



Diagnostic Medical Sonography Program

Program Description

The Diagnostic Medical Sonography (DMS) associate degree program is designed to prepare qualified entry-level sonographers who are highly skilled, technically competent, ethical, professional, compassionate, and responsive to the needs of patients and of employing organizations. The profession requires critical thinking skills and judgment and the ability to provide appropriate healthcare services. Sonographers use technologically advanced equipment that utilizes high-frequency sound waves to produce dynamic visual pictures of internal body structures. Physicians evaluate the images to make a medical diagnosis.

Course work includes sonographic physics, sonographic appearance of normal and abnormal anatomy, physiology, pathology, and pathophysiology of the abdomen, pelvis, and small parts of the adult, pediatric, and fetal patient, clinical application courses, interventional sonography including biopsies, needle aspirations, and fluid drainage procedures, journal and case study review, and comprehensive registry reviews. The program combines formal education and extensive clinical training to prepare students to function as a sonographer.

As a graduate of this accredited DMS program, the student is eligible to sit for the national certification examinations in Diagnostic Medical Sonography, administered by the American Registry of Diagnostic Medical Sonography (ARDMS) in the SPI Physics exam upon completing the program physics class and in the Abdomen and the Obstetrics/Gynecology specialties up to sixty-days prior to program completion. The student may also elect to take the American Registry of Radiologic Technologist (ARRT) exam for Sonography, a combined exam of Physics, Abdomen, and Obstetrics and Gynecology. The partnership that CTC has with area healthcare facilities will provide the student with the benefit of on-the-job training in a clinical setting. Columbus Technical College does not guarantee job placement; however, we often assist graduates with employment opportunities as healthcare facilities seek our graduates for job prospects. Hospital imaging departments, clinics, physician's offices, and diagnostic centers seek registered graduates.

Program Accreditation

The Diagnostic Medical Sonography program at Columbus Technical College is accredited by the Commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon the recommendation of the Joint Review Committee on Education in Diagnostic Medical Sonography (JRC-DMS). The goal of the Diagnostic Medical Sonography program is to prepare competent entry-level sonographers in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains for the Obstetrics and Gynecology Sonography concentration and the Abdominal - Extended Sonography concentration. Students will learn both concentrations during the continuous course of study over a 17-month/four semester duration of class, lab, and clinical rotations.

Commission on Accreditation
of Allied Health Education Programs
9355 – 113th St. N. #7709
Seminole, FL 33775
(727) 210-2350
www.caahep.org

Joint Review Committee on Education
in Diagnostic Medical Sonography
P.O. Box 2050
Ellicott City, MD 21041
(443) 973-3251
www.jrcdms.org



Program Admission Requirements: (The DMS Program is a Competitive Admissions Program)

- Applicants must present documentation of a high school diploma or official GED scores for admission.
- Applicants must be at least 18 years of age.
- No provisional and/or special admission students are considered for the program.
- Must have a minimum GPA of 2.0 at the end of summer semester of the year submitting the application.
- Must complete all prerequisite courses by the end of summer semester in the year of application submission.
- All transcripts for courses being transferred in from other colleges must be received in the Admissions Office before the application deadline of October 1st.
- HESI A2 exam must be completed at Columbus Tech before the application deadline of October 1st.
- Entrance into the DMS program is contingent upon completion/results of a criminal background check and drug screen which must be completed after being conditionally accepted into the program. Pertinent information regarding the Background Check/Drug Screen will be provided to students once accepted into the program. The student will be responsible for the cost of these items.
- Student must provide current medical/physical exam results on a DMS provided Medical Form, meet the Diagnostic Medical Sonography Technical Standards, and provide immunization records and current CPR card (BLS for Healthcare Providers) after program acceptance. While Columbus Tech does not require vaccines for program admission, the majority of our clinical sites require students to be fully vaccinated. If a student chooses not to be vaccinated, they may not be allowed to attend those sites, which could delay or prevent program completion.

