

# Diagnostic Medical Sonography

## Program Guide, Curriculum & Observation Log



The Diagnostic Medical Sonography (DMS) program at the University of Southern Indiana provides a curriculum which includes didactic courses in conjunction with laboratory and clinical experiences. The DMS curriculum consists of 1 1/2 years of pre-requisite general education courses, 1 1/2 years of General Sonography (physics, abdomen, OB/GYN) course work, and one year of EITHER Vascular Sonography or Cardiac Sonography course work. Completion of these four years results in a Bachelor of Science degree. The student will be eligible to apply for credentialing examinations administered by the American Registry for Diagnostic Medical Sonography (ARDMS). The DMS program at USI is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) on recommendation by the Joint Review Committee on Education in Diagnostic Medical Sonography (JRC-DMS) in Abdominal-Extended, Obstetrics and Gynecology, Vascular, and Cardiac concentrations.

- CAAHEP ADDRESS: 9355 113th St. N #7709, Seminole, FL 33775  
PHONE: 727-210-2350 WEB: [www.caahep.org](http://www.caahep.org)
- JRC-DMS ADDRESS: 6021 University Blvd., Suite 500, Ellicott City, MD 21043  
PHONE: 443-973-3251 WEB: [www.jrcdms.org](http://www.jrcdms.org)

### Admission to the Diagnostic Medical Sonography Program

Prospective students must be accepted for admission to USI before being considered for admission to the DMS program. Applicants must have graduated from high school and completed all DMS program prerequisite courses with at least a "C" and a minimum grade point average of 3.0 (4.0 scale). Program selection occurs annually following the application deadline of **September 15**.

The DMS program application, accompanying required documents, and transcripts must be received by September 15 for program consideration. Failure to submit all necessary documents by the deadline will make the student ineligible for program consideration including the admission interview process. Applicants meeting academic requirements must be eligible for ARDMS certification and be capable of fulfilling essential functions of a diagnostic medical sonographer.

Due to COVID-19, observation hours are not required for the fall 2023 application period. If you have not completed observation hours, it is strongly recommended that you contact a sonographer and research the following questions:

- What kind of procedures are performed in a general sonography department?
- What type of invasive procedures are performed and what is the sonographer's responsibility during these procedures?
- What type of interaction does a sonographer have with a physician?
- What job responsibilities does a sonographer have other than scanning?

The DMS program is limited in the number of students that may be accepted each year. USI, in collaboration with the clinical affiliates, reserves the right to determine the number of students enrolled in each beginning class. Currently, 12 students are accepted to the DMS program each year.

The DMS student selection process involves a review of all required documents and an interview by the DMS admission committee. This committee consists of the program faculty and clinical instructors from various clinical affiliates. Applicants are informed when to schedule the interview via e-mail from a DMS program representative. All interviews are conducted privately and by appointment only. The committee's decision is conveyed by email no later than two weeks after all interviews are completed.

# Diagnostic Medical Sonography Program Guide

## Program Fees

Recently accepted DMS students must pay a \$250 deposit fee to reserve their position in the program. This deposit fee will be deducted from the following semester's tuition bill at USI. In addition to tuition and fees, expenses of the program include: books \$1000, uniforms \$200, professional society memberships \$100, clinical education management system \$150, student compliance management system \$150, CPR certification \$100, and immunizations/TB testing \$100. Expenses will also be incurred by the student for travel to local and distance clinical education sites. These expenses are approximate and are subject to change. For information on current charges for tuition and fees, contact the USI Office of Admissions at 812-464-1765. Financial aid information can be obtained through the Office of Student Financial Assistance at 812-464-1767.



