BACHELOR OF APPLIED SCIENCE - APPLIED HEALTH SCIENCES, ADULT AND PEDIATRIC **CARDIAC SONOGRAPHY SPECIALIZATION**

Previous Degree Required: A.S. in Sonography from a CAAHEP accredited program

Eligible for Financial Aid: Yes Delivery Method(s): On-Campus, Hybrid Location(s): Melbourne, Online Additional Limited Access Application Process Required: Yes Program Testing Requirements: Not Required Academic Community: HSCI Program Code: HSBSMAPC Classification of Instructional Programs (CIP) Code: 51.2211 Florida Department of Education CIP Code: 1105122111

This program provides the coursework required to complete the Advanced Technical Certificate (ATC) in Adult and Pediatric Cardiac Sonography

BAS admissions requirements:

- · Specific degree required: A.S. in Sonography from a CAAHEP accredited program
- · Current ARDMS registration (any specialty), ARRT certification in Sonography Primary, or CCI certification.

Refer to the Bachelor Degree Programs overview page to find information about admission, graduation, general education and other requirements. Students who need additional general education or technical electives will work with a bachelor's advisor to determine the courses best suited to their plan of study.

Specializations: Several EFSC Associate in Science (A.S.) and Bachelor degrees have multiple associated specializations. Students must select one specialization, and will receive the specific A.S./BAS degree only one time. While students may take courses from more than one specialization, the specific degree will be awarded only once.

Visit the program page for more details and how to apply.

Specialization Requirements

Code	Title	Credit Hours	
Associate Degree	e		
Complete Associ	60		
Applied Health S			
HSC 3741	Writing for Healthcare Professionals	3	
or ENC 3241	Technical Writing for Professionals		
ISC 3523	Applied Scientific Thinking	3	
General Education or Technical Concentration			

Student will take 21 credits to satisfy general education requirements 21 (36 general education credits are required)

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Adult and Pediatr	ic Sonography Major Courses	
SON 3402	Introduction to Electrocardiography	3
SON 4131	Pediatric Cardiac Sonography	4
SON 4132	Adult and Pediatric Cardiac Sonography Seminar	2
SON 4404	Adult Cardiac Sonography I	3
SON 4405	Adult Cardiac Sonography 2	3
SON 4944	Pediatric Cardiac Sonography Practicum	4
SON 4945	Adult Cardiac Practicum 1	4
SON 4946	Adult Cardiac Practicum 2	4
Technical Electives		
Select 6 credits from the following:		
HSA 3111	US Healthcare Systems	
HSA 3180	Healthcare Administrative Management	
HSA 3191	Healthcare Automation and Technology	
HSA 3502	Healthcare Risk Management	
HSA 4170	Healthcare Finance	
HSC 4184	Healthcare Leadership	
PHY 2048	General Physics 1	

PHYL 2048 Total Credit Hours

Satisfy the foreign language competency requirement

General Physics 1 Laboratory

· Satisfy the civic literacy competency requirement

Course Sequence

The following sequence is recommended. However, courses may not be offered in this order, so it is important that you work with an advisor to plan your schedule based on your specific needs.

Course	Title	Credit Hours
Term 1		
HSC 3741 or ENC 3241	Writing for Healthcare Professionals or Technical Writing for Professionals	
SON 3402	Introduction to Electrocardiography 3	
SON 4404	Adult Cardiac Sonography I 3	
SON 4945	Adult Cardiac Practicum 1	4
	Credit Hours	13
Term 2		
ISC 3523	Applied Scientific Thinking	3
SON 4131	Pediatric Cardiac Sonography	4
SON 4944	Pediatric Cardiac Sonography Practicum	4
Technical Electives		3
	Credit Hours	14
Term 3		
SON 4132	Adult and Pediatric Cardiac Sonography Seminar	2
SON 4405	Adult Cardiac Sonography 2	3
SON 4946	Adult Cardiac Practicum 2	4
	Credit Hours	9
Term 4		
General Education or	Technical Concentration Hours	q

General Education or Technical Concentration Hours

120



 Technical Electives 1
 3

 Credit Hours
 12

 Term 5
 3

 Technical Electives 1
 3

 General Education or Technical Concentration Hours
 9

 Credit Hours
 12

 Total Credit Hours
 60

 ¹ Select 6 credits from the following: HSA 3111 US Healthcare Systems
 HSA 3180 Healthcare Administrative Management
 HSA 3191 Healthcare Automation and Technology
 HSA 3502 Healthcare Risk Management
 HSA 4170 Healthcare Finance
 HSC 3801 Clinical Observation/Volunteer Work
 HSC 4184 Healthcare Leadership
 PHY 2048 General Physics 1
 PHYL 2048 General Physics 1 Laboratory

Learning Outcomes

- 1. Demonstrate professional behavior while in an adult cardiac clinical setting.
 - Core Ability Supported: Work Cooperatively
- Differentiate between normal and abnormal Electrocardiography.
 Core Ability Supported: Think Critically and Solve Problems
- 3. Identify abnormal and normal conditions for the adult cardiac cycle.
 Core Ability Supported: Think critically and Solve Problems
- 4. Describe the development of major cardiac structures from conception to birth
 - · Core Ability Supported: Think critically and Solve Problems
- 5. Describe the pathophysiological and hemodynamic consequences of each congenital pathology
- Core Ability Supported: Think critically and Solve ProblemsDiscuss the repair techniques related to selected congenital
- abnormalities
 - Core Ability Supported: Think critically and Solve Problems
- 7. Execute proper positioning and standards while in a clinical setting
 Core Ability Supported: Work Cooperatively
- Describe the variation in imaging planes used in pediatric echocardiography to optimally image atypical anatomy and cardiac positioning.
 - Core Ability Supported: Work Cooperatively
- Recognize echocardiographic anatomy of selected congenital disease, i.e., shunting lesions, transposition of the great vessels, venous anomalies, single ventricle lesions, right and left heart abnormalities, and myocardial pathologies
 - Core Ability Supported: Work Cooperatively
- 10. Identify abnormal and normal pathology and anatomy for the adult cardiac cycle
 - · Core Ability Supported: Think critically and Solve Problems