

TECHNICAL/ACADEMIC STANDARDS

The Cardiovascular Technology Program complies with the 1990 Americans with Disabilities Act (ADA). Any student requiring special accommodations or classroom modifications should see the Program Office for Students with Disabilities at Edison State College.

Cardiovascular Technology at the Associate level involves the provision of direct care for individuals and is characterized by the application of knowledge in the skillful performance of patient care functions in the cardiac cath lab. Therefore, in order to successfully complete the clinical and laboratory requirements, all students must possess certain characteristics. The purpose of this section is to provide the student/applicant an understanding of the physical demands and communication skills required for the program based on tasks performed by Cardiovascular Technologists working in the field.

The common work environment for a Cardiovascular Technologist and for a student studying for the same profession would include the following:

1. Constant contact and communication with patients, the public and other members of the healthcare team.
2. Making decisions on patient care based on assessment of the patient.
3. Moving and manipulating heavy equipment and patients.
4. Frequent and timely operation of computers and telephones.
5. Moving patients for such activities as moving a patient in a stretcher or wheel chair, and assisting in the lifting of patients, for example, moving a patient in the bed or moving from a stretcher to a bed or the cath lab patient table.
6. Exposure to pathogens through bodily fluids, secretions, mucous, and blood.
7. Exposure to ionizing radiation in the cath lab. This requires the student to wear lead shielding and radiation monitoring badges. The lead shielding can weigh up to 20 pounds.

An applicant/student must possess:

1. Sufficient visual acuity such as is needed in the accurate preparation and administration of medications, for the observation required for patient assessment including visualizing patient monitors, response to therapy and care, and to assist the MD in handling very small needles, guidewires and other equipment. .
2. Sufficient auditory perception to receive verbal communication from patients and members of the health care team who often are wearing face masks and to assess health needs of patients through the use of monitoring devices such as cardiac monitors, various alarms, stethoscopes, fire alarms, life support equipment, etc.
3. Sufficient gross and fine motor coordination to respond promptly and implement the skills, including the manipulation of tools and equipment required in meeting health care needs.
4. Sufficient communication skills (speech, reading, writing) to interact with individuals and communicate their needs promptly and effectively as may be necessary in the individuals' interest.
5. Sufficient intellectual and emotional function to plan and implement care for individuals.

THE NEXT PAGES CONTAIN A TABLE THAT LISTS THE TECHNICAL/ACADEMIC STANDARDS FOR THE PROGRAM

Please read, complete and sign the form at the end of the table.

STANDARD	ISSUES	EXAMPLES OF NECESSARY ACTIVITIES
Critical thinking ability sufficient for clinical judgment.	Critical thinking	Assess and react to patients' medical, physical, hemodynamic and emotional status as diagnostic and therapeutic procedures are performed.
Problem solving to make adjustments in therapy based on normal and abnormal physical, medical and emotional responses to therapy.	Problem solving	After assessment, adjust treatment appropriately to conditions.
Interpersonal abilities sufficient to appropriately interact with individuals, families, and groups from a variety of social, emotional, cultural, and intellectual backgrounds.	Interpersonal	Establish and maintain support relationships with patients, visitors, and other healthcare providers.
Communication abilities sufficient for appropriate interactions with others in verbal and written form.	Communication	Explain procedures, give directions, answer questions while performing procedures; communicate effectively with physicians, patients, visitors, and other healthcare professionals.
Physical abilities sufficient to maneuver in small areas and to maneuver equipment.	Mobility	Move around patients' rooms and work areas with equipment. Administer CPR. Wearing heavy lead protective shielding for long periods of time while standing, bending, reaching, twisting and walking. Transporting patients in wheel chairs or stretchers.

STANDARD	ISSUES	EXAMPLES OF NECESSARY ACTIVITIES
Gross and fine motor abilities sufficient to perform patient care procedures safely and efficiently.	Motor skills	Manipulate equipment to control and adjust machines/equipment, turn panels and knob controls; position patient and equipment; assist patients from wheelchairs and stretchers. Must have good hand/eye coordination for cardiac catheterization procedures.
Auditory ability sufficient to monitor and assess health needs.	Hearing	Hear monitor alarms; equipment audible signals, voices under protective garb; calls for help.
Visual ability sufficient for observation, assessment and implementation of patient care and monitoring procedures.	Visual	Observe patient response; read orders; read computer screens; read control panels and patient ECG and hemodynamic monitors. Distinguish between shades of gray on angiographic images.
Tactile ability sufficient for assessment of physical health conditions.	Tactile	Perform palpation, percussion, and chest assessment; check patient pulses.
Olfactory senses sufficient for maintaining environmental and patient safety.	Smell	Distinguish smells which are contributory to assessing and/or maintaining patient's health status, eg smell fire.
Ability to present professional appearance and implement measures to maintain own health.	Self-care	Implement standard precautions; follow established procedures for body hygiene.

