

## **Health care and Pharmaceutical**

### **CERTIFIED EKG TECHNICIAN (CET)**

### **Curriculum**

#### **Program Outline :**

#### **Module 1: Fundamentals of Certified EKG Technician (CET)**

- 1. Electrocardiogram (EKG) Testing:** Proficiency in performing EKG tests to monitor the electrical activity of the heart and detect any abnormalities.
- 2. EKG Machine Operation:** Knowledge of operating and troubleshooting EKG machines to ensure accurate readings and patient safety.
- 3. Patient Interaction:** Ability to communicate effectively with patients, explaining the EKG procedure and ensuring their comfort and cooperation.
- 4. Data Interpretation:** Skills in interpreting EKG results and recognizing common cardiac rhythms and abnormalities.
- 5. Record Keeping:** Maintaining accurate and detailed records of EKG results, patient information, and test procedures.

## **Module 2:Advanced Certified EKG Technician (CET)**

**1.Advanced Cardiac Monitoring:** Proficiency in using advanced cardiac monitoring equipment and techniques, such as Holter monitoring and stress testing.

**2.Arrhythmia Recognition and Management:** Expertise in recognizing and managing complex cardiac arrhythmias, including atrial and ventricular arrhythmias.

**3.Pacemaker and Implantable Cardioverter Defibrillator (ICD) Monitoring:** Skills in monitoring and interpreting data from pacemakers and ICDs to ensure proper functioning and patient safety.

**4.Medication Effects on EKG:** Understanding the impact of various medications on EKG readings and recognizing drug-induced changes in cardiac rhythms.

**5.Data Analysis and Reporting:** Advanced skills in analyzing EKG data, generating detailed reports, and communicating findings to healthcare providers for accurate diagnosis and treatment

## **Module 3: Practical Applications**

### **1. Patient Care and Management:**

**Medication Therapy Management (MTM):** Pharmacists optimize medication regimens to improve therapeutic outcomes and reduce adverse effects.

### **2. Clinical Practice:**

**Patient Counseling:** Educating patients on proper medication use, potential side effects, and lifestyle modifications to enhance health outcomes.

### **3. Pharmaceutical Research and Development:**

**Drug Discovery and Development:** Conducting research to discover new medications and develop existing ones

### **4. Healthcare Technology and Innovation:**

**Telemedicine:** Using telehealth platforms to provide remote consultations, follow-ups, and health monitoring

## **Module 4: Capstone Project**

### **1.Impact of Telemedicine on Patient Outcomes**

Analyze the effectiveness of telemedicine in improving patient outcomes, especially for chronic disease management .

### **2.Pharmaceutical Waste Management**

Develop strategies to reduce pharmaceutical waste and its environmental impact.

### **3.Medication Adherence in Elderly Patients**

Investigate factors affecting medication adherence among elderly patients and develop interventions to improve adherence.

### **4.Implementation of an Electronic Health Records (EHR) System**

Assess the challenges and benefits of implementing an EHR system in a healthcare facility

## ELECTIVE MODULES

**1.Advanced Pharmacology:** Deep dive into the mechanisms of action, side effects, and interactions of various drugs.

**2.Clinical Research Methods:** Learn about designing and conducting clinical trials, data analysis, and ethical considerations.

**3.Health Informatics:** Study the use of information technology in healthcare, including electronic health records and data management.

**4.Global Health:** Explore health issues and solutions in a global context, including international health policies and practices

### Websites:

- <https://chools.in/>
- <https://ramaqchools.com/>
- <https://www.choolsgroup.com/>