Program Considerations

- DMS courses are generally scheduled between 8:00am–5:00pm, Monday–Friday, all four semesters. Students will be in class, lab, and clinicals 40 hours/week (schedules can change for needs of the program)
- Attending the program is equivalent to working a full-time job, with additional study and homework time in the evening and weekends.
- Travel is required for clinical rotations (currently, as far as ~50 miles, each way) for up to four (4) days per week each semester. Reliable transportation is a must.
- ARDMS Registry exam fees (totaling \$875.00) must be paid in increments throughout the program) See www.ardms.org for more info.
- We often assist graduates with employment opportunities as they come available in the area; however, we do not guarantee job placement. (Over the past five (5) years, 100% of graduates have been gainfully employed either full-time or part-time within the first six (6) months post-graduation.)
- The DMS program only accepts 10 students per year. Being that the program is very competitive, students are advised to have a back-up plan and apply to multiple programs. At the time that we take applications for the DMS program, students can also apply to the Associate Degree Nursing program, Respiratory Care, and Radiologic Technology programs, as long as they meet those program requirements. If they are accepted into more than one program, we give the student the choice of which program they wish to accept.

If you have any questions, please contact the DMS Program Director,
Regina Ridgley at rridgley@columbustech.edu or (706)641-4012.



***The following courses will be used in the DMS ranking process for competitive admission:**

ENGL 1101, MATH 1103 or MATH 1111, BIOL 2113, BIOL 2113L, BIOL 2114, BIOL 2114L,
MATH 1127 or ALHS 1040, and PHYS 1110, PHYS 1110L

(PSYC 1101, & HUMN XXXX are not used in the ranking process, but these courses must be completed prior to program admission.)

See pages 7-9 for details about the Competitive Admissions Process

Diagnostic Medical Sonography - Prerequisite Courses	CREDIT HOURS
*ENGL 1101 Composition and Rhetoric	3
*MATH 1103 Quantitative Skills and Reasoning <u>Or</u> *MATH 1111 College Algebra	3
PSYC 1101 Introduction to Psychology	3
*BIOL 2113 Anatomy and Physiology I	3
*BIOL 2113 L Anatomy and Physiology I Lab	1
HUMN XXXX Humanities/Fine Arts Elective	3
*ALHS 1040 Introduction to Health Care <u>or</u> *MATH 1127 Introduction to Statistics	3
*PHYS 1110 Conceptual Physics	3
*PHYS 1110 L Conceptual Physics Lab	1
*BIOL 2114 Anatomy and Physiology II	3
*BIOL 2114 L Anatomy and Physiology II Lab	1

**** Other recommended course: ALHS 1090 – Medical Terminology**

This course is not required but may be helpful to the student during their time in the DMS program. (Beginning in August 2025, completion of the ALHS 1090 course with a grade of “C” or higher can be used to add one (1) bonus point to the competitive admissions ranking.)



DMS Program Completion Rates

Graduation Year	Students Accepted	Academic Attrition	Non-Academic Attrition (Voluntary Withdrawal)	Graduates	Retention Rate
2025	10	0	1	9	90%
2024	10	0	0	10	100%
2023	10	0	0	10	100%
2022	10	0	1	9	90%
2021	10	0	0	10	100%

DMS Job Placement Rates

Graduation Year	# of Graduates	Pursuing further degree	Not pursuing career in sonography	Total # Positive Placement	Positive Job Placement Rate (Within 6 months of graduation)
2025	9	0	0	9	100%
2024	10	0	0	10	100%
2023	10	0	0	10	100%
2022	9	0	0	9	100%
2021	10	0	0	10	100%

DMS Program - Credentialing Examination Pass Rates

(American Registry for Diagnostic Medical Sonography) <https://www.ardms.org/>

Grad. Year	ARDMS SPI Exam Overall Pass Rate			ARDMS Abdomen Exam Overall Pass Rate			ARDMS OB/GYN Exam Overall Pass Rate	
Graduation Year	CTC Rate	National Average		CTC Rate	National Average		CTC Rate	National Average
2025	100%	n/a		100%	n/a		100%	n/a
2024	100%	n/a		100%	n/a		100%	n/a
2023	100%	65%		90%	64%		100%	74%
2022	100%	63%		89%	61%		100%	72%
2021	100%	60%		100%	62%		100%	73%

