**Cardiovascular Technology, AS**

Graduates of the Cardiovascular Technology Program are prepared to become credentialed as a Registered Cardiovascular Invasive Specialist (RCIS) after successful completion of the national RCIS Examination. Cardiovascular technology is an allied health profession specifically focused on the diagnosis and treatment of patients with cardiac and vascular disease. The technologist performs examinations at the request or direction of a physician. The technologist is proficient in the use of analytical equipment and sundry apparatus including placing such equipment on or into the patient, or placing the patient on the equipment, acquisition of diagnostic images, cognitive skills involving data measurement, professionalism for patient interactions, and knowledge of cardiac and vascular anatomy and pathophysiology.

Through subjective sampling and/or recording, the technologist proceeds with the examination to create an easily definable foundation of data from which a correct anatomic and physiologic diagnosis and/or treatment may be established for each patient.

The profession of cardiovascular technology encompasses five areas of diagnostic evaluation and/or interventional/therapeutic procedures: 1) invasive cardiovascular technology, 2) adult echocardiography, 3) pediatric echocardiography, 4) noninvasive vascular study, and 5) cardiac electrophysiology. The procedures performed by the cardiovascular technologist may be found in, but are not limited to, one of the following general settings:

* Invasive cardiovascular laboratories, including cardiac catheterization, blood gas and electrophysiology laboratories;
* Noninvasive cardiovascular laboratories, including echocardiography, exercise stress test and electrocardiography laboratories;
* Noninvasive vascular laboratories including Doppler ultrasound, and plethysmography laboratories;
* Cardiac pacing and electrophysiology laboratories, including electrophysiology laboratories and pacemaker clinics.

Current occupational employment and wages data for Cardiovascular Technologists are published by the United States Department of Labor’s Bureau of Labor Statistics at <http://www.bls.gov/oes/current/oes292031.htm>

The Edison State College Cardiovascular Technology Program is accredited in the Invasive Cardiovascular Technology (cardiovascular catheterization) area of diagnostic evaluation. The Invasive Cardiovascular Technologist works in cardiovascular catheterization laboratories (cath labs). Working with a cardiologist, they perform sophisticated tests to diagnose heart and blood vessel disease. They also assist the cardiologist during interventional repair procedures.

The Cardiovascular Technology Program admits students once per year and starts each Fall semester. The curriculum includes a combination of classroom, laboratory, and clinical education experiences. General Education and Program Specific coursework may be taken on various campuses but the Cardiovascular Technology core courses are only offered on the Lee Campus. Clinical education occurs at affiliated hospitals throughout Southwest Florida.

**ACCREDITATION:**

The Edison State College Cardiovascular Technology program is nationally accredited by the:

Commission on Accreditation of Allied Health Education Programs (CAAHEP)

1361 Park Street

Clearwater, FL 33756

Telephone: 727-210-2350

**APPLICATION DEADLINE:** May 31

**ADMISSION REQUIREMENTS:**

Cardiovascular Technology has limited enrollment due to the rigorous clinical education requirements for the program. Acceptance to Edison State College does not imply acceptance into the Cardiovascular Technology program. Each applicant must meet specific criteria which are listed in the admission policies. The Criteria for Admission Policies are available through the program office or through the School of Health Professions office at (239)489-9255. Admission applications are located at <http://www.edison.edu/academics/ascardiotech/cardiotech.php>

Admission to the program is determined by admissions points, academic transcript evaluation, and affective skills demonstration. Admissions points are awarded for the completion of General Education coursework and prospective students are encouraged to complete as many courses as possible, prior to starting the Cardiovascular Technology Core coursework. Pre-admission requirements include satisfactory completion of the following:

* Watson-Glaser Critical Thinking Examination
* Panel Interview
* College-approved criminal records check and drug testing at the applicant’s expense

After acceptance, students must complete the following:

* Immunization and health report
* TB Skin Test
* Certification in American Heart Association Basic Life Support for Healthcare Providers (CPR and AED) obtained during the months of June-August, prior to Fall Year 2 semester start

**BACCALAUREATE DEGREE OPPORTUNITY:**

Edison State College also offers a Bachelor of Applied Science (BAS) in Cardiopulmonary Sciences. Graduates of the AS Degree Program in Cardiovascular Technology with the RCIS credential may enroll in this degree program and complete remaining courses to earn the bachelor’s degree. For more information, please contact the School of Health Professions (239) 489-9255.

**CARDIOVASCULAR TECHNOLOGY, AS DEGREE PROGRAM OF STUDY:**

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| **GENERAL EDUCATION COURSEWORK:** Courses must be selected from those listed in the **General Education Program Guide** | **24 CREDIT HOURS** |
| ENC 1101 | Composition I | 3 |
| BSC 1093C\* | Anatomy and Physiology I | 4 |
| BSC 1094C | Anatomy and Physiology II | 4 |
| HUMANITIES | Any Listed Course in Humanities Section | 3 |
| CHEMISTRY  | Any Listed Chemistry in Natural Sciences Section  | 3 |
| CHEMISTRY LABORATORY | Any Listed co-requisite Chemistry Lab in Natural Sciences Section that accompanies Chemistry course | 1 |
| PSYCHOLOGY OR SOCIOLOGY | Any Listed Psychology or Sociology Course in Social Sciences Section | 3 |
| MATHEMATICS\*  | Any Listed Course in Mathematics Section | 3 |

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| **PROGRAM SPECIFIC COURSEWORK** | **7 CREDIT HOURS** |
| MCB 2010C\* | Microbiology | 4 |
| PHYSICS | PHY 1007C Physics for the Health Sciences **OR** PHY 2053/2053L\* is strongly recommended | 4 |

\*BSC 1010/BSC 1010L are required prerequisites for BSC 1093C and MCB 2010C at most institutions.

\*MAC 1114 and MAC 1140 are required prerequisites for PHY 2053/2053L at most institutions.

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| **CARDIOVASCULAR TECHNOLOGY CORE COURSEWORK** | **46 CREDIT HOURS** |
| RET 1024  | Introduction to Cardiopulmonary Technology | 3 |
| RET 1613C  | Cardiopulmonary Anatomy and Physiology | 2 |
| CVT 1200  | Cardiovascular Pharmacology | 3 |
| CVT 1800L  | Cardiovascular Pre- Practicum I | 2 |
| CVT 1801L | Cardiovascular Pre- Practicum II | 2 |
| CVT 2420C | Invasive Cardiology I | 4 |
| CVT 2620C | Non-Invasive Cardiology Technology I | 2 |
| CVT 2805C | Cardiovascular Interventional Pre-Practicum | 2 |
| CVT 2840L  | Cardiovascular Practicum II | 6 |
| CVT 2421C  | Invasive Cardiology II | 4 |
| RET 2244  | Critical Care Applications | 2 |
| CVT 2841L  | Cardiovascular Practicum III | 6 |
| CVT 2920  | Cardiovascular Technologist as a Professional | 2 |
| CVT 2842L  | Cardiovascular Practicum IV | 6 |
| **TOTAL DEGREE PROGRAM, CARDIOVASCULAR TECHNOLOGY, AS** | **77 CREDIT HOURS** |

Note: CVT 2621C Non-Invasive Cardiology Technology II (4 credit hours) is available as an Elective option; this is NOT a required course for the degree.