

The Profession

Diagnostic Medical Sonography (DMS) is a highly specialized area of diagnostic imaging and the diagnostic medical sonographer is an integral part of the health care team concept. This unique, non-invasive technique utilizes high frequency sound waves, along with the appropriate detectors and graphics computers, to produce images of internal organs and associated structures. The diagnostic medical sonographer provides patient services by using sonographic equipment to provide physicians with important diagnostic information. The sonographer assists the physician by providing pertinent anatomical, physiological, and/or pathological sonographic data and images necessary to diagnose a variety of medical conditions and diseases.

Sonographers must demonstrate a high degree of motivation and good judgment, and should be able to work independently. In addition, sonographers should work well with other health care professionals in providing quality service to the patient and must demonstrate empathy, compassion, and ethical behavior in the practice of the profession.

Employment opportunities are readily available throughout the state and nation in hospitals, clinics, physicians' offices, and industry. Suitably qualified educators, researchers, and administrators are also needed. The national demand for sonographers continues to exceed the supply of graduates. In 2008, salaries for 75% of Diagnostic Medical Sonographers with less than five years experience were in the range of \$45,000 to \$75,000 annually.

The Program

There are three entry points and two locations for applicants to the DMS program.

- Those who completed a two-year allied health educational program that focuses on the care of patients, have successfully completed the 17 SC of specified prerequisite course work, and are certified as a Registered Nurse, Nuclear Medicine Technologist, Radiologic Technologist, Respiratory Therapist, or Paramedic may be accepted to enter the Advanced Certificate track. Upon completion of this approximately 18-month basic program, graduates will receive an Advanced Certificate in DMS. If they choose to continue for the B.S. in DMS, they must first successfully complete, or have completed, all 52 SC of specified prerequisite course work (of which the previous 17 SC is a part).
- Applicants who have not completed a two-year allied health educational program that is patient-care related may be accepted into the B.S. program if they have completed all 52 SC of the specified prerequisite course work. When they successfully complete the final spring semester of the B.S. program they will be eligible to receive the B.S. degree in Diagnostic Medical Sonography.
- Applicants who are certified by the American Registry for Diagnostic Medical Sonography (ARDMS) may be accepted into the online B.S. Career Ladder track if they have completed all 92 SC of the specified prerequisite course work (see www.uams.edu/chrp/sonography/ARDMS/ardmsprerequisites.asp). A minimum of one visit to the UAMS campus is required during the Career Ladder program.

AHEC-Southwest, Texarkana: An extension of the UAMS program is available to Southwest Arkansas residents. Contact: Mr. William Pedigo at (870) 779-6054.

Certification

Upon successful completion of the Diagnostic Medical Sonography Program, graduates are eligible to apply to take the national certifying examinations administered by the American Registry for Diagnostic Medical Sonography.

To earn these credentials, candidates must pass the following American Registry for Diagnostic Medical Sonography (ARDMS) examinations:

Registered Diagnostic Medical Sonography (RDMS): Sonographic Principles and Instrumentation **AND** Abdomen, **OR** OB/GYN, **OR** Neurosonology, **OR** Breast Sonography **OR** Fetal Echocardiography.

Registered Vascular Technologist (RVT): Sonographic Principles and Instrumentation **AND** Vascular Technology.

Registered Diagnostic Cardiac Sonographer (RDCS): Sonographic Principles and Instrumentation **AND** Adult **OR** Pediatric **OR** Fetal Echocardiography.

Advanced Certificate (Basic Program) Preprofessional Curriculum

In addition to certification/registration as a Radiologic Technologist, Respiratory Therapist, Nuclear Medicine Technologist, Registered Nurse, Paramedic, Nurse, or Radiation Therapist, the following 17 SC are required from a regionally accredited college or university and must fulfill all CHRP requirements regarding acceptance of transfer credit:

Area/Typical Course Title	Minimum Semester Credit
College Algebra (or higher level Mathematics)	3
Computer Fundamentals/Applicants*	3
Human Anatomy and Physiology**	8
Introductory College Physics***	3
	<u>17</u>

Bachelor of Science Degree Preprofessional Curriculum

The following 52 SC are required from a regionally accredited college or university and must fulfill all College requirements regarding acceptance of transfer credit:

