

DIPLOMA IN BIO-MEDICAL EQUIPMENT TECHNOLOGY AND MAINTENANCE

Eligibility: Engineering Degree or equivalent degree in Bio Medical / Electronics/Electrical/Electronics & Communications/Instrumentation/ M.Sc. (Electronics)/B.Sc (Electronics) OR Diploma in Electronics/Medical Electronics/ Electrical/Instrumentation or Equivalent. Final year students looking for Industrial Training can also apply.

Duration: 23 weeks

FEE: Rs 40000/- (payable in two equal installments)

COURSE CONTENTS

❖ **Electrical Principles & Practical medical Electronics :**

The trainee is taught the theory of electrical and electronics circuits by practical work and the process of fault diagnosis.

❖ **BIO-MEDICAL EQUIPMENT**

Theory of operation, related Anatomy and physiology, usage (application), handling, operation, Technical details and maintenance of following instruments

● ***Measuring , Recording and Monitoring Instruments***

Electrocardiograph(ECG), Pulse Oximeter, Cardiac Monitor, Digital EEG and Multi-parameter Monitor

● ***Modern Imaging Systems***

Ultrasonic Imaging System, X-Ray Machine

● ***Clinical Laboratory Instruments***

Spectrophotometer, Semi-Auto Analyzer, Colorimeter, Microscope, Centrifuge

● ***Therapeutic Equipment***

Cardiac Defibrillator, Short wave Diathermy, Ultrasonic Diathermy

● ***Miscellaneous Equipment***

Suction Machine, Anesthesia Machine, Audiometer, Ventilator

❖ **Telemedicine:**

- Introduction to telemedicine technology
- Overview of International standards
- Demonstration of telemedicine technology
- Hands-on practice

❖ **Additional Features**

- Trainees will be exposed to the working at repair and maintenance centers in various hospitals.
- Demonstration of working X-ray Computed Tomography, Magnetic Resonance Imaging System and Nuclear Medical Imaging Systems is carried out in Multi-Specialty hospital.
- Visits to Public and Private Multi-Specialty hospitals are arranged.
- Interactive sessions, lectures and discussion of the trainees with expert Bio-medical and clinical engineers is also arranged.