

#### CENTRE FOR DEVELOPMENT OF ADVANCED COMPUTING A-34, PHASE VIII, INDUSTRIAL AREA, MOHALI

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# INDUSTRIAL TRAINING IN BIO-MEDICAL EQUIPMENT TECHNOLOGY AND MAINTENANCE

**Eligibility:** Final Year students of BE/B.Tech Bio Medical / Electronics/Electrical/Electronics & Communications/Instrumentation Engineering/ M.Sc. (Electronics)

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, Anaesthesia 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-Speciality hospital.
- Visits to Public and Private Multi-Speciality hospitals are arranged.
- Interactive sessions, lectures and discussion of the trainees with expert Bio-medical and clinical engineers is also arranged.

**HOW TO APPLY:** For Admission, submit your College reference/training letter, admission form (download from <a href="https://www.cdac.in">www.cdac.in</a>) along with fee of Rs.20000/- (1st Installment) at CDAC, A-34, Phase 8, Industrial Area, Mohali – 160059. Fee can be paid in cash/debit card or through Demand Draft in favor of "Director CDAC", payable at Mohali.

#### NOTE:

- Seats are limited and admission is on first come first serve basis.
- Fee once deposited is neither refundable nor transferable from one course to another course.