Area/Typical Course Title	Minimum Semester Credit
SCIENCE	
College Algebra (or higher level Mathematics)	3
Human Anatomy and Physiology (must cover all body systems and include laboratory sessions)**	8
Introductory College Physics***	3
	<u>14</u>
LIBERAL ARTS	
English Composition I	3
English Composition II	3
American History or National Government	3
History of Civilization or World History I	3
History of Civilization or World History II	3
	<u>15</u>
SOCIAL SCIENCES	
Psychology	3
Sociology	3
	<u>6</u>
COMMUNICATIONS	
Speech or Oral Communication	2
COMPUTER SCIENCE	
Computer Fundamentals/Applications*	3
FINE ARTS	
Art, Music, or Theater Art	3
HUMANITIES	
Philosophy, Political Science, Literature, or Humanities	3
ELECTIVES****	<u>6</u>
TOTAL	<u>52</u>

*Computer fundamentals must be completed no more than seven years prior to admission into the program.

**Anatomy and physiology courses must cover all body systems and include accompanying laboratory sections. NOTE CHANGE: Effective August 2009, Anatomy and Physiology I & II will be required, eight (8) SC (two 4 hour courses with laboratory).

***Introductory College Physics must cover acoustics, wave motion, heat, electricity, force, and energy.

****Not more than one course in the following group will be accepted in transfer to meet degree requirements: band, studio, physical education, military science, English as a second language (ESL), or manual skills.

To be considered for acceptance into either the Advanced Certificate or Bachelor of Science Degree program, the applicant must have earned a CGPA of 2.5 or higher at the time of application. In addition, only prerequisite course work in which grades of "C" or higher are earned are accepted.

Actual course titles may vary among institutions. Consult the Division Director for preprofessional counseling.

Fulfillment of either Diagnostic Medical Sonography preprofessional curricula does not assure admittance into the professional program, please see the Application Procedures and Deadlines section for additional information.

Advanced Certificate (Basic Program) Professional Curriculum

The following 54 SC offered in the Diagnostic Medical Sonography Advanced Certificate professional program must be successfully completed in order to earn the Advanced Certificate.

Course #	Title	Semester Credit
Fall (1)		
DMS 3211	Sectional Anatomy	2
DMS 3312	Introductory Physics	3
DMS 3313	Abdominal Sonography	3
DMS 3221	Gynecologic Sonography	2
DMS 3514	Clinical Practicum I	5
		<u>15</u>
Spring (2)		
DMS 4242	Sonographic Conference	2
DMS 3222	Advanced Physics	2
DMS 3321	Sonographic Applications: Obstetrics	3
DMS 3824	Clinical Practicum II	8
		<u>15</u>
Summer (3)		
DMS 3541	Clinical Practicum III	5
DMS 4342	Introductory Cardiac & Vascular Sonography	3
		<u>8</u>
Fall (4)		
DMS 4241	Advanced Obstetrics, Genetics, & Pathology	2
DMS 3323	Sonographic Survey	3
DMS 4352	Doppler Sonography & Advanced Hemodynamics	3
DMS 4843	Clinical Practicum IV	8
		<u>16</u>
TOTAL		<u>54</u>

All professional courses must be completed with a grade of "C" or higher for progression to the next semester and for graduation.

Bachelor of Science Degree Professional Curriculum

In addition to the 52 SC of preprofessional courses, the following 72 SC are offered in the Bachelor of Science in Diagnostic Medical Sonography professional program. All courses must be successfully completed to earn the Bachelor of Science degree.

Course #	Title	Semester	Credit
Fall (1)			
DMS 2310	Basic Patient Care		3
DMS 3211	Sectional Anatomy		2
DMS 3312	Introductory Physics		3
DMS 3313	Abdominal Sonography		3
DMS 3221	Gynecologic Sonography		2
DMS 3514	Clinical Practicum I		5
			<u>18</u>
Spring (2)			
DMS 4242	Sonographic Conference		2
DMS 3222	Advanced Physics		2
DMS 3321	Sonographic Applications: Obstetrics		3
DMS 3824	Clinical Practicum II		8
			<u>15</u>
Summer (3)			
DMS 3541	Clinical Practicum III		5
DMS 4342	Introductory Cardiac & Vascular Sonography		3
			<u>8</u>
Fall (4)			
DMS 4241	Advanced Obstetrics, Genetics, & Pathology		2
DMS 4354	Intermediate Cardiac Sonography, OR		
DMS 4353	Intermediate Vascular Sonography		3
DMS 4352	Doppler Sonography & Advance Hemodynamics		3
DMS 4843	Clinical Practicum IV		8
			<u>16</u>
Spring (5)			
DMS 4251	Cardiovascular Pathophysiology		2
DMS 4261	Current Issues in Health Care		2
DMS 4364	Advanced Cardiac Sonography, OR		
DMS 4363	Advanced Vascular Sonography		3
DMS 4854	Clinical Practicum V		8
			<u>15</u>
TOTAL			72

All professional courses must be completed with a grade of "C" or higher for progression to the next semester and for graduation.