Graduation Year	# of Graduates	Percentage of graduates ARDMS registered in one or more specialties (ABD and/or OBGYN)
2025	9	100%
2024	10	100%
2023	10	100%
2022	9	100%
2021	10	100%



Estimated Student Expenses

**Expenses are subject to change.*

Diagnostic Medical Sonography

Expenses

HESI A2 Exam Fee	\$80.00
CTC Application Fee	\$25.00
Background Check/Drug Screen	\$92.00
Medical Physical	\$100.00
Immunizations	\$130.00
Flu Shots	\$40.00
CPR (BLS for Healthcare Providers)	\$35.00
Uniforms and Accessories	\$250.00
Graduation Fee	\$40.00
ARDMS SPI Exam	\$275.00
ARDMS Specialty Exams (\$300 x 2)	\$600.00
Required Textbooks	\$1180.00
ACEMAPP Clinical Fees	\$110.00
DMSO Course Lab Fees (8 courses)	\$450.00
Student Liability Insurance	\$12.00
Student Clinical Software Fees	\$150.00
DMS Student Registry Review Testing Fees	\$230.00

**ARDMS Exams must be
taken and paid for
DURING the DMS program**

Tuition/Fees per Semester (In-State – Not including Textbooks)

General Education Core (Cost if taking
courses as listed on chart on page 8.)

First Semester (Prerequisites)	\$1812.00
Second Semester (Prerequisites)	\$1919.00

DMS Program Courses Tuition/Fees per Semester (In-State)

Third Semester (Spring-I)	\$1812.00
Fourth Semester (Summer)	\$1705.00
Fifth Semester (Fall)	\$1919.00
Sixth Semester (Spring-II)	\$1705.00

TOTAL ESTIMATED COST: \$14,671.00



First Semester	Pre-Occupational Classes	CREDIT HOURS
ENGL 1101	Composition and Rhetoric	3
MATH 1111	College Algebra	3
MATH 1103	Quantitative Skills and Reasoning	
PSYC 1101	Introduction to Psychology	3
BIOL 2113	Anatomy and Physiology I	3
BIOL 2113 L	Anatomy and Physiology I Lab	1
Second Semester	Pre -Occupational Classes	Credit Hours
HUMN XXXX	Humanities/ Fine Arts Elective	3
ALHS 1040	Introduction to Health Care	3
MATH 1127	Introduction to Statistics	
PHYS 1110	Conceptual Physics	3
PHYS 1110 L	Conceptual Physics Lab	1
BIOL 2114	Anatomy and Physiology II	3
BIOL 2114 L	Anatomy and Physiology II Lab	1
Total Credit Hours Pre – Occupational Classes		27
Third Semester	OCCUPATIONAL CLASSES (Competitive Admission)	Credit Hours
DMSO 1010	Foundations of Sonography	3
DMSO 1020	Sectional Anatomy and Normal Sonographic Appearance	3
DMSO1040	Sonographic Physics and Instrumentation	3
DMSO 1060	Clinical Sonography I	4
Fourth Semester	OCCUPATIONAL CLASSES	Credit Hours
DMSO 1050	Abdominal Sonography I	3
DMSO 1070	Pelvic Sonography and First Trimester Obstetrics	2
DMSO 1080	Sonographic Physics and Instrumentation Registry Review	1
DMSO1100	Clinical Sonography II	6
Fifth Semester	OCCUPATIONAL CLASSES	Credit Hours
DMSO 1090	Introduction to Vascular Sonography	1
DMSO 2010	OB Second and Third Trimesters	3
DMSO 2020	Specialized Sonographic Procedures	2
DMSO 2030	Clinical Sonography III	8
Sixth Semester	OCCUPATIONAL CLASSES	Credit Hours
DMSO 2040	Comprehensive Abdomen and OB-GYN Registry Review	2
DMSO 2050	Clinical Sonography IV	10
Total Credit Hours for Occupational Classes		51
Total Program Hours		78

