

ULTRASOUND TECHNOLOGY

What is Ultrasound Technology?

Ultrasound, also referred to as sonography, is utilized primarily in hospitals, clinics, doctor's offices and community health centers. Sonography uses sound to "see", by using special equipment to direct high-frequency sound waves towards a particular part of the body. Many sonographers will specialize in specific areas of the body; obstetrics/gynecology, abdomen, heart, or the circulatory system. Initially, our program will be focusing on obstetrics/gynecology, abdomen, and small parts.

College Degree Offered:

Ultrasound Technology: Certificate of Applied Science

Individuals interested in this program must be a graduate of a medical program and currently licensed, registered or certified in an approved medical profession.

What you will learn:

- Perform sonography in a manner safe to the patient, other health team members, and self within the professional scope of practice
- Adapt ultrasound scanning and image acquisition skills to various body habitus, age, gender, and health status
- Adapt ultrasound techniques to various pathological conditions
- Critique ultrasound images for accuracy of scanning and technique to meet the satisfaction of the radiologist and/or interpreting provider
- Collaborate with the members of the health team
- Adapt ultrasound techniques to accommodate different machines and/or equipment
- Practice within the profession's ethical and legal boundaries to meet the needs of the patient and healthcare community

Prospective Employers:

- Hospital
- Clinics
- Physician's Offices
- Mobile Services
- Other Specialized Medical Facilities

Certifications preparing for:

Upon successful completion of this certificate and some additional clinical hours, you will be prepared in your area of clinical study to sit for the American Registry of Diagnostic Medical Sonographers (ARDMS) and/or the American Registry of Radiologic Technologists Sonography (ARRT) (S) examination.

Job Outlook and Pay: Sonographer

Median Wage (MT)* \$70,950 yearly
 \$34.11 per hour

Median Wage (US)* \$69,650 yearly
 \$33.49 per hour

*Bureau of Labor Statistics, Office of Employment Projections; MT Dept. of Labor and Industry, Research and Analysis Bureau (projections through MT 2024/ US 2024)

**For more information visit <http://www.careerinfonet.org/Occupations>.

Program Delivery

The didactic (lecture) and laboratory classes will be completed online and via hybrid learning. The program is currently anticipating having students physically on the the City College campus 1 weekend in both the fall and spring terms and 1 week (5 days) in the summer term. These are subject to change per the discretion of the Ultrasound department. The clinical internship portion of the program will be completed at hospitals and/or other clinical facilities that have an approved and current affiliation agreement.^{08/14}

Ultrasound Technology

***The required prerequisite courses listed below may have already been completed in previous health science studies, and if so, may be transferred in, or if not, they must be completed before entry into the Ultrasound core CAS Program.**

<u>Pre-Requisite Courses:</u>	Credits
AHMS 144 - Medical Terminology	3 Credits
COMX 106 Com in a Dynamic Workplace	3 Credits
MATH 111 Technical Mathematics.....	3 Credits
CAPP 120 Intro to Computers.....	3 Credits
WRIT104 Workplace Communications	3 credits
Total.....	15 Credits

Individuals must go through the Ultrasound Technology application process and be accepted before starting the core courses in the fall term.

<u>CORE COURSES:</u>	
US 100 - Intro to Ultrasound Imaging.....	3 Credits
US 101 – Instrumentation	3 Credits
US 102 - Abdomen.....	3 Credits
US 103 - Obstetrics/Gynecology.....	3 Credits
US 104- Clinical Experience I.....	4 Credits
US 105- Clinical Experience II.....	4 Credits
US 106- Cross Sectional Anatomy..	3 Credits
US 107- Ultrasound Physics.....	3 Credits
US 108-Clinical Experience III.....	4 Credits
Total.....	30 Credits

Total Credits Required.45 Credits

Suggested Plan of Study	
<u>*Completion of all prerequisite classes</u>	
AHMS 144.....	3
COMX 106	3
MATH 111.....	3
CAPP 120.....	3
WRIT 104.....	3
Total.....	15

First Semester Credits	
US 100.....	3
US 101	3
US 102.....	3
US 104.....	4
Total	13

Second Semester Credits	
US 103	3
US 105	4
US 106.....	3
Total	10

Third Semester Credits	
US 107.....	3
US 108.....	4
Total.....	7