



DAKOTA COLLEGE AT
BOTTINEAU

ASSOCIATE OF APPLIED SCIENCE

Diagnostic Medical Sonography

The Associate of Applied Science (AAS) in Diagnostic Medical Sonography (DMS) will prepare students for a dynamic career in sonography (ultrasound). Professionals in DMS, also known simply as sonographers, use sound waves to obtain images of organs and tissues in the body. During an ultrasound examination, the sonographer places a device called a transducer in contact with the patient's body. The transducer emits high frequency sound waves that pass through the body, sending back "echoes" as they bounce off organs and tissue. Specialized equipment then converts those echoes into visual data in the form of medical images, depicting the anatomy of interest.

Why study diagnostic medical sonography?

Sonography students are trained to acquire and analyze produced sonographic images for diagnostic image quality and submit them to a qualified physician for interpretation. These images are then used to help doctors diagnose and treat many medical conditions. Since ultrasound is a non-invasive way to visualize internal organs, it is often the first imaging test performed when a disease or condition is suspected. Therefore, sonographers have an important role in conducting and interpreting initial tests that may help narrow down a patient's diagnosis and quickly get them the medical care they need. The DMS program prepares individuals to have foundational skills and knowledge of human anatomy and pathology, ultrasound physics, equipment operation, and safe, quality patient care.

Career choices

Sonographers practice in hospitals, clinics and physician's offices, and in many clinical specialties. They are often found performing ultrasound procedures at a patient's bedside, but also may work with imaging equipment in a dedicated room within the hospital or clinic. Most diagnostic sonographers work full time, and some may be assigned to work evenings, weekends or on holidays depending on their employer.

Focused courses for your degree

This program focuses on general abdominal, obstetric and gynecological sonography courses. Ultrasound physics and instrumentation, abdominal, obstetric, gynecologic, vascular sonographic imaging procedures and patient care will be studied. Clinical laboratory and practicum (hands on) experiences will be included in the educational plan.

Credential: Registered Diagnostic Medical Sonographer (RDMS)

The American Registry of Diagnostic Medical Sonography (ARDMS) administers a national certification examination. DMS students are eligible to apply for the Sonography Physics and Instrumentation (SPI) examination during the last semester of the program. Once successfully passing the SPI, graduates are then eligible to apply for the Abdomen (AB), and/or Obstetric/Gynecologic (OB/GYN) specialty examinations. After initial certification, registrants must earn 30 continuing education credits every three years to maintain registration of their certification(s).



“ I am convinced that nothing we do is more important than hiring and developing people. At the end of the day you bet on people, not on strategies. ”

– Lawrence Bossidy



START SMALL...GO FAR
WITH DAKOTA COLLEGE AT BOTTINEAU

COURSES REQUIRED

Diagnostic Medical Sonography (AAS)

Pre-requisites

(must be completed prior to admission to program)

AH 171 Medical Terminology	3 cr
BIOL 220 Anatomy & Physiology I	4 cr
AH 231 Health Care Law and Ethics	3 cr

General education courses

(can be completed before or during program)

BIOL 221 Anatomy & Physiology II	4 cr
PHYS 120 Fundamentals of Physics	4 cr
ENGL 110 College Composition I	
or COMM 110 Fund. Public Speaking	3 cr
MATH 103 College Algebra.....	4 cr
Wellness elective	1-2 cr
SS/ART/HUM elective.....	3 cr
CSCI 101 Introduction to Computers.....	3 cr

All courses can be completed online except
PHYS 120.

Total credits in curriculum is 32-33.

All courses subject to change.



The AAS in Diagnostic Medical Sonography
is offered in partnership with Trinity Health.

DIAGNOSTIC MEDICAL SONOGRAPHY (18 months)

Semester 1 – Fall 2021 – 16 weeks (12 cr)

Week

DMS 201	Ultrasound Foundation Concepts.....	3 cr	.....	1-4
DMS 221	Abdominal Ultrasound I.....	2 cr	.....	5-16
DMS 221L	Abdominal Ultrasound I Lab	1 cr	.....	5-16
DMS 231	OB/GYN I	2 cr	.....	5-16
DMS 231L	OB/GYN I Lab	1 cr	.....	5-16
DMS 281	Clinical Practicum I (256 hours).....	3 cr	.....	5-16

Semester 2 – Spring 2022 – 16 weeks (12 cr)

Week

DMS 211	Ultrasound Physics & Instrumentation.....	2 cr	.....	1-16
DMS 222	Abdominal Ultrasound II.....	2 cr	.....	1-16
DMS 222L	Abdominal Ultrasound II Lab	1 cr	.....	1-16
DMS 232	OB/GYN II	3 cr	.....	1-16
DMS 232L	OB/GYN II Lab	1 cr	.....	1-16
DMS 282	Clinical Practicum II (288 hours).....	3 cr	.....	1-12

Semester 3 – Summer 2022 – 8 weeks (7 cr)

Week

DMS 251	Patient Care.....	1 cr	.....	1-8
DMS 212	Ultrasound Physics & Instrumentation II.....	2 cr	.....	1-8
DMS 283	Clinical Practicum III (384 hours).....	4 cr	.....	1-8

Semester 4 – Fall 2022 – 16 weeks (12 cr)

Week

DMS 223	Abdominal Ultrasound III.....	2 cr	.....	1-16
DMS 223L	Abdominal Ultrasound III Lab	1 cr	.....	1-16
DMS 233	OB/GYN III	2 cr	.....	1-16
DMS 233L	OB/GYN III Lab	1 cr	.....	1-16
DMS 241	Vascular I	1 cr	.....	1-16
DMS 241L	Vascular I Lab	1 cr	.....	1-16
DMS 284	Clinical Practicum IV (384 hours)	4 cr	.....	1-16

Semester 5 – Spring 2023 – 16 weeks (12 cr)

Week

DMS 224	Abdominal Ultrasound IV	2 cr	.....	1-16
DMS 242	Vascular II	2 cr	.....	1-16
DMS 242L	Vascular II Lab	1 cr	.....	1-16
DMS 250	Comprehensive Review.....	3 cr	.....	13-16
DMS 285	Clinical Practicum V (384 hours)	4 cr	.....	1-16

Total..... 55 cr

Students are required to complete 1,152 clinical hours following the
completion of Semester 3.

CONTACT INFORMATION



Amy Hofmann
Program Director
DCB at Trinity
HC (Health Center) 5th Ave, Suite 301
Minot, ND 58701
Ph: 701-857-5620
amy.hofmann@dakotacollege.edu

Admission Application and Campus Tours

Admission/Student Services: 800-542-6866

WWW.DAKOTACOLLEGE.EDU

