

Certified EKG Technician Course

60 hours

Course Description

Towson University's Certified EKG Technician Course teaches you the necessary skills and foundational components of becoming an EKG Technician and prepares you for a career in a professional medical or healthcare facility. Upon completion, you will be prepared to sit for the National Healthcareer Association Certified EKG Technician certification exam (NHA CET exam).

The Towson University EKG technician program provides training to support the following skills:

- Assess the roles, average day, personal qualities, and desirable character traits of various healthcare professionals.
- Build a fundamental understanding of anatomy, medical terminology, insurance, and medical records as they apply to your future career.
- Adhere to ethical standards and guidelines for healthcare professionals.
- Understand the basics of electronic records using cloud-based software.
- Obtain, record, monitor, and report vital signs.
- Prepare patients for Holter or ambulatory monitoring.
- Edit and deliver final test results to physicians for analysis

Prerequisites

- You must be 18 years of age or older
- Have a high school diploma, GED or equivalent
- Previous healthcare experience is preferred but not required

Hardware Requirements

- This course can be taken on either a PC or a Mac.

Software Requirements

- PC: Windows 8 or later.
- Mac: OS X Snow Leopard 10.6 or later.
- Browser: The latest version of Google Chrome or Mozilla Firefox are preferred. Microsoft Edge and Safari are also compatible.
- Microsoft Office or equivalent (not included in enrollment).
- Windows Media Player
- Adobe Acrobat Reader. [Click here](#) to download.

Software must be installed and fully operational before the course begins.

Other Requirements

- Email capabilities and access to a personal email account.

Course Outline

Module 1

- Seminar: Pre-Clinical Orientation
- Introduction:
- EKG Technician
- Ethics, Compliance, and Communication
- Safety and Patient Care

Module 2

- Patient Vital Signs
- Electronic Medical Records
- Human Anatomy and Physiology of the Cardiovascular System

Module 3

- Human Anatomy and Physiology of the Cardiovascular System
- EKG Equipment Settings and Supplies; Maintenance and Disinfection
- Patient Preparation and Positioning
- Lead Placement and Artifacts
- Monitoring Patient Condition, Adverse Reactions, and Emergencies

Module 4

- EKG Equipment Settings and Supplies; Maintenance and Disinfection
- Patient Preparation and Positioning
- Lead Placement and Artifacts
- Monitoring Patient Condition, Adverse Reactions, and Emergencies
- Fundamentals of EKG Analysis: EKG Tracing and Waveforms
- Waveform Symmetry, Direction and Amplitude
- EKG Analysis: Heart Rate Calculation
- EKG Analysis: Determining the Heart Rhythm
- Heart Electrical Physiology
- EKG Interpretation: Sinus and Atrial Arrhythmias
- Junctional and Ventricular Arrhythmias, Heart Blocks
- EKG Interpretation: Pacemakers
- EKG Interpretation: Cardiac Emergencies