CLINICAL RADIATION SCIENCES, BACHELOR OF SCIENCE (B.S.) WITH A CONCENTRATION IN DIAGNOSTIC MEDICAL SONOGRAPHY

The department offers a Bachelor of Science in Clinical Radiation Sciences with the following areas of concentration: diagnostic medical sonography, nuclear medicine technology, radiation therapy and radiography. Upon meeting prerequisites and gaining admission to the program, students complete a three-year, full-time program that includes general education and professional course work. Graduates of the program are eligible for national certification examinations in their respective area of concentration.

Upon completion of one of the concentrations, the graduate is eligible for the relevant national certification examination administered by the American Registry of Radiologic Technologists. Graduates of the nuclear medicine technology concentration also are eligible for the certification examination administered by the Nuclear Medicine Technology Certification Board. Graduates of the diagnostic medical sonography concentration are also eligible for the certification examination administered by the American Registry for Diagnostic Medical Sonography.

Student learning outcomes

Upon completing this program, students will know and know how to do the following:

Program core learning outcomes

- Demonstrate proficiency in performing imaging/therapy procedures
- · Demonstrate proper patient care skills
- Practice appropriate methods of patient safety (to include radiation safety as appropriate)
- · Demonstrate effective verbal and written communication
- · Demonstrate the ability to critically think and problem solve
- · Demonstrate professional and ethical behavior

Diagnostic medical sonography concentration-specific outcome

· Demonstrate proficiency in performing sonographic procedures

Special requirements

Students may see prerequisite course work for admission to this program on the pre-health major in clinical radiation sciences (https://bulletin.vcu.edu/undergraduate/college-humanities-sciences/prehealth-majors/clinical-radiation-sciences/) page elsewhere in this Bulletin.

English proficiency

All non-native applicants must meet VCU's minimum TOEFL score requirements prior to admission.

Enrolled students must earn a minimum grade of C in the following CLRS courses:

Course	Title	Hours
CLRS 208	Foundations of Patient Care	4
CLRS 301	Sonography Physics and Instrumentation I	3
CLRS 302	Sonography Physics and Instrumentation II	3
CLRS 311	Abdominal Sonography I	4
CLRS 313	Abdominal Sonography II	3
CLRS 329	Obstetric and Gynecologic Sonography I	3
CLRS 339	Obstetric and Gynecologic Sonography II	3
CLRS 393	Clinical Education I	2
CLRS 394	Clinical Education II	2
CLRS 395	Clinical Education III	3
CLRS 404	Ultrasound Pathology and Preliminary Writing	2
CLRS 488	Senior Seminar	3
CLRS 493	Clinical Education IV	3
CLRS 494	Clinical Education V	3

Degree requirements for Clinical Radiation Sciences, Bachelor of Science (B.S.) with a concentration in diagnostic medical sonography

Course	Title	Hours		
General education (https://bulletin.vcu.edu/undergraduate/ undergraduate-study/general-education-curriculum/)				
Select 30 credits of with an adviser. ¹	f general education courses in consultation	30		
Major requirements	S			
 Major core require 	ements			
CLRS 206	Cross-sectional Anatomy	2		
CLRS 398	Introduction to Research	1		
CLRS 498	Senior Project	2		
Additional major requirements				
ALHP 430	Overview of Research in the Health Professions	3		
CLRS 203	Pathophysiology I	3		
CLRS 204	Pathophysiology II	3		
CLRS 205	Exploring Radiologic Sciences	1		
CLRS 208	Foundations of Patient Care	4		
CLRS 300	Introduction to Sonography	2		
CLRS 301	Sonography Physics and Instrumentation I	3		
CLRS 302	Sonography Physics and Instrumentation II	3		
CLRS 311	Abdominal Sonography I	4		
CLRS 313	Abdominal Sonography II	3		
CLRS 325	Sonography Professional Seminar	3		
CLRS 329	Obstetric and Gynecologic Sonography I	3		
CLRS 339	Obstetric and Gynecologic Sonography II	3		

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CLRS 393	Clinical Education I	2	
CLRS 394	Clinical Education II	2	
CLRS 395	Clinical Education III	3	
CLRS 401	Introduction to Pediatric Sonography	2	
CLRS 404	Ultrasound Pathology and Preliminary Writing	2	
CLRS 488	Senior Seminar	3	
CLRS 493	Clinical Education IV	3	
CLRS 494	Clinical Education V	3	
Ancillary requirements			
Additional subjects and credits required for admission ²			
HCMG 300	Health Care Organization and Services	3	
HPEX 250	Medical Terminology	1	
STAT 210	Basic Practice of Statistics	3	
Open electives			
Select any course		11	
Total Hours		120	

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Some general education categories will be met with admission requirements. Consult with an adviser to determine remaining categories.

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See program page for pre-health major in clinical radiation sciences for a complete list of prerequisite requirements.

The minimum number of credit hours required for this degree is 120.

What follows is a sample plan that meets the prescribed requirements within a four-year course of study at VCU. Please contact your adviser before beginning course work toward a degree.

Freshman year

Fall semester		Hours
Courses tak	15	
	Term Hours:	15
Spring seme	ester	
Courses tak	en toward admission to program	14
	Term Hours:	14
Sophomore	year	
Fall semeste	er	
CLRS 203	Pathophysiology I	3
CLRS 205	Exploring Radiologic Sciences	1
CLRS 208	Foundations of Patient Care	4
HPEX 250	Medical Terminology	1
STAT 210	Basic Practice of Statistics	3
General education course		3
	Term Hours:	15
Spring seme	ester	
CLRS 204	Pathophysiology II	3
CLRS 206	Cross-sectional Anatomy	2
UNIV 200	Advanced Focused Inquiry: Literacies, Research and Communication (satisfies general education UNIV foundations)	3

General education course		4
Open elective		2
	Term Hours:	14
Summer sem	ester	
CLRS 300	Introduction to Sonography	2
	Term Hours:	2
Junior year		
Fall semester		
ALHP 430	Overview of Research in the Health Professions	3
CLRS 301	Sonography Physics and Instrumentation I	3
CLRS 311	Abdominal Sonography I	4
CLRS 393	Clinical Education I	2
Open elective		3
	Term Hours:	15
Spring semes	ster	
CLRS 302	Sonography Physics and Instrumentation II	3
CLRS 313	Abdominal Sonography II	3
CLRS 329	Obstetric and Gynecologic Sonography I	3
CLRS 394	Clinical Education II	2
CLRS 398	Introduction to Research	1
	Term Hours:	12
Summer sem	ester	
CLRS 325	Sonography Professional Seminar	3
CLRS 339	Obstetric and Gynecologic Sonography II	3
CLRS 395	Clinical Education III	3
	Term Hours:	9
Senior year		
Fall semester		
CLRS 401	Introduction to Pediatric Sonography	2
CLRS 404	Ultrasound Pathology and Preliminary Writing	2
CLRS 493	Clinical Education IV	3
CLRS 498	Senior Project	2
HCMG 300	Health Care Organization and Services	3
	Term Hours:	12
Spring semes	ster	
CLRS 488	Senior Seminar	3
CLRS 494	Clinical Education V	3
Open electives		6
	Term Hours:	12
	Total Hours:	120

The minimum number of credit hours required for this degree is 120.