Application Procedures and Deadlines

Class sizes are limited, and all applicants may not be selected for participation in the Diagnostic Medical Sonography program. Applications must be received by **March 1** to be assured of consideration for admission. Applicants must provide:

1. The College of Health Related Professions Application for Admission form. Please contact the Office of Student Affairs for information. Telephone: (501)686-5730.
2. A non-refundable application fee of \$20.00 must accompany the application. If applying to multiple programs, a \$20.00 fee is required for the first program and \$10.00 for each additional program.
3. An official transcript from each college or university attended sent by that/those institution(s) directly to the CHRP Office of Student Affairs must be received by March 1. A minimum CGPA of 2.5 or higher for all undergraduate courses is required. Transcripts "issued to the student" will not substitute for official transcripts forwarded directly to the College of Health Related Professions by the institution issuing the transcripts.
4. Proof of a valid and current registration or certification as a health care professional, if, applicable. Applicants without certification as a health care professional are required to complete a direct observation in a hospital department where sonography is practiced. This observation must be documented by submission

of a verification form received by **March 1**. The verification form and instructions will be sent to the applicant upon receipt of the completed application and application fee.

5. In addition, qualified applicants must present themselves in person for counseling with the Diagnostic Medical Sonography faculty. The program office will schedule these group counseling sessions.
6. Admission Requirements for International Applicants: All applicants who are not United States citizens or permanent resident aliens or for whom English is not their native language must meet additional admission requirements. Please consult the Admission/Academic Information section of the CHRP Catalog found at <http://www.uams.edu/chrp/catalog/>.

Arkansas residency will be considered during selection for admission. Applicants are considered without regard to race, color, gender, age, sexual orientation, religion, national origin or disability status as a criterion in deciding against any individual in matters of admission, placement, transfer, hiring, dismissal, compensation, fringe benefits, training, tuition assistance, and other personnel or educationally-related actions.

All documents should be submitted to: University of Arkansas for Medical Sciences, College of Health Related Professions, Office of Student Affairs, UAMS, #619, 4301 West Markham Street, Little Rock, Arkansas 72205-7199. Telephone: (501) 686-5730.

Fees

Shown below are fees for 2011-2012. Fees are subject to change without notice by action of the Board of Trustees, so contact the division director prior to registration to learn the exact fees. Note that all fees are due upon registration.

Arkansas resident \$233.00 per semester credit
Non-resident \$534.00 per semester credit

Additional fees may apply; contact the division director prior to registration for exact fees.

Applicants may apply for financial aid, which includes grants, scholarships, and student loans, from the UAMS Student Financial Services Office-Awards Division, 4301 West Markham, #864, Little Rock, AR 72205. Please call (501) 686-5451 or visit www.uams.edu/studentfinancialservices for eligibility requirements.

This brochure describes the program requirements for the 2011-2012 academic year. While it is expected that most of the requirements will apply to 2012-2013 as well, some changes are likely. You are strongly advised to contact the department/program office to receive the latest information.

Telephone (501) 686-5948
Division of Diagnostic Medical Sonography
Department of Imaging and Radiation Sciences
College of Health Related Professions
University of Arkansas for Medical Sciences
4301 W. Markham, #563B
Little Rock, AR 72205-7199
E-Mail: DMS@uams.edu
www.uams.edu/chrp/sonography

6272011

Diagnostic Medical Sonography

(501) 686-5948

www.uams.edu/chrp/sonography/

UAMS

COLLEGE OF HEALTH RELATED PROFESSIONS

UNIVERSITY OF ARKANSAS FOR MEDICAL SCIENCES

2011-2012

Division of Diagnostic Medical Sonography
Department of Imaging and Radiation Sciences
College of Health Related Professions
University of Arkansas for Medical Sciences
4301 West Markham Street, #563B
Little Rock, Arkansas 72205-7199