

# **Diagnostic Medical Sonography Program**

#### **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).

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

### **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, as well as clinical application courses, interventional sonography, journal and case study review, and comprehensive registry reviews. The DMS program combines formal education and extensive clinical training to prepare you to function as a sonographer.

As a graduate of this accredited DMS program, the student is eligible to sit for the national certification examination 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 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 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 2.5 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 submitting the application.
  - All transcripts for courses being transferred in from other colleges must be received in the Admissions Office before the application deadline of September 15<sup>th</sup>.
  - HESI A2 exam must be completed at Columbus Technical College before the application deadline of September 15<sup>th</sup>.

#### Competitive ranking will be based on:

1. Grades from designated Prerequisite Courses (60% of ranking)

Designated course grades used for competitive ranking are indicated by an asterisk\* on program sequence sheets on CTC web page. All prerequisites must be completed at the time of program application with a grade of C or higher.

- Students will be given one opportunity to improve their grade for all prerequisite courses. The higher grade will be used for ranking. (Financial Aid may not cover additional attempts.)
- Science courses (BIOL 2113 & 2113L, BIOL 2114 & 2114L, & PHYS 1110 & 1110L) used for competitive admission cannot be more than 7 years old or the course must be re-taken.
- Any science courses more than 7 years old will not be used for competitive ranking.

#### 2. HESI A2 exam scores (40% of ranking)

Student must take the HESI A2 exam and achieve a minimum score of 70 to be considered for admission into the DMS program.

- Call 706-649-1822 (Testing Center in Library Building) for times, dates and questions regarding testing. The HESI exam must be completed before submitting an application to the program. The deadline for program application is September 15th, so please plan ahead and schedule the exam at least 2-3 weeks in advance as testing slots do fill quickly.
- The HESI A2 exam may be taken a total of two times per calendar year. The test results are only good for a two-year period.
- The HESI A2 exam is required for all competitive admission programs.
- There are several preparation options for the HESI A2 exam, including free test prep via the Columbus Technical College virtual library on Mometrix or HESI Admission Assessment Exam and Review book, 5th Edition ISBN: 9780323582261.
- 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. Please note that the Covid-19 vaccine is required by many of our clinical sites. More details about these requirements will follow after acceptance into the program.
- 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.



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

ENGL 1101, MATH 1111, BIOL 2113, BIOL 2113L, MATH 1127, PHYS 1110, PHYS 1110L,

<u>BIOL 2114</u>, <u>BIOL 2114L</u>

(<u>SEMN 1000</u>, <u>PSYC 1101</u>, & <u>HUMN XXXX</u> are not used in the ranking process, but these courses must also be completed prior to program application with exception of SEMN 1000 which may be taken during the program.)

Diagnostic Medical Sonography - Prerequisite Courses	CREDIT HOURS
SEMN 1000 First Semester Seminar	0
*ENGL 1101 Composition and Rhetoric	3
*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
*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 courses include:

\*\*ALHS 1040 - Introduction to Health Care and ALHS 1090 - Medical Terminology.

\*\*These courses are not required, but may be helpful to the student during their time in the DMS program.

### **Application Deadline**

Applications will be accepted <u>online</u> at www.columbustech.edu between <u>September 1<sup>st</sup> - September 15th</u> for Spring semester admission. All prerequisite courses and HESI A2 exams must be completed by the time of application and all transcripts from courses being transferred in from other colleges must be received in the Admissions Office before the application deadline of September 15<sup>th</sup>.



### **Program Considerations**

- DMS courses are generally offered from 8:00am 5:00pm, Monday–Friday, during any given semester (times/days can change for the needs of the program)
- Attending the program is equivalent to working a full-time job.
- 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 \$725.00, must be paid in increments throughout the program) See <u>www.ardms.org</u> for more info.
- We often assist graduates with employment opportunities as they come available in the area; however, we do not guarantee job placement (Approximately 86-100% of past graduating classes are gainfully employed either full-time, part-time, or PRN within the first six (6) months post-graduation.)

Graduation Year	Students Accepted	Academic Attrition	Non-Academic Attrition (Voluntary Withdrawal)	Graduates	Retention Rate
2021	10	0	0	10	100%
2020	11	1	0	10	91%
2019	12	0	1	11	92%
2018	10	1	0	9	90%
2017	10	1	0	9	90%

#### **Program Completion Rates**

#### **Job Placement Rates**

Graduation Year	# of Graduates	Pursuing further degree	Not pursuing career in sonography	Total # Positive Placement	<b>Positive Job Placement Rate</b> (within 6 months of graduation)
2021	10	0	0	10	100%
2020	10	0	0	10	100%
2019	11	0	1	11	100%
2018	9	0	1	8	89%
2017	9	1	0	8	89%

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## **Credentialing Examination Pass Rates**

## (American Registry for Diagnostic Medical Sonography)

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Grad. Year	s Firs	ARDMS SPI Exam rst Attempt Pass Rate		ARDMS Abdomen Exam First Attempt Pass Rate			ARD OB/0 First At Pass	GYN tempt
	CTC Rate	National Average		CTC Rate	National Average		CTC Rate	National Average
2021	90%	Not available		100%	Not available		100%	Not available
2020	82%	76%		90%	74%		100%	84%
2019	91%	73%		100%	79%		100%	81%
2018	90%	73%		89%	83%		89%	79%
2017	100%	75%		100%	84%		100%	79%

Graduation Year	# of Graduates	Percentage of graduates ARDMS registered in one or more specialties (ABD and/or OBGYN) within 12 months of graduation
2021	10	100%
2020	10	100%
2019	11	100%
2018	9	89%
2017	9	100%



# **Estimated Student Expenses**

Diagnostic Medical Sonography Background Check Medical Physical Immunizations Flu Shots CPR (BLS for Healthcare Providers) Uniforms and Accessories Graduation Fee ARDMS SPI Exam ARDMS SPI Exam ARDMS Specialty Exams (\$250 x 2) Required Textbooks ACEMAPP Clinical Fees DMSO Course Lab Fees (8 courses)		Expenses \$60.00 \$100.00 \$130.00 \$40.00 \$65.00 \$175.00 \$40.00 \$225.00 \$500.00 \$1220.00 \$100.00 \$275.00	*Estimated expenses are subject to change without notice ARDMS Exams must be taken and paid for DURING the DMS program
Student Liability Insurance		\$35.00	
Student Clinical Software Fees		\$150.00	
Prerequisite Courses Tuition/Fees per Semester (In-State)			
First Semester	\$1621.00		
Second Semester	\$1721.00		
HESI Exam Fee	\$73.00		
DMS Program Tuition/Fees per Semester (In-State)			
Third Semester (Spring-I)	\$1621.00		
Fourth Semester (Summer)	\$1521.00		
Fifth Semester (Fall)	\$1721.00		
Sixth Semester (Spring-II)	\$1521.00		
TOTAL ESTIMATED COST:		<b>\$12,914.00</b>	



First Semester Pre-Occupational Classes	CREDIT HOURS
SEMN 1000 First Semester Seminar	0
ENGL 1101 Composition and Rhetoric	3
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
Second Semester Pre -Occupational Classes	Credit Hours
HUMN XXXX Humanities/ Fine Arts Elective	3
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
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	<mark>51</mark>
Total Program Hours	78