

# Cardiovascular Technology Program Technical Standards

## Cardiovascular Technologist:

A health care professional that possesses the knowledge and skills to utilize diagnostic level x-radiation or ultrasound and the associated instrumentation; to produce or assist in the production of medical images of the cardiovascular systems. The cardiovascular technologist will also provide basic nursing and medical care and assists with emergency patient treatment, as indicated.

## MAJOR TASKS OF JOB PERFORMANCE & CLINICAL EDUCATION

1. Communicate with patients and others team members in completion of tasks.
2. Retrieve & dispatch patients within a Cardiovascular department/ hospital or clinic.
3. Provide for the patient's physical safety and well-being while he/she is under the technologist's care.
4. Provide basic and ACLS life support services, as needed.
5. Secure and assist with advanced life support services, when indicated.
6. Assist with patient movement & perform direct positioning for procedures.
7. Retrieve, manipulate, and operate radiographic and ultrasonic equipment for patient imaging.
8. Prepare and use procedural materials such as: sterile (medical) trays & drugs, instruments, contrast media, linens, and other patient care items.
9. Process and retrieve diagnostic images, hemodynamics and records.
10. Interpret diagnostic images, hemodynamics and records.
11. Evaluate imaging products for technical accuracy and procedural determinations.
12. Coordinate the provision of fluoroscopic and contrast media examinations, and provide physician assistance, as necessary.
13. Perform surgical &/ or bedside imaging, and operate related instrumentation.
14. Work with various equipment used by the program and its affiliates.
15. Perform basic equipment testing and maintenance.
16. Receive and schedule patients, file, and assist with office & clerical work.
17. Perform cath lab or echocardiography tasks for an eight – ten hour shift, as assigned for full time curriculum.

COMPLIANCE WITH TECHNICAL STANDARDS

*Technical Standards required for successful completion of the program and relevant examples are below.*

Each applicant is asked to review these standards and to inform the program director if he or she will need accommodation with any of the tasks or capabilities listed. Any applicant or student who is considered, in the judgment of the program faculty, in conjunction with the disabilities office, to be unable to meet the technical standards of the program, must show verification of compliance with the below standards to be considered for admittance and/or continuation in the program.

Technical Standard	Explanation	Examples
Critical Thinking	Critical thinking sufficient for clinical judgment.	Handle multiple priorities in stressful situations. Make accurate independent decisions. Concentrate and focus attention for prolonged periods of time to attain precise testing results. Ability to work alone; as well as a member of a team. Apply reasoning and evaluation skills necessary in the safe technical performance of cardiovascular procedures.
Interpersonal	Interpersonal abilities sufficient to interact with individuals, families and groups from a variety of social, emotional, cultural and intellectual backgrounds.	Display patience, empathy and concern for others. Deal with fear and hostility in a calm manner. Demonstrate a high degree of patience. Work with other health care providers in stressful life/death situations.
Communication	Communication abilities sufficient for interaction with others in verbal and written form while completing the duties of the job.	Communicate needs in a prompt, clear and concise manner. Accurately document pertinent patient information and data. Understand and follow verbal and/or written instructions and orders. Interact with patients and other health care providers in a professional manner.
Mobility	Physical abilities sufficient to move independently from room to room and through hallways; maneuver in small places. Physical abilities to mobilize patients and manipulate imaging equipment.	Respond promptly to patient's needs, manipulate equipment, lift a minimum of 30lbs, exert a sustained force of 20lbs, push/pull mobile equipment weighing up to 300lbs; participate as a team member of four in moving a 150 pound incapacitated patient; ensure patient safety; stand for prolonged periods of time (sometimes wearing a 12-20lb lead apron underneath gown); walking equivalent of 5 miles per day; sit for periods of 1 hour.

Tactile and Motor Skills	Gross and fine motor abilities sufficient to safely and effectively perform cardiovascular technology skills and studies.	Ability to grasp, hold, grip, seize, turn or otherwise manipulate work with hands. Work with fingers to manipulate switches, dials and other computer equipment. Input data into computer. Perceive attributes of an object via touch. Palpate.
Hearing	Auditory ability sufficient to monitor and assess health needs.	Communicate verbally with patients and other health care providers. Detect and evaluate the sounds of cardiac monitors, stethoscopes, Doppler, IV pumps, fire alarms, etc..
Visual	Visual ability sufficient for physical observation.	Observe and monitor patients. Perceive attributes of patient and patient images via sight.

PHYSICAL DISABILITIES THAT ARE SUGGESTED PROBLEM AREAS

EXCLUSIVE:

1. Blind (i.e. no sight)
2. Limbless
3. Total absence of upper extremities
4. Confined to stretcher.

MARGINAL:

1. Total deafness, when unable to lip read
2. Bilateral above the elbow amputee
3. Bilateral above the knee amputee
4. Lack of one total upper extremity
5. Confined to a wheelchair
6. Necessity for walking assistance
7. Torso height at or below 36 inches above the floor level
8. Motor dysfunction sufficient to significantly hinder dexterity and/or task performance
9. Color Blindness

**DISABILITY SERVICES:**

Students who have a disability or have inquiries regarding the nondiscrimination policies are encouraged to notify Lisa Richardson, Section 504 and Title IX Coordinator (Building 100/Room 323) at 678-226-6691 or [lrichardson@gwinnettech.edu](mailto:lrichardson@gwinnettech.edu). Juan Wilson, (Alpharetta-North Fulton, Building A/Room 162), Coordinator, Support Services, 470-282-5453 or [jwilson@gwinnettech.edu](mailto:jwilson@gwinnettech.edu).