

# Diagnostic Medical Sonography • Associate in Applied Science

## Why Choose Diagnostic Medical Sonography?

Diagnostic Medical Sonographers use high frequency sound waves to produce images and data that assist health care professionals diagnose various disease and disease processes. Sonographers are taught to work independently and to operate highly technical ultrasound equipment to acquire sonographic images. Physicians depend on the sonographer's assistance with interpretation of the images to evaluate many body parts and structures, especially of the abdomen and pelvis.

Students enter the professional sequence of the program in the fall semester and spend the first three semesters on the Big Rapids campus. Studies during this period include general education and technical courses. Laboratory periods provide an opportunity to apply the theory and principles learned in the lecture sessions. During the final three semesters students work with patients in an off-campus clinical center. These sites are located throughout the state in hospitals affiliated with the University to provide clinical experience and continued academic instruction.

Graduates of the program are eligible to write the Physical Principles/Instrumentation Examination (The Ultrasound Physics and Instrumentation) and Specialty Examinations for the RDMS Credential (Abdomen, and Obstetrics and Gynecology) upon completion of all required clinical experience as dictated by the American Registry of Diagnostic Medical Sonographers (ARDMS). Graduates of the program are eligible to write the ARRT Sonography Credential.

## Get a Great Job

Diagnostic Medical Sonography is a newly designated occupational category by the US Bureau of Labor Statistics within the imaging sciences field as of 2001. According to the US Department of Labor, almost 53 percent of sonographers are between the ages of 41 and 65, which means that they are at or near retirement. With employment of sonographers expected to grow faster than the average through 2010, plenty of opportunities await the skilled professional.

Sonography, an ever-evolving profession, offers its practitioners many opportunities to enhance and advance careers. Sonographers can specialize in such diverse areas as the abdomen, obstetrics and gynecology, echocardiography, vascular technology, neurosonology and ophthalmology. They can work in clinics, hospitals, private practice, public health facilities, labs and other medical settings or branch out into education, administration, research or sales.

## Admission Requirements

Students must be admitted to the university. To be qualified to enter the professional sequence of the program a student must have earned a minimum grade of "C" in each of the following courses or their equivalent: BIOL 109, MATH 115 (or Math ACT subscore of 24), PHYS 130, MRIS 102 and ENGL 150 with a grade of "C" or better + GPA 2.5.

To assure students of a quality technical education in classroom/lab and clinical practice, enrollment is limited. Students who meet or will have met the program's qualification criteria by the end of Spring semester are required to apply to the program's professional sequence between January 15 and January 30 of the year prior to the August professional sequence entry. Admission will be based upon date of qualification.

## Graduation Requirements

The six-semester sequential course of study at Ferris leads to an associate in applied science degree. Ferris provides you an internship in the last three semesters of the program, although due to limited space, specific clinical site locations cannot be guaranteed. If a student elects to interrupt progression in the professional sequence of the program, re-entry cannot be guaranteed due to space limitations in laboratory and clinical placement sites. Graduation requires a minimum 2.0 GPA overall and students must earn a "C" or better in major and core courses and meet all general education requirements as outlined on the General Education website.

## Required Courses

	Credit Hours
Qualification = 5 courses	
MRIS 102 Orientation to Med Vocabulary	1
BIOL 109 Basic Human Anatomy-Physiology	4
PHYS 130 Concepts in Physics	4
MATH 115 Intermediate Algebra	3
ENGL 150 English 1	3
Professional Sequence Courses:	
CCHS 101 Orientation-Health Care	3
CCHS 102 Safety Issues-Health Care	1
CCHS 103 CI Skills-Health Care Provider	1
ENGL 250 English 2	3
PSYC 150 Introduction to Psychology	3
Choose one:	
COMM 105 Interpersonal Communication	3
COMM 221 Small Group Decision Making	3
Choose one:	
PHIL 220 Ethics in Health Care	3
PHIL 330	3
Social Awareness Elective	
Cultural Enrichment Elective	
SONO 100 Introduction to DMS	1
SONO 102 Intro to Sonographic Imaging	1
SONO 104 Intro to Ultrasound Physics	3
SONO 105 Sonography Physics Prin Lab	2
SONO 111 Pathophys of Abdominal Organs	3
SONO 112 Abdominal Imaging Lab	3
SONO 115 Sono Cross Sectional Anatomy	1
SONO 117 Intro to Sonographic Interpret	2
SONO 121 Introduction to OB/GYN Imaging	3
SONO 122 OB/GYN Imaging Lab	2
SONO 131 Hemo and Doppler Prin of Sono	1
SONO 132 Hemodynamics - Doppler Lab	3
SONO 280 Clinical Internship 1	8
SONO 281 Small Parts and Invasive Proc	4
SONO 282 Clinical Internship 2	8



## More Information

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For Career information, enclose a stamped, self-addressed business size envelope with your request to:

ARDMS  
600 Jefferson Plaza  
Suite 360, Rockville, MD 20852-1150  
(301) 738-8401 or (800) 541-9754  
FAX (301) 738-0312/0313  
www.ardms.org.

SDMS  
12770 Coit RoadM  
Suite 708, Dallas, TX 75251-1319  
(972) 239-7367 or (800) 229-9506  
FAX (972) 239-7378  
www.sdms.org.

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SONO 121	Introduction to OB/GYN Imaging	3
SONO 122	OB/GYN Imaging Lab	2
SONO 131	Hemo and Doppler Prin of Sono	1
SONO 132	Hemodynamics - Doppler Lab	3
SONO 280	Clinical Internship 1	8
SONO 281	Small Parts and Invasive Proc	4
SONO 282	Clinical Internship 2	8
SONO 283	Obstetrical - Gynecolog Imag 2	4
SONO 284	Clinical Internship 3	8
SONO 285	Sonographic Interpretation 2	4
Additional Requirements	Computer competency - CAHS Core Requirement	

Minimum credit hours required: 80

BIOL 109, PHYS 130, ENGL 150, Medical Terminology Competency, MATH Competency are pre-requisites to the professional sequence and must be successfully completed prior to SONO 100 or 102, 104, 105.

Medical Terminology competency can be demonstrated with successful completion of MRIS 102 or through proficiency testing.

MATH Competency can be demonstrated with a Math ACT subscore of 24 or higher, MATH 115 or equivalency with a grade of C or better or proficiency exam.

A grade of C or better is required in all courses listed on the checksheet. A minimum GPA of 2.0 is required for graduation.