## Application Checklist

- Apply to the University of Southern Indiana and complete the admissions process, including submission of official university transcripts from all institutions (other than USI).
- Declare the Pre-Diagnostic Medical Sonography major with Registrar's office.
- Enroll in and complete prerequisite courses for the DMS program.
- Submit a completed online application with DMS program by September 15.
- Submit verification of observation within abdominal, OBGYN, vascular, and cardiac areas of sonography if applicable.
- In a narrative format, signed and dated, address the following:
  - ◇ Through your observation experience, online research, or communication with practicing sonographers, explain what various sonography examinations are performed by the sonographer in a general sonography department.
  - ◇ Describe which sonography discipline you prefer to pursue in the fourth year of the DMS program, vascular sonography or cardiac sonography; provide a detailed rationale for your preference.
  - ◇ Describe what you believe are essential traits of a diagnostic medical sonographer.
  - ◇ List your long-term career goals.
- Submit all materials no later than September 15 to be considered for admission to the DMS program to:

Diagnostic Medical Sonography  
College of Nursing and Health Professions  
University of Southern Indiana, 8600 University Boulevard, Evansville IN 47712

### PROGRAM DETAILS

<http://www.usi.edu/health/diagnostic-medical-sonography>

**FOR MORE INFORMATION, CONTACT:  
DIAGNOSTIC MEDICAL SONOGRAPHY  
PROGRAM AT  
812-465-1181**

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## Essential Functions

Essential functions are those physical, mental, and psychosocial characteristics that are necessary to meet the clinical/practice/fieldwork expectations for the College of Nursing and Health Professions programs. Becoming a healthcare professional requires the completion of an education program that is both intellectually and physically challenging. The purpose of this statement is to articulate the essential function requirements of the CNHP programs in a way that allows students to compare their own capabilities against these demands.

There are times when reasonable accommodations can be made in order to assist a student with a disability. Reasonable accommodation does not mean that students with disabilities will be exempt from certain tasks; it does mean that we will work with students with disabilities to determine whether there are ways that we can assist the student toward completion of the tasks.

### Motor Skills

- Ability to independently manipulate and guide weights up to 50 pounds
- Ability to move about freely and maneuver in small spaces
- Tolerate regular changes of physical position, both stationary and mobile, for extended (8-12 hour shift) periods of time
- Possess skills to independently handle and operate a range of items, devices or equipment
- Maintain a stable physical position
- Agility to respond in an emergency situation

### Communication Skills

- Process, comprehend, and communicate information effectively, clearly, in a timely manner, in the English language, and with individuals from various social, emotional, cultural, and intellectual backgrounds.

### Cognitive/Critical Thinking Skills

- Collect, measure, calculate, analyze, interpret, and apply information
- Exercise good judgment in a variety of settings
- Ability to set priorities and manage time effectively

### Interpersonal and Behavioral Skills

- Establish and maintain professional working relationships
- Apply conflict management and problem-solving strategies
- Demonstrate professional, ethical, and legal behavior
- Demonstrate appropriate maturity, stability, and empathy to establish effective and harmonious relationships in diverse settings
- Demonstrate flexibility and ability to adapt to change
- Maintain self-control in potentially stressful environments
- Comply with professional standards regardless of circumstance

### Sensory Skills

Uses all available senses to collect data regarding patient status and provide patient care.