Competitive Admissions Information:

1. Competitive admission applicants are encouraged to speak to a Program Director in the Division of Health Sciences & Nursing (706.225.0502) or Tamara Hardnett in the Academic Advisement Center (706.649.1174) before applying.
DMS Program Director: Regina Ridgley, ridgley@columbustech.edu or 706-641-4012
2. Degree Program Rankings are performed using a program-specific Excel spreadsheet, with 60% of the ranking coming from competitive GPA and 40% from HESI A2 scores and additional Bonus Points beginning August 2025.
3. **Program applications will be available on the Columbus Technical College (CTC) website two (2) weeks before published deadlines. Applicants must submit an electronic application for each program they wish to apply for at that time.** CTC's Academic Advisement Center staff will review and rank all submitted application information. For application questions, please contact Tamara Hardnett in the Advisement Center at 706.649.1174 or thardnett@columbustech.edu.
4. Applicants for all degree programs must have a cumulative college GPA of 2.0 or greater.
5. Applicants with college degrees must compete in the same areas as those without previous degrees, including the HESI A2 exam.
6. Current CTC students in competitive health sciences or nursing programs **cannot** apply for another competitive health sciences or nursing program until completion of their current program.
7. **All prerequisite courses must be completed before the application deadline date.**
8. Transfer credits – CTC's Admissions Office must receive students' official transcripts/grades from **all institutions** by the deadline date posted below.
 - a. All accredited health sciences and nursing programs have state or national guidelines and standards that students must successfully meet to complete the program. However, the curriculum varies widely among programs. For example, some programs operate in the quarter system while others utilize semesters. Furthermore, each program's courses are structured differently and may be taught in a different order. Therefore, Columbus Technical College will not accept transfer credit from other accredited colleges and universities for previously completed nursing or health sciences program-occupational courses. Additionally, no military credits and/or nursing experience while working in the military will be accepted.
9. **The Competitive Ranking will be based on the following:**
 - a. **Designated prerequisite course grades (60% of overall ranking)**
 - i. Courses used for competitive ranking are indicated for each program in the Catalog and Student Handbook on the CTC web page. All prerequisite courses must be completed with a grade of C or higher at the time of program application submission.
 - ii. Applicants receiving a passing grade for any prerequisite course will be given one opportunity to improve their grade in that specific prerequisite course. The higher passing grade will be used for ranking. *** Financial Aid will only pay for two attempts with a passing grade.**
 - iii. **Science courses (BIOL 2113 & 2113L, 2114 & 2114L, 2117 & 2117L, CHEM 1211 & 1211L, PHYS 1110 & 1110L, ALHS 1011) used for competitive admission cannot be more than seven (7) years old, or the course must be re-taken. Science courses over seven (7) years old will not be used for competitive ranking. The 7-year period begins on the course's completion date, as reflected on the student's transcript.**
 - b. **HESI A2 exam scores (40% of overall ranking)**
 - i. CTC's specific HESI A2 exam is required for all competitive programs and must be taken in the CTC testing center before the application deadline. Only scores from this exam will be used for ranking.

