

Technologist, or a Radiation Therapy Technologist with the ARRT or Nuclear Medicine Technology Certification Board (NMBCT.), CTCP 2140
Offered: Spring and Summer.

CVTE 1100 Introduction to Cardiovascular Technology (1-0-1)

This course is designed to provide the student with the basic understanding of the Cardiovascular Technician Profession. Topics of discussion will include Invasive Cardiology, Non-Invasive Cardiology, Basic Cardiovascular Anatomy and Physiology, basic Cardiovascular terminology, basic Electrocardiography (ECG/EKG), ethical and legal considerations, vital signs, current and coming technology related to the field of study, employment opportunities, outlook, and earnings potential as defined by the U.S. Department of Labor. A field trip will also be used to help enhance the learning of the Cardiovascular Technician student.

Corequisites: None.

Prerequisite: Completion of all Learning Support requirements.

Offered: Summer.

CVTE 1110 Cardiovascular Pharmacology (3-0-3)

This course is designed to provide the student with the basic understanding of Cardiopulmonary pharmacology. Topics of discussion will include Medical-Legal aspects, documentation, routes of administration, and Pharmacodynamics and Pharmacokinetics of the following: Analgesic, Anesthetic, Narcotic medications and reversal agents, Antiarrhythmic medications, Antihypertensive medications, Cardiac Stimulants, Antiangine medications, Anticoagulant, Antiplatelet and Thrombolytic medications, Diuretics, Oxygen, and miscellaneous medications as they relate to the professional field.

Prerequisite: Admission to the Cardiovascular Technology Program. CVTE 1100 is required as a Prerequisite or a Corequisite.

Corequisite: CVTE 1115, CVTE 1118, CVTE 1131.

Offered: Fall semester.

CVTE 1115 Cardiopulmonary Anatomy & Physiology (3-0-3)

This course is designed to provide the student with the understanding of Cardiac Anatomy and Physiology. Areas of study include normal cardiovascular anatomy and physiology, embryology, congenital heart disease, and acquired cardiac and vascular diseases, microcirculation, autoregulation, blood components, fluid and electrolytes, lymphatics, acid base balance, oxygen transport and rennin angiotensin system.

Prerequisite: Admission to the Cardiovascular Technology Program. CVTE 1100 is required as a Prerequisite or a Corequisite.

Corequisite: CVTE 1110, CVTE 1118, CVTE 1131.

Offered: Fall semester.

CVTE 1118 Physics of Ultrasound (1-0-1)

This course defines the basic principles of ultrasound physics and introduces the student to their practical use in diagnostic ultrasound. Topics of discussion will include definition of sound, propagation of sound in tissue, transducers, Doppler signal processing, Doppler instrumentation, ultrasound imaging and ultrasound safety. Prerequisite: Admission to the Cardiovascular Technology Program OR admission to the Diagnostic Medical Sonography Program. CVTE 1100 OR DMSP 1101 is required as a Prerequisite.

Corequisite: CVTE 1110, CVTE 1115, CVTE 1131.

Offered: Fall semester.