

Pathway: Health Sciences & Wellness

Associate of Applied Science, Diagnostic Medical Sonography



The Diagnostic Medical Sonography (DMS) program offers students the knowledge and skills for performing high-quality diagnostic exams to aid the physicians in making a diagnosis. Most sonographers work in hospitals covering various shifts (nights, weekends, and holidays), medical clinics, and private practices. Sonographers may also find employment in the industrial sales of equipment, traveling sonography agencies, and educational institutions.

Graduates of this program will receive an Associate of Applied Science in Diagnostic Medical Sonography. The program is an intensive, six-semester program, not including prerequisite courses and is designed for students new to patient care. The sonographer must have an in-depth knowledge of physics, pathophysiology, human anatomy and physiology, and sonographic technique to create a diagnostic ultrasound image. Physicians depend on the sonographer's experience to evaluate normal and abnormal body parts. The DMS program is accredited in general studies, which include Abdomen/Small Parts, OB/GYN, and Vascular Technology. Students of this program are eligible to sit for the national certifying exams of the American Registry of Diagnostic Medical Sonographers. Upon passing the Sonography Principles and Instrumentation and one of the specialties (Abdomen, OB, Vascular), a student is certified as a registered diagnostic medical sonographer (RDMS). For vast employment opportunities, it is advised to have all three specialty exams passed upon or following graduation.

The Joint Review Committee on Education in Diagnostic Medical Sonography (JRC DMS), is the accreditation agency of the sonography program at LCCC. The JRC DMS has established specific criteria for clinical settings for students, thus limiting the number of accepted students pending clinical site availability. Most students are employed immediately following graduation. The program begins a new class each summer.

The last three semesters of the program are primarily clinical experience, and students may be placed in various hospitals or clinics in Wyoming, Colorado, Nebraska, or Montana. Students interested in the program may contact the Program Director, Clinical Coordinator, or the Admission Office for details about the program admission process and timeline. Student selection occurs in March based on the application, prerequisites completed or in-progress, and other criteria as indicated in the program application material.

Laramie County Community College does not discriminate based on race, color, national origin, sex, age, religion, political affiliation, or disability in admission or access to, or treatment or employment in, its education program or activities.

The following prerequisites must be in progress or complete with a grade of "C" or better by the application deadline (February 28) for the sonography program. Students are encouraged to contact the sonography faculty for program-specific questions.

Contact Information

Contact information is available on the [Diagnostic Medical Sonography](#) program website.

Competencies

Upon successful completion of this program, students will be able to:

1. Demonstrate technical proficiency by producing high-diagnostic images consistently.
2. Demonstrate professional communication skills.
3. Demonstrate consistent high-quality patient care.
4. Display themselves ethically and professionally
5. Gain employment as a general and vascular entry-level sonographer.

Map your individual academic plan of courses with your College Advisor.

Students may need to take prerequisite courses before beginning college level math and English courses or moving through a program's course sequence. Check the [Course Descriptions](#) section of the catalog to see the course prerequisites. Students should work with their advising team on determining prerequisite requirements.

Certain courses may only be offered in Fall or Spring semester. Students who are part time or have unique circumstances should work with their Academic Advisors to develop their customized academic plan.

If students choose to transition to another program within the Health Sciences & Wellness pathway, they should be particularly aware of the choice points that indicate when a decision to branch off into another program must be made to ensure credits and time are not lost.

Coursework common to all degrees within this pathway is indicated by the ✓ in the Common Academic Coursework (CAC) column below.

First Semester – Prerequisites

Gen Ed	CAC	Course code	Course name	Credits	Milestones and Choice Points
		ZOO 2015 OR ZOO 2010	Human Anatomy OR Anatomy and Physiology I	4	Choice Point- Students pursuing Diagnostic Medical Sonography (DMS) must take either ZOO 2010 OR ZOO 2015 Choice Point- Student pursuing DMS should complete the prerequisite courses listed here during their first semester to avoid losing credits and to stay on track to apply to the program.
QL	✓	MATH 1400	College Algebra	3	
WC	✓	ENGL 1010	English I: Composition	3	
SS	✓	STRT 1000	Strategies for Success	3	
			Semester Total	13	

Second Semester – Prerequisites

Gen Ed	CAC	Course code	Course name	Credits	Milestones and Choice Points
		ZOO 2025 OR ZOO 2020	Human Physiology OR Anatomy and Physiology II	4	Milestone- Students are eligible to apply to the DMS program upon completion of the courses in this semester.
		PHYS 1050	Concepts of Physics	4	
		HLTK 1200	Medical Terminology	2	
OC	✓	COMM 2010	Public Speaking	3	
			Semester Total	13	

