

Technical Standards

All students in the diagnostic medical sonography program must possess the intellectual ability to learn, integrate, analyze, and synthesize data. They must have functional use of the senses of vision, hearing, and equilibrium. Students must have motor function capabilities to meet the demands of diagnostic medical sonography education and the demands of patient care.

The diagnostic medical sonography student must possess the following capabilities and skills listed below:

- **Observation skills**
 - The ability to observe is required for demonstrations, visual presentations in lectures and laboratories, laboratory evidence and microbiological cultures, microscopic studies of microorganisms and tissue in normal and pathologic states.
 - The ability to discriminate among blacks, grays, and whites, and various color combinations that indicate blood flow on both display devices and recorded images (film and paper) is required for scan interpretation.
 - A student must be able to observe patients accurately and completely, both at a distance and closely.
- **Communication skills**
 - Students must be able to communicate effectively via speech, reading, and writing.
 - Students should be able to hear and observe clinical staff and patients in order to elicit information, perceive nonverbal communications, describe changes in mood, activity and posture, and recognize and respond to an emergency or urgent situation.
 - In addition to patient and clinical staff communication, students must be able to communicate orally and in writing with physicians and other health care professionals.
- **Motor skills**
 - Students should possess the ability for gross and fine motor function, manual dexterity, and physical strength to:
 - Apply general care and emergency treatment to patients
 - Help lift patients who may be unable to move themselves from wheelchairs or beds to the examination table and vice versa (up to 10-25 patients per day)
 - Lift and move objects (50 pounds or more routinely)
 - Manipulate (including pushing and pulling) ultrasound equipment, computers, and peripherals
 - Distinguish audible sounds: Adequately view sonograms, including color distinctions

- Work standing on his/her feet 80 percent of the time: Have full use of both hands, wrists and shoulders involving the coordination of muscular movements, equilibrium, and sensation.
- **Intellectual skills**
 - Conceptual, integrative, and quantitative abilities are required. Problem solving is a critical skill demanded of sonographers and this requires all these abilities.
 - Students must also be able to comprehend multi-dimensional relationships and the spatial relationships of anatomic structures.
- **Behavioral and Social Attributes**
 - Students must be emotionally healthy.
 - Students must be able to use their intellectual ability and exercise good judgment, to complete all responsibilities attendant to obtaining quality ultrasound studies and providing care to patients.
 - Students must be able to develop mature, sensitive, and effective relationships with patients and colleagues.
 - Students must be able to tolerate physical and emotional stress and continue to function effectively.
 - Students must possess qualities of adaptability, flexibility, and be able to function in the face of uncertainty.
 - Students must accept constructive feedback/criticism from others and implement changes pertaining to the feedback provided.
 - Students must have a high level of compassion for others, motivation to serve, integrity, and a consciousness of social values.
 - Students must possess sufficient interpersonal skills to interact positively with people from all levels of society, and all ethnic and religious backgrounds.

The Diagnostic Medical Sonography Program encourages individuals with disabilities to apply. Individuals who may not meet one or more of the expectations presented in the Technical Standards are encouraged to communicate with the Program Director for further information. Moreover, the individual will be evaluated by the RIT Admissions Office and the Program Director to determine if reasonable accommodations can be made to ensure successful program requirement completion.