

CARDIOPULMONARY SCIENCES

Bachelor of Science Degree in Cardiopulmonary Sciences (CIP# 1105109081)

Limited-Access

School of Health Sciences

The Cardiopulmonary Sciences bachelor's degree offers professionally-credentialed graduates of Respiratory Care, Cardiovascular Technology and Cardiopulmonary Technology Associate degree programs the opportunity to expand their knowledge in advanced modalities or community health. The Cardiopulmonary Sciences professions are challenging and growing professions with career opportunities in areas such as cardiopulmonary diagnostics, cardiopulmonary rehabilitation, and community health. With professional experience and additional education at the baccalaureate level, opportunities for management and education career options are enhanced.

The BSCARDIO program is an online program.

Since the BSCARDIO is a limited access program, admission to Valencia does not imply acceptance to the program.

Program Concentrations

- Advanced Critical Care Concentration
- Community Health Concentration
- Leadership Concentration

Potential Careers

- Respiratory Care Management/Administration
- Cardiovascular Management/Administration
- Higher Education
- Community Health Educator
- Clinical Practice in Non-Invasive Cardiology

Salary and Earnings Information

For salary and wage information, visit: www.salary.com (<https://www.salary.com>)

Contact Information

For more information about the program or admission requirements, please email AlliedHealthBS.ATC@valenciacollege.edu.

For the most up-to-date information, visit our website at: <https://valenciacollege.edu/academics/programs/health-sciences/cardiopulmonary-sciences/>.

Your Student Success Coach contact information can be found in MyVC. Log into MyVC, click on the Courses tab, and check your Academic Profile information to find a link to your Coach.

Overview of Cardiopulmonary Sciences

For the Cardiopulmonary Sciences program, students must hold current professional certification and a related Associate in Science

or Associate of Applied Science degree. Students must provide proof of current professional certification or its equivalent in one of the following: Registered Therapist (RRT) credential from the National Board for Respiratory Care (NBRC) or one of the following credentials from Cardiovascular Credentialing International (CCI): Registered Cardiovascular Invasive Specialist (RCIS), Registered Cardiac Electrophysiology Specialist (RCES), Registered Cardiac Sonographer (RCS), Registered Congenital Cardiac Sonographer (RCCS) or Registered Vascular Sonographer (RVS).

Students must have a minimum of 64 accepted credits and one of the following degrees from a regionally accredited institution.

- Associate Degree in Cardiovascular Technology
- Associate Degree in Cardiopulmonary Technology
- Associate Degree in Respiratory Care

For admission, the following prerequisite coursework must be completed with a minimum grade of C:

ENC 1101	FRESHMAN COMPOSITION I (GR) ^{++~}	3
Mathematics	See Gen. Ed. Requirement ^{++~}	3
BSC 2093C	^{++~}	4
or BSC X085C		
BSC 2094C	^{++~}	4
or BSC X086C		
MCB 2010C	MICROBIOLOGY ^{++~}	4
Total Credit Hours		18

Courses with different numbers that are determined to be equivalent may be substituted.

In their junior and senior years, students will be required to complete the following coursework:

- Any additional credits needed to complete the state-mandated 36 General Education (https://catalog.valenciacollege.edu/degrees/associateinarts/courserequirements/#General_Education_) credits in all five areas according to Valencia program requirements. If a student holds an Associate in Arts degree or higher from a regionally accredited institution, all General Education requirements will be satisfied.
- 30 credits in upper-division core courses
- 10 credits in upper-division concentration area

Students are responsible for meeting the degree graduation requirements found under the *Program Requirements* tab located on this page.

Admission Requirements

- Be a U.S. citizen or U.S. permanent resident or in a non-immigrant category other than F or J visa categories
- Review the current BSCARDIO Program Guide and Updates at <https://valenciacollege.edu/academics/programs/health-sciences/cardiopulmonary-sciences/>
- Submit a completed Valencia Application for Admission using the Bachelor's Degree & ATC application, and be in Active Student Status.
- Have a minimum overall college GPA of 2.5
- Submit official transcripts from all prior colleges and universities with one denoting completion of an Associate degree in Respiratory

Care, Cardiovascular Technology or Cardiopulmonary Technology from a regionally accredited institution and have a minimum of 64 accepted credits, including the previously-specified General Education coursework

- Following your admission to Valencia College as a candidate for the Bachelor of Science, complete the online Bachelor's Degree Orientation and submit a copy of your current certification with CCI or NBRC or equivalent certification to AlliedHealthBS.ATC@valenciacollege.edu.

