

## **EKG Technician (CET)**

## curriculum

Electrocardiograph or EKG technicians are healthcare professionals who perform diagnostic tests that help doctors identify cardiovascular problems in patients. The tests can help discover any irregularities in the heart that could lead to a heart attack or heart disease. They work mostly in hospitals, but can also work in long-term specialty care facilities or private practices. The EKG technician explains the test to patients prior to conducting them. Once the patient is on the machine, the technician monitors heart performance and the patient's blood pressure.

Units	Modules	Clinical Lab	Takeaways
Unit 1 Medical Terminology	<ul> <li>The heart: What is the heart</li> <li>Pericardium: The layer or sac that surrounds the heart.</li> <li>Myocardium: The middle layer.</li> <li>Endocardium: The innermost layer.</li> <li>Epicardium: The top layer.</li> <li>Conduction System of the Heart</li> <li>How does the conduction system work?</li> <li>Myocardial infarction: Commonly known as a heart attack</li> <li>Myocardial ischemia: Angina</li> </ul>		<ul> <li>Opportunity to learn the structure of the heart</li> <li>Trace the evolution of cardiology</li> <li>Development of the roles of cardiologist and EKG technician in the nineteenth and twentieth centuries</li> </ul>
Unit 2 Introduction to EKG	<ul> <li>Myocardial ischemia: Angina</li> <li>The Medical Assistant's Role in Electrocardiography and Pulmonary Function Testing</li> <li>Equipment used by the EKG Technician</li> <li>The scope of the EKG practice</li> <li>Legal issues and concerns of the medical (EKG) technician</li> </ul>		<ul> <li>The ability to define Electrocardiography and how is it used as a diagnostic tool</li> <li>The ability to describe the heart including its structure functions.</li> </ul>

Unit 3 Anatomy & Physiology	<ul> <li>Medical terminology</li> <li>The conduction system of the heart</li> <li>The structure and function of the cardiovascular system</li> </ul>		<ul> <li>Identification of the anatomic structures of the cardiovascular system and the pathway of circulation through the heart to the tissues of the body</li> <li>Recognition of the unique properties of cardiac cells that provide for their electrical and mechanical activity.</li> </ul>
Unit 4 Safety and Health	<ul> <li>Safety considerations during the Cardiovascular Examination</li> <li>The importance of infection control</li> <li>OSHA (Occupational Safety and Health Administration); universal precautions</li> <li>Cleaning and maintenance of the equipment</li> </ul>		• The exam will require a basic understanding of the role of the EKGtechnician and the moral and legal considerations of the health care profession.
Unit 5 EKG Practice on Mannequin	<ul> <li>The EKG Machine <ul> <li>EKG Leads</li> </ul> </li> <li>Performing an EKG: <ul> <li>Preparation for the EKG Procedure</li> <li>Identifying Anatomical Landmarks</li> <li>Applying the Electrodes and Leads</li> </ul> </li> <li>Safety and Infection Control <ul> <li>Operating the EKG machine</li> <li>Checking the EKG Tracing</li> <li>Troubleshooting Artifacts and other Problems</li> </ul> </li> </ul>	• Practice on Mannequin	<ul> <li>Demonstrate proficiency by successfully performing a minimum of two instructor supervised EKG's on a mannequin with 100% proficiency</li> </ul>
Unit 6 EKG Live Practice	<ul> <li>Practicing Electrocardiography on a volunteer</li> <li>Reading a Lead II EKG Strip:</li> <li>Sinus Rhythms</li> <li>Ectopic Beats</li> <li>Atrial Dysrhythmias</li> <li>Junctional Rhythms</li> <li>Ventricular Dysrhythrnias</li> <li>Asystole</li> </ul>	• EKG Live Practice	• Demonstrate proficiency by successfully performing a minimum oftwo instructor supervised EKG's on a live patient volunteer with I 00% accuracy

Unit 7 Career Development	<ul> <li>The Job Search Process</li> <li>Preparing Resumes</li> <li>The Cover Letter</li> <li>Preparing for the Job Interview</li> <li>The Job Application</li> <li>Preparation of Professional Portfolio</li> <li>The Thank You Letter</li> </ul>	<ul> <li>Participate in an in-class mock interview</li> </ul>	<ul> <li>Successfully prepare a career portfolio that will contain a resume, cover letter, thank you letter and references.</li> <li>Successfully demonstrate successful job search techniques by locating a minimumof five positions in the medical field</li> </ul>
<b>Unit 8</b> NHA Examination Prep	<ul> <li>Course is designed to assist students with preparation for the national certificationtest with NHA</li> <li>Practice tests are formatted similarly to the national exam (multiple-choice) relative to the curriculum taught</li> </ul>	• In class mock NHA Practice test	<ul> <li>Exam Prep is designed to simulate the actual certification examination</li> <li>Practice test is online assessment that can help the students gauge performance and identify areas for improvement</li> </ul>