers do not themselves diagnose patients, they assist cardiologists with the diagnostic process.

**Admission:** Health Care programs have special program admission criteria which must be completed prior to applying for the clinical phase of the program.

A brief description of program admission options is below. For more detailed information, please go to [www.ptc.edu/hsnis](http://www.ptc.edu/hsnis).

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To become eligible for entry into the Cardiovascular Technology major studies coursework, applicants must complete the following:

1. Complete the following courses (minimum "C" grade required):

- AHS 102
- BIO 210
- ENG 101
- MAT 102
- PSY 201

2. Minimum grade point average for the above coursework of 2.5. A GPA calculator can be found on the college website.

3. Good academic standing at the college.

Students are required to maintain a current American Heart

Association "Basic Life Support" certification throughout the major studies courses.

**Major Studies Courses:** Completion of the Associate in Applied Science with a major in Cardiovascular Technology requires five (5) semesters upon acceptance to the major studies coursework.

## GENERAL EDUCATION COURSES

COURSES	CREDIT HOURS
BIO 210 Anatomy and Physiology I.....	4.0
BIO 211 Anatomy and Physiology II .....	4.0
ENG 101 English Composition I.....	3.0
MAT 102 Intermediate Algebra.....	3.0
PSY 201 General Psychology.....	3.0
SPC 205 Public Speaking .....	3.0
Elective Humanities/Fine Arts .....	3.0

**SUBTOTAL: 23.0**

## REQUIRED CORE SUBJECT AREAS

COURSES	CREDIT HOURS
CVT 101 Introduction to Cardiovascular Technology...	2.0
CVT 102 Cardiovascular Pathophysiology.....	3.0
CVT 106 Introduction to Non-Invasive Physics .....	3.0
CVT 107 Non-Invasive Cardiovascular Physics .....	3.0
CVT 112 Cardiovascular Principles .....	3.0
CVT 140 Non-Invasive Cardiology I.....	3.0
CVT 141 Non-Invasive Cardiology II .....	3.0
CVT 142 Non-Invasive Cardiology Clinical I .....	5.0
CVT 144 Non-Invasive Cardiology Clinical II.....	8.0
CVT 243 Non-Invasive Cardiology III.....	3.0
CVT 245 Non-Invasive Cardiology Clinical III .....	8.0
CVT 246 Non-Invasive Cardiology Special Topics.....	2.0

**SUBTOTAL: 46.0**

## OTHER COURSES REQUIRED FOR GRADUATION

COURSES	CREDIT HOURS
AHS 102 Medical Terminology .....	3.0

**SUBTOTAL: 3.0**

**TOTAL CREDIT HOURS: 72.0**

**Note:** Each student is required to complete BIO 211 (before the end of the first semester) and SPC 205 (before the end of the second semester). Students are encouraged to complete all general education coursework prior to beginning program coursework.

>>> Visit [www.ptc.edu/cardio](http://www.ptc.edu/cardio) to learn more.