



Printed: 10/25/2019

Academic Year: 2020-2021

Diagnostic Medical Sonography Associate Degree

Program Code 105262

As a graduate of the Diagnostic Medical Sonography program, you can choose to work in a variety of health care settings including clinics, hospitals, private practice physician offices, and public health facilities and laboratories. You perform routine sonographic (ultrasound) examinations of the body to include the abdomen, small parts, obstetrics, and gynecology. You work closely with physicians and may assist in the performance of invasive procedures. The Diagnostic Medical Sonography program is accredited by the Commission on the Accreditation of the Allied Health Education Programs.

71%
Graduate
Employment
With 71% Employed in
Field

Locations

Offered at the Green Bay campus.
For information: (920) 498-5444.
Toll-free: (888) 385-6982.

This program is fully eligible for financial aid.

Requirements for Program Entry

- REQUIREMENTS FOR PROGRAM APPLICATION
- The DMS program follows a competitive enrollment process whereby candidate applications are reviewed by a ranking process. The following steps must be completed for the application process.
- Attendance at a mandatory pre-application informational session will be required. To sign-up for a mandatory pre-application session, please contact Admissions at (920) 498-7159 or (888) 385-6982.
- High school transcript or equivalent. (For a list of equivalents, go to www.nwtc.edu/gettingstarted.)
- Two semesters in high school, or one semester of college Algebra, Biology, Physics, and Chemistry (with a lab component) with a grade of "B" or better.
- To be admitted to this program, learners must achieve a prior cumulative high school or college grade point average of 3.0 or higher OR a satisfactory academic skills assessment score. College grade point average

CURRICULUM

Students following the study plan below will complete the Diagnostic Medical Sonography associate degree in the number of semesters shown.

PRE-SEMESTER	
10-806-177 Gen Anatomy & Physiology	4
10-801-196 Oral/Interpersonal Comm	3
SEMESTER TOTAL	7
SUMMER SEMESTER	
10-804-113 College Technical Math 1A	3
10-806-143 College Physics 1	3
SEMESTER TOTAL	6
FIRST SEMESTER	
10-890-101 College 101	1
10-501-101 Medical Terminology	3
10-526-200 Intro to DMS	3
10-526-210 Cross Sectional Anatomy	2
10-526-221 Sonography Physics 1	3
SEMESTER TOTAL	12
SECOND SEMESTER	
10-526-207 Abdominal Sonography	4
10-526-208 OB/GYN Sonography 1	3
10-526-222 Sonography Physics 2	2
10-526-223 Vascular Imaging 1	3
10-806-179 Adv Anatomy & Physiology	4
SEMESTER TOTAL	16
SUMMER SEMESTER	
10-526-203 Scanning with Proficiency	1
10-526-209 DMS Clinical Experience 1	2
SEMESTER TOTAL	3
THIRD SEMESTER	
10-526-211 Superficial Sonography	2
10-526-212 OB/GYN Sonography 2	3
10-526-213 DMS Clinical Experience 2	3
10-526-224 Vascular Imaging 2	3
10-809-198 Intro to Psychology	3
SEMESTER TOTAL	14
FOURTH SEMESTER	
10-526-215 DMS Clinical Experience 3	4
10-526-219 DMS Clinical Experience 4	3
10-809-172 Intro to Diversity Studies	3
10-801-136 English Composition 1	3
SEMESTER TOTAL	13
TOTAL CREDITS	71

Curriculum Note

Students must earn a "C" or higher in all 10-526-XXX courses and 10-501-101. A student who withdraws or receives a grade lower than a "C" in a program course may apply for re-entry into the program. Consideration for re-entry will be at the discretion of the re-entry team and will be dependent on clinical availability.

must be based on 15 credits or more. To learn more about starting this program, please contact an academic advisor at (920) 498-5444 or (888) 385-6982.

- Upon completion of program benchmarks and attendance at the mandatory information session, students will be able to register for the Health Educations Systems Inc. (HESI) A2 Exam. The HESI can only be taken after attendance at a pre-application information session. Test topics include Math, Biology, Anatomy & Physiology, and Reading. To learn more about these assessment scores, please contact an admissions specialist at (920) 498-7159 or (888) 385-6982, or visit the DMS program webpage <http://www.nwtc.edu/academics/degrees/health-sciences/Medical/Pages/DiagnosticMedicalSonography.aspx> Related link, lower right side.

- Candidates submitting applications to the DMS program must also provide an essay (no more than 1,000 words) completed on campus in the Assessment Center. The essay will follow a question and answer format and will include information related to the following; why they are interested in and their knowledge of the profession, experience in healthcare, specific skills and duties of a sonographer, and characteristics that make them a good candidate for the program.

- Candidates are ranked in the following categories: HESI scores and program essay. The highest ranking candidates will be offered a place on the program wait list. Remaining candidates will need to resubmit a new application for the following year to have an opportunity to re-apply with the following year's applicants.

· REQUIREMENTS FOR PROGRAM ENTRY

- Upon success acceptance to the program wait list, the following must be completed:

- Complete caregiver background check. A fee is charged for this service. Additional information will be provided upon acceptance into the program.
- Complete mandatory welcome week program orientation.
- Complete mandatory four-hour job shadow.

