

DIAGNOSTIC MEDICAL SONOGRAPHY: ECHOCARDIOGRAPHY SPECIALIZATION, A.A.S.

Location(s): MEC
NOVA Code: 1091

Purpose

To prepare competent entry-level adult cardiac sonographers in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains. The curriculum prepares students to produce diagnostic images of the heart structures and motion to diagnose cardiovascular changes. The echocardiographer uses special equipment to direct high frequency sound waves into areas of the patient's body. The echocardiographer is a central member of the health care team and assists the radiologist in body image interpretation. Upon successful completion of degree requirements, the student will be eligible to apply to take the American Registry of Diagnostic Medical Sonography examinations leading to credentials as a Registered Diagnostic Cardiac Sonographer (RDCS®).

Admission Requirements

Students must:

- Comply with all general admission requirements for Health Sciences Programs.
- Review an online Diagnostic Medical Sonography information session (<https://www.nvcc.edu/academics/programs/diagnostic-medical-sonography/>).
- Complete BIO 141 Human Anatomy And Physiology I and BIO 142 Human Anatomy and Physiology II with a "B" or higher and completed within 5 years of application.
- Complete DMS 100 Orientation to the Sonography Profession with a grade of "B" or higher and completed within 5 years of application.
- Complete ENG 111 College Composition I with a grade of "B" or higher.
- Complete MTH 161 PreCalculus I or higher level math with a "B" or higher.
- Complete PHY 100 Elements of Physics with a "B" or higher and completed within 5 years of application.
- Complete SDV 100 College Success Skills or SDV 101 Orientation to: with a "B" or higher.
- Successfully complete and achieve satisfactory scores on the TEAS (Test of Essential Academic Skills) test. Students may only take the test three times per year. The latest result must be within three years of application to the DMS Program.
- Have a minimum 2.5 cumulative GPA. For Health Science programs, GPA evaluation will prioritize a student's record at Northern Virginia Community College (NOVA). If no NOVA GPA is available, the GPA from the student's most recent institution will be considered.

Completion Requirements

All DMS program courses must be completed with a grade of "79.5%" or better before taking the next semester course sequence and to satisfy

graduation requirements. A program placed student not achieving a "79.5%" or higher will be automatically academically dismissed from the DMS program. All prerequisite courses require a B or higher. General Education courses require a C or higher grade and may be completed prior to admission to the DMS program.

Two Years

Course	Title	Credits
Prerequisites		
BIO 141	Human Anatomy And Physiology I	4
BIO 142	Human Anatomy and Physiology II	4
DMS 100	Orientation to the Sonography Profession	1
ENG 111	College Composition I	3
MTH 161	PreCalculus I (or Higher)	3
PHY 100	Elements of Physics	4
SDV 101 or SDV 100	Orientation to: or College Success Skills	1
Credits		20
1st Semester		
DMS 190	Coordinated Internship	2
DMS 206	Introduction to Sonography	3
DMS 207	Sectional Anatomy	2
DMS 208	Ultrasound Physics and Instrumentation I	2
DMS 217	Sectional Anatomy Laboratory	1
DMS 218	Ultrasound Physics and Instrumentation Laboratory I	1
HLT 141	Introduction to Medical Terminology	1
HLT 220	Concepts of Disease	3
Credits		15
2nd Semester		
DMS 150	Echocardiography I	4
DMS 196	On-Site Training in:	3
DMS 209	Ultrasound Physics and Instrumentation II	2
DMS 219	Ultrasound Physics and Instrumentation Laboratory II	1
PSY Elective (https://catalog.nvcc.edu/courses/psy/)		3
Credits		13
3rd Semester		
DMS 231	Clinical Education I	3
DMS 250	Echocardiography II	4
DMS 256	Echocardiography Case Study Review	1
Credits		8
4th Semester		
DMS 223	Introduction to Vascular Ultrasound	3
DMS 232	Clinical Education II	4
DMS 255	Echocardiography Registry Review	2
Humanities/Fine Arts Elective (https://catalog.nvcc.edu/general-education-electives/#ge_hum_fa_elect)		3
Credits		12
Total Credits		68