

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 or CCI (Cardiovascular Credentialing International) for the board exam that will award them the RCS (Registered 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 September 15.
- Diagnostic Medical Sonography Admission Committee conducts interviews.
- Students are notified by e-mail of admission status.
- Accepted students begin spring semester.

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

Minimum credits: 66

Minimum cumulative GPA: 2.0

Minimum grade in all courses: 2.0

Minimum grade in BIO 132 or BIO 253/254 2.5 , 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 effective communication in a dynamic and changing 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: Identify artistic, linguistic, and theoretical perspectives across the human experience (3 credits)**

Choose one of the following:

ART 111 Art History: Prehistoric to 1400

ART 112 Art History: Renaissance to Present

ENG 210 Film in Literature

ENG 246 Short Story & Novel

ENG 247 Poetry & Drama

ENG 249 African-American Literature

ENG 252 Shakespeare

ENG 254 Children's Literature

ENG 255 American Literature – 19th Century

ENG 256 American Literature – 20th Century

ENG 261 Creative Writing

FRN	131	Elementary French I
GER	131	Elementary German I
HUM	131	Cultural Connections
MUS	130	Music of Non-Western Cultures
MUS	131	Understanding Music
MUS	132	History of American Popular Music
MUS	151	Music Theory I
MUS	152	Music Theory II
PHL	231	Introduction to Philosophy
PHL	243	World Religions
SPN	131	Elementary Spanish I
SPN	132	Elementary Spanish II
SPN	231	Intermediate Spanish I
SPN	232	Intermediate Spanish II
THR	116	Introduction to Theatre
WRL	102	Portuguese Conversation I
WRL	103	Portuguese Conversation II
WRL	104	Mandarin I
WRL	105	Mandarin II

CARDIAC SONOGRAPHY RELATED REQUIREMENTS (14 CREDITS)

Take the following:

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

CARDIAC SONOGRAPHY CORE REQUIREMENTS (31 CREDITS)

Take the following:

DMS	140	Sonographic Orientation & Technique
DMS	141	Adult Echo I
DMS	142	Echo Clinical I
DMS	144	Cardiovascular Principles
DMS	146	Echo Clinical II
DMS	196	Introduction to Clinical
DMS	206	Sonographic Instrumentation
DMS	240	Adult Echo II
DMS	246	Echo Clinical III