



Cardiac Sonography – Associate in Applied Science (CSON.AAS)

A cardiac sonographer (echocardiographer) is the allied health professional who, after an extensive and comprehensive educational process, is qualified to perform an echocardiogram (ultrasound of the heart). The primary role of the cardiac sonographer is to obtain diagnostic recordings and measurements from the ultrasound image of the heart, including hemodynamic information. This individual assumes great responsibility for the performance of this exam. The techniques for obtaining the required images and recordings require great skill. A thorough understanding of cardiac anatomy, physiology, hemodynamics and pathophysiology is required.

The cardiac sonography program is an online program accredited by the Commission for Accreditation of Allied Health Education Programs (CAAHEP) in the United States. It is a program leading to an Associate in Applied Science degree. The curriculum consists of integrated didactic and clinical coursework with a minimum of 1,136 supervised clinical hours with an approved clinical education affiliate. This program is designed to prepare the student for employment as a cardiac sonographer with positions located in hospitals, medical clinics, and other diagnostic imaging facilities. Upon successful completion, students are eligible to apply to the ARDMS (American Registry for Diagnostic Medical Sonographers) for board examinations that will award them the RDCS (Registered Diagnostic Cardiac Sonographer) credential.

There are special admission requirements to the sonography programs, and it is the student's responsibility to understand the requirements and adhere to them. Entry into a program is competitive and based on a "point system." Point values are based on grades earned in prerequisite coursework and the interview process.

Applications are processed according to the following:

- Applications must be received by the Allied Health Office by August 15.

- Questionnaires will be mailed to eligible applicants.
- Completed questionnaires must be returned by the stated due date.
- Diagnostic Medical Sonography Admission Committee conducts interviews.
- Students are notified by mail of application/interview results.
- Accepted students begin winter semester.

General education prerequisites and related requirement courses must be completed before admission to the program.

Minimum credits: 73

Minimum cumulative GPA: 2.0

Minimum grade in all courses: 2.0

Minimum grade in BIO 132 or BIO 253/254, HOC 130 and MOA 120: 3.0

Minimum Jackson College credits: 33

GENERAL EDUCATION REQUIREMENTS (21-29 CREDITS)

GEO 1: Write clearly, concisely and intelligibly (3 credits)

Choose one of the following:

ENG 131 Writing Experience I

ENG 132 Writing Experience II

GEO 2: Recognize the importance of equity and inclusion in a diverse society (3 credits)

Choose one of the following:

COM 250 Intercultural Communication

GEO 3: Demonstrate computational skills and mathematical reasoning (4 credits)

Take the following:

MAT 130 Quantitative Reasoning (or higher)



**GEO 4: Demonstrate scientific reasoning
(4-8 credits)**

Choose one of the following:

- BIO 132 Human Biology OR
- BIO 253 Human Anatomy and Physiology I AND
- BIO 254 Human Anatomy and Physiology II

**GEO 5: Understand human behavior and social systems, and the principles which govern them
(4 credits)**

Take the following:

- PSY 140 Introduction to Psychology

GEO 6: Understand aesthetic experience and artistic creativity (3 credits)

Choose one of the following:

- HUM 131 Cultural Connections
- ENG 249 African-American Literature

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**CARDIAC SONOGRAPHY RELATED
REQUIREMENTS (14 CREDITS)**

Take the following:

- DMS 100 Introduction to Diagnostic Imaging
- DMS 104 Intro to Sonographic Instrumentation
- HOC 130 Introduction to Health Occupations
- MOA 120 Medical Terminology
- PHY 145 Introduction to Basic Physics

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**CARDIAC SONOGRAPHY CORE
REQUIREMENTS (38 CREDITS)**

Take the following:

- DMS 140 Sonographic Orientation & Technique
- DMS 141 Adult Echo I
- DMS 142 Echo Clinical I
- DMS 144 Cardiovascular Principles
- DMS 148 Echo Clinical II
- DMS 196 Introduction to Clinical
- DMS 206 Sonographic Instrumentation
- DMS 240 Adult Echo II
- DMS 244 Echo Clinical III