

DIAGNOSTIC MEDICAL SONOGRAPHY, ASSOCIATE OF APPLIED SCIENCE



The Associate of Applied Science degree prepares the student for an entry-level position as a Diagnostic Medical Sonographer for employment in hospitals and other health care agencies. The Diagnostic Medical Sonographer produces, evaluates, and correlates ultrasound images and related data. Sonographers provide a summary of their technical findings to the qualified interpreting physician to aid in rendering a medical decision. The curriculum consists of on-campus didactic and lab instruction, as well as off-campus clinical applications at our affiliated health care institutions. The program offers specialty training in adult echocardiography and vascular technology. The Diagnostic Medical Sonography program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP). Upon completion of the Diagnostic Medical Sonography program, graduates are eligible to apply for the national credentialing exams by the American Registry of Diagnostic Medical Sonography (ARDMS) in the exam offerings of their specialty option. Students will also have the option to individualize and enhance their sonography career by taking coursework in other sonography specialty coursework such as breast sonography and pediatric cardiac sonography. **Final acceptance into the Diagnostic Medical Sonography program is contingent upon the results of the required background check.**

Program contact: Learn more

Learn more about how certificate credits apply to the related degree.

Related Degrees and Certificates

- Diagnostic Medical Sonography (General Sonography), Associate of Applied Science

Program Admissions Requirements

The DMS program application is online and found on the program web page at <http://www.tri-c.edu/sonography> along with comprehensive admissions and program information. Please refer to the website for application timelines.

- Verification of having completed an 8-16 hour observation where the candidate "shadows" an ARDMS-credentialed sonographer in the hospital environment. 50% of the exams observed should be on in-patients. See the DMS application packet for details and the required form.
- Non-native English speaking applicants: Admission into Cuyahoga Community College is premised on a complete and accurate initial application to the College, including, if applicable, proof of English

Language Proficiency Requirements for admission as indicated on the English Language Proficiency Requirements for Admissions to the College, and available on the web at: <http://www.tri-c.edu/get-started/international-students/english-language-proficiency-requirements-for-admission.html>.

To be accepted into any selective admission programs, students must successfully complete English as a Second Language (ESL) course/s, as referenced above, if deemed necessary by the College at the time of enrollment. Admission is conditioned upon achieving the necessary grade point average (GPA), English language proficiency requirements and any specific pre-requisite courses, and by meeting program accreditation or licensing requirements as evidenced in the Program Handbook for the specific program.

- Complete the following Program Admissions requirements with a "C" grade or higher in each:

Code	Title	Credit Hours
BIO-2331	Anatomy and Physiology I ^{1,2}	4
BIO-2341	Anatomy and Physiology II ¹	4
DMS-1071	Concepts of Physics in Diagnostic Sonography ³	2
DMS-1303	Introduction to Sonography ³	2
DMS-1320	Introduction to Sonographic Scanning ³	1
DMS-1351	Patient Care Skills	1
Select one of the following:		3
ENG-1010	College Composition I	
ENG-101H	Honors College Composition I	
Select one of the following:		3-4
MATH-1410	Elementary Probability and Statistics I ⁴	
MATH-1530	College Algebra ⁴	

¹ Minimum 3.0 for BIO-2331 and BIO-2341 (total 8 credits). GPA calculated using only the Tri-C specific admission course credit hours listed above.

² Requires appropriate placement score on Biology placement test or grade of "C" or higher in BIO-1100 to enroll in this course.

³ Minimum 3.0 GPA for DMS-1303 Introduction to Sonography, DMS-1320 and DMS-1071 (total 5 credits). GPA calculated using only the Tri-C specific admission course credit hours listed above.

Other Information

- Criminal background check required. Also see General Application Procedures for Health Careers.
- To improve from a previous attempt, only two of the admission courses may be repeated once. A "W" is counted as an attempt.
- Applicant must submit evidence of good health by fulfilling health requirements of the DMS Program and verification of current CPR certification prior to clinical assignment. Complete information provided during the first semester of the Program.

Program Learning Outcomes

This program is designed to prepare students to demonstrate the following learning outcomes:

1. Exhibit an awareness of continuity of care through effective, empathetic communication and interpersonal skills.
2. Display sensitivity to all aspects of diversity.

