



# Diagnostic Medical Sonography (DMS)



Mrs. April Sutherland, Program Director  
256.352.83188  
April.sutherland@wallacestate.edu

## Associate in Applied Science Degree (6 semesters)

### At a Glance

Sonography (ultrasound) is a dynamic profession that has grown significantly over the past several years. Sonography is a diagnostic medical procedure that uses high frequency sound waves (ultrasound) to produce images of organs, tissues, or blood flow inside the body. This type of procedure is often referred to as a sonogram or ultrasound scan.

Sonography can be used to examine many parts of the body, such as the abdomen, breasts, female reproductive system, prostate, heart, and blood vessels. It is also used to guide fine-needle tissue biopsy to assist in taking a sample of cells from an organ for lab testing (for example, a test for breast cancer). Unlike x-ray, there is no ionizing radiation used to perform a sonogram.

With rapidly developing technologies and increased use of diagnostic sonographic procedures, growth in this profession is projected to continue in the future with employment opportunities for qualified sonographers in a variety of settings nationwide. Sonographers can choose to work in clinics, hospitals, private practice physician offices, public health facilities, laboratories, and other medical settings performing examinations in their areas of specialization.

### Program Description

Purpose and Goal of General Option: To prepare competent entry-level general sonographers in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains.

Purpose and Goal of Cardiovascular Option: To prepare competent entry-level cardiac and vascular sonographers in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains.

The Associate in Applied Science degree awarded at program completion is a six-semester, competency-based curriculum that includes practical experience in regional health institutions. The sonography program general pathway at Wallace State Community College is accredited by the Commission on Accreditation of Allied Health Education Programs ([www.caahep.org](http://www.caahep.org)) upon the recommendation of the Joint Review Committee on Education in Diagnostic Medical Sonography. Upon admission of our first class, initial accreditation will be sought for the cardiovascular pathway. By attending a program accredited by CAAHEP, you will be

able to apply to take the national certification examinations offered by the ARDMS/ARRT upon graduation from the program. By successfully completing the certification exams, you will be awarded the credential RDMS, RT(R), RDCS, RVT, RCS, and/or RVS.

### Admission Requirements

1. Unconditional admission to the college – College application must be submitted by the program application deadline of June 1.
2. Student must be in good standing with the college.
3. Receipt of complete program applications accepted between March 1 and June 1 for fall entry. Applications received after the deadline will be considered on a space available basis.
4. The online application is located at [www.wallacestate.edu](http://www.wallacestate.edu). Online application instructions are under the *Application to Program* tab. Upon completion of the online application, all applicants are required to submit a Verification Sheet with all necessary documentation attached. The Verification Sheet, along with full instructions, can be found on Page 3 of the Online Application Instructions.
5. Official transcripts from each college attended must be provided to the Admissions Office and all unofficial transcripts must be attached to the program application Verification Sheet and submitted by the deadline of June 1.
6. Student must meet the essential functions and technical standards required for the program as documented on the required WSCC physical form at [www.wallacestate.edu](http://www.wallacestate.edu)-see Physical Form Essential Functions.
7. A minimum of **19** ACT composite score (National or Residual) is required for admission consideration. Proof of score must be submitted with the application Verification Sheet.
8. Documented evidence of a minimum of four (4) hours of observation in an ultrasound department with a **registered sonographer**.
9. Proof of active/current AHA Approved CPR certification for **Healthcare Providers** (or BLS) must also be provided with the application (cognitive hands-on – Online CPR courses not accepted).
10. Attain a minimum GPA of 2.5 or greater on a 4.0 scale with a grade of “C” or better on all general required pre-

sonography courses. GPA calculated for program selection will be on the general required pre-sonography courses only. Math/Sciences courses (MTH 100, BIO 201, physics) must have been completed within **seven** years of the date of expected entry into the DMS program.