## Diagnostic Medical Sonography Curriculum

Course	Course Title	Credits	CORE 39
<u>Fall Semester-First Year</u>			
*ENG 101	Composition I	3	F
*CMST 101/107	Communication	3	F
*MATH 111/114/ 215/230	Mathematics	3	F
*BIOL 121	Anatomy & Physiology I	4	BS- NS Lab
*UNIV 101	First Year Experience	1	F
*HP 115	Medical Terminology	<u>2</u>	
		<b>16</b>	
<u>Spring Semester-First Year</u>			
*ENG 201	Composition II	3	F
*BIOL 122	Anatomy & Physiology II	4	BS-NS
*PHYS 101	Introduction to Physical Sciences	3	WOK-S & MI
*RADT 196	Orient. to Rad. & Imaging Sciences	2	
*WOK-SI	Choose course from WOK-Social Inquiry	<u>3</u>	WOK-SI
		<b>15</b>	
<b>The 11 prerequisite courses listed above with (*) must be completed with a C or better. All grades must be available to be eligible to apply to DMS program.</b>			
<u>Fall Semester-Second Year</u>			
KIN 192/281	Physical activity/wellness	1	F
BS-SS	Choose course from BS-Social Science	3	BS-SS
BS-World L/C	Choose course from BS World L/C	3	BS-World L/C
IPH 356	Health Care Ethics	3	WOK-M/E & EE-Diversity
HP 211	Health Care System	<u>3</u>	
		<b>13</b>	
<u>Spring Semester-Second Year</u>			
DMS 301*	Patient Care for Imaging Sciences Professionals	2	
DMS 312*	Introduction to DMS Principles & Procedures	2	
DMS 313*	Sonographic Sectional Anatomy	2	
IPH 401	IP Perspectives in Global Health	3	EE-Global
WOK elective	Choose course from Cr/A, HI, World L/C	<u>3</u>	WOK
		<b>12</b>	
<u>Summer Semester-Second Year</u>			
DMS 315*	Abdominal Procedures	3	
DMS 316*	Sonographic Lab Practice I	<u>3</u>	
		<b>6</b>	
<u>Fall Semester-Third Year</u>			
DMS 321*	Sonographic Physics & Instrumentation I	3	
DMS 323*	Obstetric Procedures	3	
DMS 324*	Gynecology Procedures	3	
DMS 326*	Sonographic Lab Practice II	2	
DMS 327*	Clinical Practice I (24 hours per week)	<u>3</u>	
		<b>14</b>	
<u>Spring Semester-Third Year</u>			
DMS 331*	Sonographic Physics and Instrumentation II	3	
DMS 332*	Small parts, Pediatric and Specialty Sono Exams	2	
DMS 333*	Critique, Clinical Correlation & Case Analysis	3	EE-Writing
DMS 336*	Sonographic Lab Practice III	2	
DMS 337*	Clinical Practice II (24 hours per week)	<u>3</u>	
		<b>13</b>	

## Diagnostic Medical Sonography Curriculum

### Track 2A – General Sonography + Vascular Specialty

<b>Course</b>	<b>Course Title</b>	<b>Credits</b>	<b>CORE 39</b>
<u>Summer Semester-Third Year</u>			
DMS 347*	Advanced Clinical Practice (32 hours per week)	4	
DVT 398*	Introduction to Sonographic Vascular Lab	2	
DVT 401*	Introduction to Vascular Anatomy & Procedures	<u>2</u>	
		<b>8</b>	
<u>Fall Semester-Fourth Year</u>			
DVT 402*	Vascular Procedures I	3	
DVT 423*	Sonographic Vascular Lab Practice I	2	
DVT 426*	Clinical Practice I-Vascular (32 hours per week)	4	
Writing (EE)	Choose EE-Writing Course 400 Level	<u>3</u>	EE-Writing
		<b>12</b>	
<u>Spring Semester-Fourth Year</u>			
DVT 421*	Vascular Procedures II	2	
DMS 436*	Sonographic Professional Advancement Sem.	3	
DVT 437*	Clinical Practice II-Vascular (24 hours per week)	3	
HI 301 OR HA 431	Choose ONE - HI 301 Health Informatics OR HA 431 Healthcare Quality	<u>3</u>	
		<b>11</b>	

### Track 2B - General Sonography + Echocardiography Specialty

<b>Course</b>	<b>Course Title</b>	<b>Credits</b>	<b>CORE 39</b>
<u>Summer Semester-Third Year</u>			
DMS 347*	Advanced Clinical Practice (32 hours per week)	4	
ECHO 398*	Introduction to Echocardiography Lab	2	
ECHO 401*	Introduction to Echocardiography	<u>2</u>	
		<b>8</b>	
<u>Fall Semester-Fourth Year</u>			
ECHO 402*	Advanced Echocardiography	3	
ECHO 423*	Echocardiography Lab Practice I	2	
ECHO 426*	Clinical Practice I-Cardiac (32 hours per week)	4	
Writing (EE)	Choose EE-Writing course	<u>3</u>	EE-Writing
		<b>12</b>	
<u>Spring Semester-Fourth Year</u>			
ECHO 421*	Fetal Echocardiography	2	
DMS 436*	Sonographic Professional Advancement Sem.	3	
ECHO 437*	Clinical Practice II-Cardiac (24 hours per week)	3	
HI 301 OR HA 431	Choose ONE - HI 301 Health Informatics OR HA 431 Healthcare Quality	<u>3</u>	
		<b>11</b>	

**\*ALL DMS, DVT and ECHO courses must be completed with a C or better to progress in the DMS program.**