STANDARD**ISSUES****EXAMPLES OF
NECESSARY ACTIVITIES**

Deal effectively with stress produced by work and interpersonal interaction situations.

Temperament

Perform procedures on patients in pain or in distress.
Maintain professional composure under stress.

Physical Requirements:

Constant walking, standing, bending, stretching for long periods of time with and without lead protective shielding, (the lead protective shielding is heavy, students with back or other related problems should consult their physician), seeing, hearing, talking, public contact, and decision-making. Frequent operation of computers and a wide array of equipment, sometimes in a darkened environment, including very small wires, usage of telephone, pushing stretchers and wheelchairs, moving patients, lifting patients, reading, handling, reaching, grasping, fingering, feeling exposure to stressful situations and concentration. Occasional operation of office machines, lifting more than 20 lbs., bending, and exposure to trauma, grief.

**STUDENT DECLARATION OF MEETING TECHNICAL STANDARDS FOR
ADMISSION TO THE CARDIOVASCULAR TECHNOLOGY PROGRAM**

I have reviewed and understand the Technical Standards minimum qualifications necessary to perform the essential functions of an invasive cardiovascular technologist. I will return this form to the faculty.

Critical Thinking:

_____ I am capable of meeting these requirements. _____ I am not capable of meeting these requirements.*

_____ I am capable of meeting these requirements with the following accommodations.*

Problem Solving:

_____ I am capable of meeting these requirements. _____ I am not capable of meeting these requirements.*

_____ I am capable of meeting these requirements with the following accommodations.*

Interpersonal:

_____ I am capable of meeting these requirements. _____ I am not capable of meeting these requirements.*

_____ I am capable of meeting these requirements with the following accommodations.*

Communication:

_____ I am capable of meeting these requirements. _____ I am not capable of meeting these requirements.*

_____ I am capable of meeting these requirements with the following accommodations.*

Mobility:

_____ I am capable of meeting these requirements. _____ I am not capable of meeting these requirements.*

_____ I am capable of meeting these requirements with the following accommodations.*

Motor Skills:

_____ I am capable of meeting these requirements. _____ I am not capable of meeting these requirements.*

_____ I am capable of meeting these requirements with the following accommodations.*

Hearing:

_____ I am capable of meeting these requirements. _____ I am not capable of meeting these requirements.*

_____ I am capable of meeting these requirements with the following accommodations.*

Visual:

_____ I am capable of meeting these requirements. _____ I am not capable of meeting these requirements.*

_____ I am capable of meeting these requirements with the following accommodations.*

Tactile:

_____ I am capable of meeting these requirements. _____ I am not capable of meeting these requirements.*

_____ I am capable of meeting these requirements with the following accommodations.*

Smell:

_____ I am capable of meeting these requirements. _____ I am not capable of meeting these requirements.*

_____ I am capable of meeting these requirements with the following accommodations.*

Self-Care:

_____ I am capable of meeting these requirements. _____ I am not capable of meeting these requirements.*

_____ I am capable of meeting these requirements with the following accommodations.*

Temperament:

_____ I am capable of meeting these requirements. _____ I am not capable of meeting these requirements.*

_____ I am capable of meeting these requirements with the following accommodations.*

Physical Requirements:

_____ I am capable of meeting these requirements. _____ I am not capable of meeting these requirements.*

_____ I am capable of meeting these requirements with the following accommodations.*

I, the undersigned, do hereby testify that I have read and understand the Technical Standards for Admission to the Cardiovascular Technology Program and the above statements, as indicated, are true.

Name _____ Name _____ Date _____
(printed) (signature)

Daytime telephone number _____

*Indicates awareness of applicant to make an appointment with the coordinator for disabled student services by calling 489-9427 between 8:30 and 4:30 and delivering this form to the counselor for determination of reasonable accommodations.