11. Candidates must be able to meet all Technical Standards required of the program. Those Standards are as follows:
  - a. Lift more than 50 pounds routinely
  - b. Push and pull routinely
  - c. Bend and stoop routinely
  - d. Have full use of both hands, wrists, and shoulders
  - e. Distinguish audible sounds
  - f. Adequately view sonograms, including color distinctions
  - g. Work standing on their feet 80% of the time
  - h. Interact compassionately and effectively with the sick or injured
  - i. Assist patients on and off examining tables
  - j. Communicate effectively with patients and other health care professionals
  - k. Organize and accurately perform the individual steps in a task in the proper sequence

#### **Selection and Notification**

1. The DMS Program admits a beginning class annually fall semester.
2. ALL courses must be complete prior to application deadline of June 1. The only exception is the physics course. It can be completed in the summer prior to admission to the program. Those that have it completed by the application deadline will receive 0.5 points added to their ranking score.
3. Applicants that are registered sonographers and applying for reentry, will receive 2 points added to their ranking score.
4. Candidates are ranked for admission on the basis of ACT scores, weighted GPA of pre-sonography courses (GPA x 9) and completion of admission requirements. In the case of a tie of ranking score, in order to fill our 50 slots (30 general, 20 cardiovascular), the following tie breaker will be used in this order to determine acceptance into the program: Completion of classes, GPA, ACT Composite, ACT Math, ACT Science Reasoning.
5. Program applications will be reviewed for completion of program admission requirements. Written notification of program acceptance status will be mailed to each applicant at the address given on the application.
6. Following acceptance into the program, students must respond confirming their intent to enroll by using the internet link or QR code provided on their letter, by the deadline indicated on the letter. A student who fails to respond will forfeit his/her place in the class.

#### **Program Expectations**

Students admitted into the Diagnostic Medical Sonography

are expected to comply with the Health Science Program Regulations and Expectations as published in the Programs of Study section of the Wallace State College Catalog.

#### **Required Competencies**

Clinical competencies (patient care and interaction, performance of cardiovascular, abdominal, superficial structures, obstetrical and gynecologic sonograms).

#### **Upon Admission**

1. Sonography students are required to submit a completed program physical examination form, including proof of having completed 2 of 3 Hepatitis B vaccinations and proof of immunization or vaccinations for the diseases listed on the form by the deadline noted on their program acceptance letter.
2. Sonography students must maintain current CPR certification. The appropriate certification is for **"Healthcare Providers"** (or BLS).
3. Accident and liability insurance, available through the College, is required. This will be covered through your fees.
4. Sonography students are required to undergo Background Screening and Drug Testing according to WSCC Health Science Division policy.
5. Medical insurance is required of all students in the program in order to attend clinicals. This is NOT provided through the school.

#### **Progression**

Students selected for admission into the program must maintain a grade of 75% or higher on major required courses. Failure to do so will result in program dismissal.

#### **Readmission**

Students who withdraw or are dismissed from the program must apply for re-admission. No preferential consideration is given to prior students for re-admission. Students will be readmitted ONE time only.

#### **Career Path**

Before or upon completion of the program, sonography students should take registries and become registered sonographers. Many sonographers opt to advance their career horizons by seeking expertise in other sonographic specialties. There are several areas of specialization in the field of sonography. For additional information concerning a career in sonography go to [www.sdms.org](http://www.sdms.org).

Additional career advancement opportunities exist in education, administration, research, and in commercial companies as education/application specialists, sales representatives, technical advisors, etc. National median annual earnings of Diagnostic Medical Sonographers were \$73,133 according to the SDMS Sonographer Salary & Benefits Survey (2018). Program courses have been accepted for transfer to Athens State and the University of Alabama at Birmingham for the Bachelor Degree in Health Science. Please

consult STARS transfer guide for the latest information.