- ii. For the following programs, applicants must achieve a **70 or higher** on the HESI A2 exam to be eligible to apply:
 - 1. Associate Degree Nursing-RN
 - 2. Dental Hygiene
 - 3. Diagnostic Medical Sonography
 - 4. Radiologic Technology
 - iii. Applicants must score **60 or higher** to qualify for the programs below:
 - 1. Practical Nursing TCC (PN21)
 - 2. Respiratory Care Technology
 - 3. Surgical Technology
 - iv. The exam may be taken twice per calendar year, and the results are only good for two years.
 - v. The exam is administered in the CTC testing center (Located in Patrick Hall, room 603). Call 706-649-1822 for exam dates, times, and questions. The cost of the exam is \$55.00, and an exam sitting fee of \$25.00, for a total of \$80.00.
 - vi. CTC's specific exam will cover the following six topics:

1. Reading Comprehension	4. Basic Math Skills
2. Vocabulary and General Knowledge	5. Biology
3. Grammar	6. Anatomy and Physiology
 - vii. Exam preparation options
 - 1. There is free study material through CTC's virtual library via Galileo under the test prep software Mometrix. Once in Mometrix, click on nursing and scroll to HESI A2 Secrets and HESI A2 Practice Questions to begin.
 - 2. There is also a study guide that may be purchased: ***HESI Admission Assessment Exam and Review***, 6th Edition, Elsevier, ISBN-13: 978-0443114090
- c. Bonus Points (Beginning August 2025)
- i. One (1) bonus point will be added to the final score for an applicant who graduated from one of the following Columbus Technical College's Health Sciences and Nursing programs (***Only one (1) point will be added for a listed program even if more than one program was completed.***):
 - 1. Associate Degree Nursing (NU23 or NLB3)
 - 2. Dental Assisting (DA12 or AD21)
 - 3. Dental Hygiene (DH13)
 - 4. Diagnostic Medical Sonography (DMS3)
 - 5. EMS Professions (EP12)
 - 6. Health Science, Associate of Science (AD23)
 - 7. Medical Assisting (MA22)
 - 8. Nurse Aide (CN21, NAA1, or NAF5)
 - 9. Paramedicine (PAF2, PT12, or PT13)
 - 10. Pharmacy Technology (PT22, PT23, or PA71)
 - 11. Practical Nursing (PN12 or PN21)
 - 12. Radiologic Technology (RT23)
 - 13. Respiratory Care (RCT3)
 - 14. Sports & Fitness Management (SAF3)
 - 15. Surgical Technology (ST13)

- ii. One (1) bonus point will be added to the final scores for applicants who earn C” or better in ALHS 1040 - Introduction to Healthcare and/or ALHS 1090 – Medical Terminology.

The following exceptions prohibit the addition of such bonus points:

1. ALHS 1040 - Introduction to Healthcare
 - a. Not applicable for ***Practical Nursing*** applicants
 - b. Not applicable to ***Diagnostic Medical Sonography*** applicants unless using MATH 1127 (Statistics) as a prerequisite
2. ALHS 1090 – Medical Terminology
 - a. Not applicable for ***Practical Nursing*** applicants
 - b. Not applicable for ***Radiologic Technology*** or ***Surgical Technology*** applicants since it is a prerequisite for the programs

Program applications will be available on the Columbus Technical College (CTC) website two (2) weeks before the published deadline.

APPLICATION DEADLINE DATES:

Program	Deadline to submit an electronic application
Associate Degree in Nursing (Spring Semester Start)	October 1 st
Associate Degree in Nursing (Fall Semester Start)	June 1 st
Dental Hygiene	June 1 st
Diagnostic Medical Sonography	October 1 st
Practical Nursing	March 1 st
Radiologic Technology	October 1 st
Respiratory Care	October 1 st
Surgical Technology	March 1 st

If you would like more information about any of these programs, please contact the Program Director:

Associate Degree Nursing - Tammy Shelley, Program Director, tshelley@columbustech.edu

Dental Hygiene – Amber Brazile, Program Director, abrazile@columbustech.edu

Diagnostic Medical Sonography – Regina Ridgley, Program Director, rridgley@columbustech.edu

Practical Nursing – Angel Pike, Program Director, apike@columbustech.edu

Radiologic Technology - Kimberly Whitaker, Program Director, kwhitaker@columbustech.edu

Respiratory Care - Tikisha Virgil, Program Director, tvirgil@columbustech.edu

Surgical Technology – Carl Sandy, Program Director, csandy@columbustech.edu