

Certified EKG Technician (CET): 6-week class

Course Description:

This course is designed to prepare students for the National Healthcareer Association (NHA) Exam for CET (Certified EKG Technician) at completion. The Certified EKG Technician course offers morning classes, and evening classes. Throughout the course you will master the skills necessary to assist physicians in the diagnosis and treatment of various cardiovascular diseases.

What is an EKG? What do EKG technicians do?

An electrocardiogram - abbreviated as EKG or ECG - is a test that measures the heart's electrical activity. EKGs are easily performed by EKG technicians in many settings such as a doctor's office or hospital. Technicians are responsible for carefully and correctly placing electrodes (sticky pads) to a patient's chest and limbs to get a correct reading of a patient's heart activity. These electrodes are hooked up to a machine which graphs of the impulses transmitted by the heart, while EKG technicians will monitor, analyze, and provide the data to the patient's physician for advanced interpretation.

Gaining a Foundation on the Science & Procedures Behind EKG.

Lectures & Hands-on Training:

- Lectures in the didactic portion of this program include anatomy and physiology (with a focus on the heart and circulatory system), analyzing heart rhythms, EKG wave patterns, Stress Tests & Holter Monitors, 12 Lead EKG procedure, and medical ethics & confidentiality. All lectures are conducted in-person and are led by qualified and experienced instructors.
- Clinical skills labs are interwoven between lectures, coinciding with the related lecture topic. Students will collaborate in small groups to practice applying and aligning electrodes to anatomical dummies. Then, instructors will lead live EKG demonstrations, applying and analyzing the 12 Lead EKGs of student and/or instructor volunteers. Students will have the opportunity to interpret and discuss findings in class, and eventually complete an entire EKG procedure on their own for their practical exams.

WELCOME TO THE CERTIFIED EKG TECHNICIAN (CET) AT EDEN AREA ROP

- Students are responsible for gaining their 10-live EKGs required for the NHA Exam.
- Students will have to participate in pairs (all gender identities) to perform EKGs.
- Students will have an adequate amount of time during the 6-Week Course to practice/perform 12-Lead EKGs. (Practice Labs)

Certified EKG Technician Training Includes:

- A detailed understanding of Anatomy and Physiology of the heart.
- Medical disease processes and terminology.
- Learn to interpret ALL cardiac rhythms.
- How to analyze and calculate heart rates from an EKG rhythm strip.
- Perform EKGs on patients.
- Stress Testing
- Emergency response, pertaining to Cardiac Diseases + Perform Vital Signs
- Become certified in CPR First Aid. (Optional)
- NHA Exam

Certified EKG Technician Course Fees:

- Course Price: **\$800**
- Basic Life Support (BLS) CPR & First Aid Course: **(included in course)**
- Booklet: Mastery Guide: Cardiac Rhythm Interpretation 2nd Edition **(included in course)**
- Textbook: EKG Plain and SimPearsons EKG Technician Program 4th Edition **\$45 (Digital) or \$95 (Hardcopy)** + other options are available on website.
- NHA Exam: CET Exam (additional **\$130 payable to NHA**)

Current Class Schedule: TBA

BLS/ CPR: TBA

NHA Exam Date: TBA

Class Fee: \$800

Welcome to Eden Area ROP Certified EKG Technician Class!

Please read the syllabus and class description below.

HIPPA Regulations, OSHA, Infection control practices, etc.

- HIPPA & OSHA regulations
- Guidelines regarding infection control
- Role & Scope of practice of the EKG Technician
- Ethical standards related to the practice of EKG Technician
- Communication methods and techniques
- Factors that affect communication with patients
- Roles and responsibilities of members of the interdisciplinary health care team.

Electronic Medical Records/ Electronic Health Records

- Basic elements and processes related to EMR/HER

Infection Control Practices

- Contact Precautions
- Droplet Precautions
- Airborne Precautions

Vital Signs, Ambulatory Monitoring

- Emergencies related to cardiac testing
- Methods to obtaining vital signs
- Instructions for patient use of ambulatory monitors
- Types of ambulatory monitors

Cardiac Anatomy

- Anatomy & Physiology: The Cardiovascular System (Materials Provided)

Cardiac Medical Terminology, Using Calipers, & Methods to Calculate Heart Rates

- Medical Terminology is frequently used in a Cardiac Setting
- Units of measurements of Graph Paper
- Formulas to determine maximum and target heart rates

Introduction to Cardiac Rhythms

- Sinus, Junctional & WAP Rhythms

- Atrial Fib/ Flutter

Understanding the ECG Leads, Polarity and Einthoven's Triangle

- Bipolar Leads, Unipolar, Precordial Leads
- Einthoven's Law
- Polarization: Positive & Negative

Operating EKG Machine, 12- Lead EKG, Electrode Placement, Artifact

- Cardia Testing
- Vital Signs
- Anatomy of ECG Placement
- SVT, RVR, & BBB
- PSVT & PAT
- Practice Lab (Hands-On)

Premature Complexes

- PACs, PVCs, PJC's

Bigeminy & Trigeminy:

- Atrial & Ventricular

Paced Rhythms & Types of Pacemakers

- Atrial Paced Pacemakers
- Ventricular Paced Pacemakers
- AV Paced Pacemakers
- BiV Paced Pacemakers
- Failure to Sense & Failure to Capture

Heart Blocks

- First Degree AV Block
- Second Degree Type I
- Second Degree Type II
- Third Degree (Complete Block)

Lethal Rhythms: Part 1

- ST Elevation & ST Depression
- Idioventricular
- Accelerated Idioventricular

Lethal Rhythms: Part 2

- Ventricular Fibrillation
- Ventricular Tachycardia
- Torsades de Pointes
- Pulseless Electrical Activity (PEA)
- Asystole

Basic Life Support (BLS) CPR & First Aid Certification

NHA Exam Date: TBA (additional fees apply)