First Semester

Gen Ed	CAC	Course code	Course name	Credits	Milestones and Choice Points
		IMAG 1505	Introduction to Diagnostic Medical Sonography	3	The DMS program typically begins during the summer semester.
		IMAG 1500	Cross-Sectional Anatomy	3	
			Semester Total	6	

Second Semester

Gen Ed	CAC	Course code	Course name	Credits	Milestones and Choice Points
		IMAG 1510	Ultrasound Physics I	2	
		IMAG 1520	OB/GYN Sonography I	2	
		IMAG 1521	OB/GYN Sonography I Lab	1	
		IMAG 1525	Abdominal Sonography I	2	
		IMAG 1526	Abdominal Sonography I Lab	1	
		IMAG 1530	Vascular Sonography I	1	
		IMAG 1531	Vascular Sonography I Lab	0.5	
HSI	✓		Choose an approved U.S./ Wyoming Constitution course	3	
			Semester Total	12.5	

Third Semester

Gen Ed	CAC	Course code	Course name	Credits	Milestones and Choice Points
		IMAG 1515	Ultrasound Physics II	3	Milestone- Upon completion of IMAG 1515 students are eligible to sit for the Sonography Principles of Instrumentation (SPI) board certification.
		IMAG 1540	OB/GYN Sonography II	2	
		IMAG 1541	OB/GYN Sonography II Lab	1	
		IMAG 1545	Abdominal Sonography II/ Small parts	2	
		IMAG 1546	Abdominal Sonography II/ Small Parts Lab	1	
		IMAG 1550	Vascular Sonography II	2	
		IMAG 1551	Vascular Sonography II Lab	1	
			Semester Total	12	

Fourth Semester

Gen Ed	CAC	Course code	Course name	Credits	Milestones and Choice Points
		IMAG 2500	Sonography Clinical Experience I	6	Milestone- DMS Clinical Education Begins typically occurs during the Summer Semester
			Semester Total	6	

Fifth Semester

Gen Ed	CAC	Course code	Course name	Credits	Milestones and Choice Points
		IMAG 2515	Sonography Clinical Experience II	11	
		IMAG 2530	Registry Review I	1	
			Semester Total	12	

Sixth Semester

Gen Ed	CAC	Course code	Course name	Credits	Milestones and Choice Points
		IMAG 2520	Sonography Clinical Experience III	13	Milestone- Completion of AAS degree in Diagnostic Medical Sonography.
		IMAG 2535	Registry Review II	1	Milestone- Students are eligible during this semester to apply for certification through ARDMS. The majority of employers mandate these certifications.
		IMAG 2540	Vascular Sonography Registry Review	1	
			Semester Total	15	

Program credit hour total	89.5
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Program Comments

Students planning to apply to the Diagnostic Medical Sonography program should work closely with their Advising Team regarding course sequence options required for completion prior to program application. STRT 1000 is a general education requirement, but is not a prerequisite course requirement prior to program application. Students may apply to the program while enrolled in or completing the last semester of prerequisites. Students should closely review the program application for specific information and requirements prior to applying to the program.

The information below is intended to be a guide, and does not guarantee regional job placement, job availability, or a specific wage after completion of the program. Students are required to pass a licensure examination to work as a sonographer.

At the end of the Spring I semester, DMS students will obtain the following credential to become eligible for licensure:

- ARDMS Sonography Principles of Instrumentation (SPI)

Upon graduation and/or employment, students are required to obtain licensure in the following concentrations:

- ARDMS Abdomen
- ARDMS OB/GYN
- ARDMS Vascular Technology (VT)

Laramie County Community College Diagnostic Medical Sonography Students are eligible to sit for Abdomen and Obstetrics and Gynecology registries 60 days prior to graduation due to the longevity of their accreditation status.

Most sonographers seek employment in medical clinics and hospitals.

Additional information on careers in Diagnostic Medical Sonography is available through [Career Coach](#) and career specific related links below.

Society of Diagnostic Medical Sonography (SDMS)

2745 Dallas Parkway, Suite 350

Plano, TX 75093-4706

214.473.8057

www.sdms.org

American Registry for Diagnostic Medical Sonography (ARDMS)

51 Monroe Street, Plaza East One

Rockville, MD 20852

301.738.8401

www.ardms.org

Transfer Information

LCCC courses may transfer to institutions in addition to those with formal articulation agreements. Students are strongly encouraged to determine the degree requirements and transfer policy of the specific college/university and program to which they plan to transfer.