· Students must earn a "B" or higher in General Anatomy & Physiology and Advanced Anatomy & Physiology. A student who withdraws or receives a grade lower than a "B" in these courses may apply for re-entry into the program. Consideration for re-entry will be at the discretion of the re-entry team and will be dependent on clinical availability. · The credit for 10-890-101, College 101 is an institutional requirement for graduation. Consequently, it is not part of the program credit requirements.

Course Descriptions

10-806-177 GENERAL ANATOMY & PHYSIOLOGY ...overview of the human anatomy/physiology using a body-systems approach, emphasizing the interrelationships between form/function at the gross and microscopic levels. (Prerequisite: Gen Chemistry w/C or better OR 2 semesters lab-based high school chemistry w/C or better & placement value of 3300; OR Accuplacer Rdg score greater/= to 80; OR ACT Rdg score greater/= to 17; OR prep courses-contact academic advisor at 920-498-5444)

10-801-196 ORAL/INTERPERSONAL COMMUNICATION ...the communication process, perception and self-concept, language, listening, nonverbal communication, interpersonal relationships, communication in groups and public communication; prepare and deliver an oral presentation. (Prerequisite: Accuplacer Rdg score greater/equal to 55 AND Sentence Skills score greater/equal to 60; OR ACT Rdg score greater/equal to 16 AND English score greater/equal to 16; OR preparatory course-contact an academic advisor at 920-498-5444)

10-804-113 COLLEGE TECHNICAL MATH 1A ...topics include solving linear equations; graphing; percent; proportions; measurement systems; computational geometry; and right triangle trigonometry. Emphasis will be on the application of skills to technical problems. (Prerequisite: Accuplacer Arithmetic score greater/equal to 65 AND Reading score greater/equal to 55; OR ACT Math score greater/equal to 15 AND ACT Reading score greater/equal to 16; OR preparatory courses-contact an academic advisor 920-498-5444)

10-806-143 COLLEGE PHYSICS 1 ...presents the applications and theory of basic physics principles. This course emphasizes problem solving, laboratory investigation and applications. Topics include laboratory safety, unit conversions and analysis, kinematics, dynamics, work, energy, power, temperature, and heat. (Prereq: 2.6 GPA & Alg 2 or equiv w/C or better; OR Accuplacer Reading greater/equal to 80, Arith greater/equal to 65, & Elem Alg greater/equal to 61; OR ACT Reading greater/equal to 17 & Math greater/equal to 21; OR Coll Tech Math 1A OR Int Alg w/C or better)

10-890-101 COLLEGE 101 ...Students will utilize digital tools and resources to assess, explore, practice, apply, and evaluate both employability and learning skills. By establishing NWTC cultural values as hallmarks of success in academic, career, and personal settings the course encourages reflective, personalized development of a growth mindset and emphasizes the importance of making wise choices. To maximize the return on investment, students should take this course in their first semester as it identifies key expectations (hidden rules) of higher learning and professional employment.

10-501-101 MEDICAL TERMINOLOGY ...focuses on the component parts of medical terms: prefixes, suffixes, and root words. Students practice formation, analysis and reconstruction of terms. Emphasis on spelling, definition and pronunciation. Introduction to operative, diagnostic, therapeutic and symptomatic terminology of all body systems, as well as systemic and surgical terminology.

10-526-200 INTRO TO DMS ...introduces learners to the field of diagnostic medical sonography. Explores the duties and functions of the diagnostic medical sonographer as well as the historical background. Learners examine the other imaging modalities as they relate to sonography. Includes principles of patient care and legal and ethical issues related to sonography. (Prerequisite: Accepted into the Diagnostic Medical Sonography Program)

10-526-210 CROSS SECTIONAL ANATOMY ...introduces cross sectional anatomy as related to Diagnostic Medical Sonography. Includes correlating images from other imaging modalities. (Prerequisite: Accepted into the Diagnostic Medical Sonography Program.)

10-526-221 SONOGRAPHY PHYSICS 1 ...introduces physics and instrumentation relevant to diagnostic medical sonography. Learners explore how principles of sound propagation in tissues create a sonographic image. (Prerequisite: 10-806-143, College Physics 1)

10-526-207 ABDOMINAL SONOGRAPHY ...prepares learners to perform ultrasounds of the abdominal organs including liver, gallbladder, biliary tree, pancreas, spleen, urinary tract, aorta and retroperitoneum. Practice scan sessions included. (Prerequisites: 10-526-200, Intro to DMS; 10-501-101, Medical Terminology; 10-806-177, Gen Anatomy & Physiology. Corequisite: 10-806-179, Adv Anatomy & Physiology)

10-526-208 OB/GYN SONOGRAPHY 1 ...prepares learners to perform ultrasounds of the nonpregnant uterus and the first-trimester pregnancy. Explores the anatomy, physiology, and pathology of the female reproductive system as well as intrauterine and ectopic pregnancies. (Prerequisites: 10-526-200, Intro to DMS; 10-501-101, Medical Terminology; 10-806-177, Gen Anatomy & Physiology; Corequisite: 10-806-179, Adv Anatomy & Physiology)