3. Seek and accept opportunities for improvement by being a team player that is confident, flexible, and passionate about what they do.
4. Exercise discretion, knowledge, and independent judgment in performing sonographic procedures, accessing medical information systems, and in seeking assistance.
5. Integrate pertinent patient history, supporting clinical data, and data obtained using ultrasound and related diagnostic technologies to provide a summary of findings to the physician.
6. Become a credentialed sonographer that continually educates oneself in sonography and in issues affecting the healthcare industry in recognition of the value of other modalities and professions.

Note: Students must select to pursue either option a or option b to complete this degree program. Letters in parenthesis refer to options (a) or (b).

Suggested Semester Sequence

Program Admissions Requirements	Semester	Credit Hours
BIO-2331	Anatomy and Physiology I ¹	4
BIO-2341	Anatomy and Physiology II	4
DMS-1071	Concepts of Physics in Diagnostic Sonography	2
DMS-1303	Introduction to Sonography	2
DMS-1320	Introduction to Sonographic Scanning	1
DMS-1351	Patient Care Skills	1
MATH-1410	Elementary Probability and Statistics I ²	3
Select one of the following: 3		
ENG-1010	College Composition I	
ENG-101H	Honors College Composition I	
Credit Hours		20
First Semester		
DMS-1311	Initial Sonographic Scanning	2
DMS-1381	Cardiac Diagnostic Procedures	3
DMS-2350	Sonographic Instrument/Physics	3
Select one of the following: 4		
DMS-1602	Echocardiography I (Option A)	
DMS-1701	Vascular Sonography I (Option B)	
Credit Hours		12
Second Semester		
DMS-1940	Field Experience I	1
DMS-2301	Intermediate Sonographic Scanning	2
MA-1010	Introduction to Medical Terminology ³	2
Select one of the following: 4		
DMS-2602	Echocardiography II (Option A)	
DMS-2702	Vascular Sonography II (Option B)	
Select one of the following 3		
ENG-1020	College Composition II	
ENG-102H	Honors College Composition II	
Credit Hours		12
Summer Session		
DMS-1950	Field Experience II	2
HTEC-1110	Ethics for Health Care Professionals ⁴	1
Select one of the following: 3		

PSY-1010	General Psychology	
PSY-101H	Honors General Psychology	
Credit Hours		6
Third Semester		
DMS-2940	Field Experience III	3
DMS-2985	Physics Review	1
DMS-2991	Sonography Capstone	1
PSY-1060	Cross-Cultural Competency for Health Care Providers	1
Credit Hours		6
Fourth Semester		
DMS-xxxx	DMS Elective ⁵	1-2
DMS-2950	Field Experience IV	1
DMS-2981	Specialty Registry Review	1
Select one of the following:		1-3
DMS-2650	Pediatric Cardiac Sonography (Option A) ⁵	
DMS-2760	Transcranial Doppler Sonography (Option B) ⁵	
Credit Hours		4-7
Total Credit Hours		60-63

- ¹ Requires appropriate placement score on Biology placement test or grade of "C" or higher in BIO-1100 to enroll in this course.
- ² MATH-1530 College Algebra or higher will be accepted in place of MATH-1410 Elementary Probability and Statistics I.
- ³ MA-1020 Medical Terminology I Medical Terminology I will be accepted in place of MA-1010 Introduction to Medical Terminology Introduction to Medical Terminology.
- ⁴ PHIL-2050 Bioethics Bioethics will be accepted in place of HTEC-1110 Ethics for Health Care Professionals Ethics for Health Care Professionals.
- ⁵ Course selection can only be used once toward a graduation requirement.

Options

(A) Echocardiography Option

Take the following courses to complete Option A:

Code	Title	Credit Hours
DMS-1602	Echocardiography I	4
DMS-2602	Echocardiography II	4
DMS-2650	Pediatric Cardiac Sonography	3
Additional program courses		51-52
Total Credit Hours		62-63

(B) Vascular Option

Take the following courses to complete Option B:

Code	Title	Credit Hours
DMS-1701	Vascular Sonography I	4
DMS-2702	Vascular Sonography II	4
DMS-2760	Transcranial Doppler Sonography	1

Additional program courses	51-52
Total Credit Hours	60-61

Electives

Technical Electives

Select from the following courses to fulfill DMS elective option:

Code	Title	Credit Hours
DMS-2330	Sonographic Pathology	3
DMS-2450	Breast Sonography	2
DMS-2650	Pediatric Cardiac Sonography	3
DMS-2750	Principles of Vascular Imaging for Abdomen and Cardiac Sonographers	3
DMS-2760	Transcranial Doppler Sonography	1
DMS-2960	Supplemental Field Experience	2
DMS-2983	Supplemental Speciality Registry Review	1