Note: Prior to enrollment in a clinical practice, provide documentation of the following requirements:

- Current criminal background check
- Fingerprinting
- Drug testing
- Physical exam forms
- Up-to-date immunization data

Program Outcomes

- Perform effective communication skills within the healthcare environment
- Practice professional behaviors in the healthcare setting
- Perform advanced level skills as described by the scope of practice for selected concentration (Advanced Critical Care, Leadership or Community Health)
- Execute safe clinical decision making in the healthcare environment
- Demonstrate information literacy

Program Goal Statement for Respiratory Therapists: To provide graduates of entry into respiratory care professional practice degree programs with additional knowledge, skills, and attributes in leadership, management, education and knowledge of advanced clinical practice that will enable them to meet their current professional goals and prepare them for practice as advanced degree respiratory therapists.

Program Goal Statement for Cardiovascular Technologists: To provide graduates of entry into cardiovascular technology practice degree programs with additional knowledge, skills, and attributes in leadership, management, education and knowledge of advanced clinical practice that will enable them to meet their current professional goals and prepare them for practice as advanced degree cardiovascular technologists.

Valencia B.S. General Education Requirements (18 credits)

Students who did not have a Humanities and/or Social Science course prior to program admission must have at least 6 credits in both areas for degree graduation.

Communications		6
ENC 1102	FRESHMAN COMPOSITION II ^{++~}	
SPC 1608	FUNDAMENTALS OF SPEECH [~]	
or SPC 1017	INTERPERSONAL COMMUNICATION	
Mathematics	(GR) (STA 2023 is recommended) ^{++~}	3
General Education Student Choice	See Gen. Ed. Requirements [~]	9
Total Credit Hours		18

Cardiopulmonary Core Requirements (30 credits)

RET 3287	CARDIOPULMONARY DIAGNOSTICS ⁺⁺	3
RET 3536	CARDIOPULMONARY REHABILITATION ⁺⁺	3
HSA 3702	RESEARCH METHODS AND INFORMATION LITERACY ⁺⁺	3
RET 3715	NEONATAL MEDICINE ⁺⁺	3
RET 3354	MEDICAL PHARMACOLOGY ⁺⁺	3
HSC 4555	PATHOPHYSIOLOGIC MECHANISMS ⁺⁺	3
HSC 4640	INTRODUCTION TO HEALTH LAW ⁺⁺	3
HSC 4652	ETHICS AND HEALTH CARE IN A PLURALISTIC SOCIETY ⁺⁺	3
HSA 4184	LEADERSHIP IN HEALTHCARE ⁺⁺	3
Cardiopulmonary Sciences Elective		3
Total Credit Hours		30

Concentration: Advanced Critical Care (10 credits)

RET 3269	ADVANCED CARDIOPULMONARY CRITICAL CARE ⁺	3
RET 3444	INTRODUCTION TO LUNG AND CARDIAC ULTRASOUND ⁺	3
RET 4931	SPECIAL TOPICS IN EVIDENCE-BASED CRITICAL CARE ⁺	2
RET 4950	ADVANCED CRITICAL CARE CAPSTONE ⁺⁺	2
Total Credit Hours		10

Concentration: Community Health (10 credits)

RET 4524	COMMUNITY HEALTH AND WELLNESS ⁺	3
HSC 4500	EPIDEMIOLOGY ⁺	3
RET 4034	HEALTH CARE DELIVERY AND ACCESS ⁺	3
RET 4940	COMMUNITY HEALTH CAPSTONE ⁺⁺	1
Total Credit Hours		10

Concentration: Leadership (10 credits)

HSA 4110	ORGANIZATIONAL BEHAVIOR ⁺	3
HSA 4340	PRINCIPLES OF HUMAN RESOURCES MANAGEMENT ⁺	3
HSA 4502	HEALTH CARE RISK MANAGEMENT ⁺	3
HSA 4850	HEALTH CARE LEADERSHIP CAPSTONE ⁺⁺	1
Total Credit Hours		10

Cardiopulmonary Sciences Electives

HSA 4340	PRINCIPLES OF HUMAN RESOURCES MANAGEMENT ⁺	3
HSA 4341	CONFLICT MANAGEMENT IN HEALTH CARE ⁺	3

RET 4034	HEALTH CARE DELIVERY AND ACCESS ⁺	3
RET 4524	COMMUNITY HEALTH AND WELLNESS ⁺	3
RTE 3205	ADMINISTRATION AND SUPERVISION ⁺	3
RTE 3253	TEACHING IN THE HEALTH PROFESSION ⁺	3
HSC 4500	EPIDEMIOLOGY ⁺	3

⁺ This course must be completed with a grade of C or better.

^{*} This course has a prerequisite; check description in Valencia catalog

[~] This is a general education course.

Notes:

Specialized courses may not be offered every session.

Transfer Notes:

- Students who hold an A.A. or Bachelor's degree from a regionally accredited institution have satisfied Valencia's general education program requirements.
- Students transferring from a regionally accredited institution with the general education program (GEP) requirements of that institution met have thereby satisfied Valencia GEP requirements.

Registration Note:

Once a student has been approved as "Course Registration Eligible," it is the student's responsibility to secure enrollment in the desired course(s).

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