

# Diagnostic Medical Sonography

Do you like to investigate mysteries, searching for clues that will help you solve the puzzle? Put your inquisitive mind to work in a career as a diagnostic medical sonographer.

Sometimes called ultrasound technicians, diagnostic medical sonographers play an integral role in the medical team.

As a diagnostic medical sonographer, you'll learn terminology, equipment, techniques and protocols utilized in gynecology and obstetrics, vascular and abdominal ultrasound. As a skilled medical professional, you will use your education and training to create images of internal body structures to aid the physician to make a medical diagnosis.

Discover a career as a diagnostic medical sonographer and enjoy work that is interesting and varied.



Trusted. Respected. Preferred.

# Diagnostic Medical Sonography Course Outline

Semester I					
Course #	Course	Theory	Lab	Extern	Credits
BIO 119	Anatomy & Physiology	45			3.0
CCM 115	Communications	45			3.0
CLE 115	Medical Law & Ethics	30			2.0
CMT 100	Medical Terminology	15			1.0
MTH 140	Math Applications	45			3.0
PHY 102	Physics	45			3.0
<b>Semester I Total</b>		<b>225</b>			<b>15.0</b>
Semester II					
Course #	Course	Theory	Lab	Extern	Credits
DMS 122	Patient Care	30	15		2.5
DMS 125	Sonographic Physics & Instrumentation	90			6.0
DMS 142	Introduction to Abdominal Sonography	45			3.0
DMS 152	Introduction to Sonographic Scanning & Instrumentation Lab		60		2.0
<b>Semester II Total</b>		<b>165</b>	<b>75</b>		<b>13.5</b>
Semester III					
Course #	Course	Theory	Lab	Extern	Credits
DMS 172	Extended Abdomen & Superficial Structures Sonography	90			6.0
DMS 173	Extended Abdomen & Superficial Structures Sonography Lab		120		4.0
DMS 200	Vascular Imaging I	30			2.0
DMS 201	Vascular Imaging I Lab		60		2.0
<b>Semester III Total</b>		<b>120</b>	<b>180</b>		<b>14.0</b>
Semester IV					
Course #	Course	Theory	Lab	Extern	Credits
DMS 242	Vascular Imaging II	30			2.0
DMS 243	Vascular Imaging II Lab		60		2.0
DMS 255	Obstetric & Gynecology Sonography	90			6.0
DMS 256	Obstetric & Gynecology Sonography Lab		90		3.0
<b>Semester IV Total</b>		<b>120</b>	<b>150</b>		<b>13.0</b>
Semester V					
Course #	Course	Theory	Lab	Extern	Credits
DMS 270	Clinical Practicum I			540	12.0
DMS 275	Sonography as a Profession	15			1.0
<b>Semester V Total</b>		<b>15</b>		<b>540</b>	<b>13.0</b>
Semester VI					
Course #	Course	Theory	Lab	Extern	Credits
DMS 280	Clinical Practicum II			540	12.0
DMS 285	Sonography Examination Review	30			2.0
<b>Semester VI Total</b>		<b>30</b>		<b>540</b>	<b>14.0</b>
<b>Program Totals</b>		<b>675</b>	<b>405</b>	<b>1080</b>	<b>82.5</b>

## Nature of Work

Sonographers use special equipment to direct sound waves into areas of the patient's body. They care for the patient by explaining the procedures, recording pertinent medical history, reviewing lab results, selecting appropriate equipment and settings, and creating diagnostic-quality images to aid the doctor in making diagnoses and guiding treatment.

Unlike other types of diagnostic imaging, sonographers use sound waves to generate an image for assessment and diagnosis. Although ultrasound technology is most commonly associated with obstetrics during pregnancy, the technology has many other applications in the diagnosis and treatment of medical conditions throughout the body.

## Job Outlook

As ultrasound imaging technology evolves, it will be used by medical facilities as a substitute for procedures that are costly, invasive, or expose patients to radiation. The use of sonography will continue to increase as patients, when given the option, choose to avoid exposure to radiation or undergo invasive procedures.

According to the U.S. Bureau of Labor Statistics, overall employment of diagnostic medical sonographers and cardiovascular technologists and technicians is projected to grow 14 percent from 2020 to 2030, faster than the average for all occupations. As the large baby-boom population ages, the need to diagnose medical conditions—such as blood clots and heart disease—will likely increase. Imaging technology is a tool used in making these diagnoses.\*

## Employment

Hospitals serve as the primary employer of diagnostic medical sonographers but employment is expected to grow more rapidly in physicians' offices, medical and diagnostic labs, and other medical institutions, such as outpatient imaging departments and free-standing urgent care facilities, due to a shift toward outpatient care.

\* Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, Diagnostic Medical Sonographers and Cardiovascular Technologists and Technicians, Including Vascular Technologists, on the Internet at <https://www.bls.gov/ooh/healthcare/diagnostic-medical-sonographers.htm> (visited October 21, 2021).



- Hands-on training
- Financial aid if qualified
- Career planning services