10-526-222 SONOGRAPHY PHYSICS 2 ...continues the study of physics and instrumentation relevant to diagnostic medical sonography. The laboratory component of this course introduces the student to the concepts of ultrasound instrumentation, an introduction to ultrasonic scanning technique, and maintenance of ultrasound equipment. (Prerequisite: 10-526-221, Sonography Physics 1)

10-526-223 VASCULAR IMAGING 1 ...introduces the principles of vascular sonographic imaging. Learners perform a variety of peripheral vascular arterial and venous duplex exams. (Prerequisites: 10-526-200, Intro to DMS; 10-526-210, Cross Sectional Anatomy; 10-526-221, Sonography Physics 1)

10-806-179 ADVANCED ANATOMY & PHYSIOLOGY ...normal human anatomy and physiology are studied using a body systems approach with emphasis on the interrelationships between form and function at the gross and microscopic levels of organization. (Prerequisite: 10-806-177, Gen Anatomy & Physiology with a "C" or better. Health programs may require a higher grade; refer to your plan for details.)

10-526-203 SCANNING WITH PROFICIENCY...provides learners with the opportunity to enhance their technical skills, accuracy, and proficiency in scanning the abdominal organs and female pelvis of the human body. This is a scanning course dedicated in continuing to prepare the learner for their first clinical experience. (Prerequisites: 10-526-207, Abdominal Sonography; 10-526-208, OB/GYN Sonography 1)

10-526-209 DMS CLINICAL EXPERIENCE 1 ...opportunities to apply scanning skills in a clinical setting. Students concentrate on ultrasound examinations of the abdominal organs. Participation in this course will take place at a hospital or clinic. (Prerequisites: 10-526-207, DMS-Abdominal Sonography; 10-526-208, DMS-OB/GYN Sonography 1)

10-526-211 SUPERFICIAL SONOGRAPHY ...investigates superficial structure imaging. Includes anatomy, pathophysiology, and sonographic evaluation. Prepared learner to perform ultrasounds of the thyroid, breast, male reproductive system, musculoskeletal system, and GI tract. (Prerequisites: 10-526-207, Abdominal Sonography; 10-526-221, Sonography Physics 1; 10-526-222, Sonography Physics 2; 10-526-210, Cross Sectional Anatomy)

10-526-212 OB/GYN SONOGRAPHY 2 ...prepares learners to perform ultrasounds of the second and third-trimester pregnancy. Explores the anatomy, physiology, and pathology of the female pelvis and the developing fetus. (Prerequisite: 10-526-208, OB/GYN Sonography 1)

10-526-213 DMS CLINICAL EXPERIENCE 2 ...further experience in a clinical setting allows the student to continue to improve technical skills while accepting more responsibilities during scanning procedures. (Prerequisite: 10-526-209, DMS Clinical Experience 1)

10-526-224 VASCULAR IMAGING 2 ...prepares learners to perform abdominal vascular and physiologic peripheral vascular exams. (Prerequisite: 10-526-223, Vascular Imaging 1)

10-809-198 INTRODUCTION TO PSYCHOLOGY ...survey of theoretical foundations of human behavior such as sensation and perception, motivation, emotions, learning, personality, psychological disorders, therapy, stress, and human diversity in personal, social and vocational settings. (Prerequisite: Cumulative GPA of 2.6 or greater OR satisfactory reading and writing assessment scores OR 10-831-107, College Reading and Writing 1 with "B" or better OR Corequisite: 10-831-102, English Comp Prep)

10-526-215 DMS CLINICAL EXPERIENCE 3 ...provides further opportunity for students to expand their skills in a clinical setting. Students begin to function as team members under the guidance of the instructor and authorized clinical personnel. (Prerequisite: 10-526-213, DMS Clinical Experience 2)

10-526-219 DMS CLINICAL EXPERIENCE 4...prepares the student to assume the role of a sonographer. This course enhances the student's scanning and employee skills through clinical practice. Serves as a transition between student and employee. (Corequisite: 10-526-215, DMS Clinical Experience 3)

10-809-172 INTRO TO DIVERSITY STUDIES...basic American values of justice and equality by teaching vocabulary, history of immigration/conquest, transcultural communication, legal liability, multicultural majority/minority relations, ageism, sexism, gender, sexual orientation, the disabled/ADA. (Prerequisite: Accuplacer Rdg score greater/equal to 55 AND Sentence Skills greater/equal to 60; OR ACT Rdg score greater/equal to 16 AND English greater/equal to 15; OR 10-831-107, College Reading and Writing with a B or better)

10-801-136 ENGLISH COMPOSITION 1 ...learners develop knowledge/skills in planning, organizing, writing, editing. Students will also analyze audience/purpose, use elements of research, format documents using standard guidelines, and develop critical reading skills. (Prerequisite: Accuplacer Rdg score greater/equal to 55 AND Sentence Skills greater/equal to 75; OR ACT Rdg score greater/equal to 16 AND Eng greater/equal to 18; OR preparatory courses-contact academic advisor at 920-498-5444)