**NOTE:** *The Guided Pathways Curricular Maps below contain all the elements required for degree/certificate completion. However, courses may be offered or taken in other semesters so long as prerequisites are met. Additional options for elective courses are available. Please see DegreeWorks for allowable substitutions. Courses may be available days, nights, hybrid, and online. Sample maps for part-time attendance may also be available. Please see an advisor.*

**ASSOCIATE DEGREE:**

**OPTION I – DIAGNOSTIC MEDICAL SONOGRAPHY: GENERAL (Abdomen & OB/Gyn) – Guided Pathway/Map**

**General Required Courses**

ORI 110	Freshman Seminar	1
ENG 101	English Composition I	3
ART 100	Art Appreciation	3
MTH 100	Intermediate College Algebra	3
BIO 201*	Anatomy and Physiology I	4
PHY 115**	Technical Physics	4
PSY 200	General Psychology	3
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Total General Required Courses		21

**1st Semester**

DMS 216	Sonographic Principles and Instrumentation I	3
DMS 229	Sonography Preceptorship I	2
DMS 202	Foundations of Sonography	3
DMS 204	Sectional Anatomy	2
DMS 205	Abdominal Sonography	4
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Total Semester Credit Hours		14

**2nd Semester**

DMS 207	Abdominal Pathology	3
DMS 217	Sonographic Principles and Instrumentation II	2
DMS 220	Obstetrical Sonography I	3
DMS 206	Gynecologic Sonography	4
DMS 230	Sonography Preceptorship II	3
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Total Semester Credit Hours		15

**3rd Semester**

DMS 240	Sonography Seminar I	2
DMS 231	Sonography Preceptorship III	4
DMS 225	Superficial Parts	1
DMS 221	Obstetrical Sonography II	3
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Total Semester Credit Hours		10

**4th Semester**

DMS 245	Sonography Case Presentation	1
DMS 241	Sonography Seminar II	3
DMS 232	Sonography Preceptorship IV	5
DMS 250	Introduction to Advanced Sonogra	3
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Total Semester Credit Hours		12
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<b>TOTAL CREDIT HOURS</b>		<b>72</b>

**OPTION II – DIAGNOSTIC MEDICAL SONOGRAPHY: CARDIOVASCULAR – Guided Pathway/Map**

**General Required Courses**

ORI 110	Freshman Seminar	1
ENG 101	English Composition I	3
ART 100	Art Appreciation	3
MTH 100	Intermediate College Algebra	3
BIO 201*	Anatomy and Physiology I	4
PHY 115**	Technical Physics	4
PSY 200	General Psychology	3
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Total General Required Courses		21

**1st Semester**

DMS 216	Sonographic Principles and Instrumentation I	3
DMS 229	Sonography Preceptorship I	2
DMS 202	Foundations of Sonography	3
DMS 204	Sectional Anatomy	2
DMS 233	Sonography Lab I	1
DMS 271	Echocardiographic Technology	3
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Total Semester Credit Hours		14

**2nd Semester**

DMS 217	Sonographic Principles and Instrumentation II	2
DMS 230	Sonography Preceptorship II	3
DMS 234	Sonography Lab II	1
DMS 261	Vascular Sonography Techniques	3
DMS 273	Echocardiographic Pathology	3
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Total Semester Credit Hours		12

**3rd Semester**

DMS 240	Sonography Seminar I	2
DMS 231	Sonography Preceptorship III	4
DMS 235	Sonography Lab III	1
DMS 263	Vascular Pathology	3
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Total Semester Credit Hours		10

**4th Semester**

DMS 245	Sonography Case Presentation	1
DMS 241	Sonography Seminar II	3
DMS 232	Sonography Preceptorship IV	5
DMS 275	Advanced Echocardiographic Mod3	3
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Total Semester Credit Hours		12

**TOTAL CREDIT HOURS 69**

*\*Biology 103 is a prerequisite to this course. This is a college requirement not a program requirement.*

*\*\* If the student has a Radiographic Physics (3 or 4 credit), PHY 112, or other physics course that has been taken, this may possibly substitute for PHY 115 with staff approval as long as it was taken within 7 years of admittance into the program.*