



COMPREHENSIVE ELECTROCARDIOGRAPHY:

(ECG LEAD SYSTEMS, SIGNAL PROCESSING, ECG INTERPRETATION, CLINICAL APPLICATIONS)

OVERVIEW

Electrocardiography is a fundamental part of cardiovascular assessment. It is an essential tool for investigating cardiac arrhythmias and other cardiac disorders. The electrocardiogram (ECG) is an important signal which reflects the electrical activity of the human heart and conveys important information about its structure. This 4 day program on electrocardiography is intended to give in depth knowledge about the various forms of ECG recording, processing and their clinical relevance.

Participants will also be exposed to the wide variety of ECG abnormalities and their interpretation for disease classification. The ECG talks will be interactive with participants able to respond electronically to didactic questions. There will also be practical sessions on ECG recording and interpretation. Digital Signal Processing (DSP) tools for analysis & processing of ECG signals will also be discussed while there will also be exposure to a Virtual Biomedical Signal Processing lab.

COURSE CONTENTS

- BASIC PRINCIPLES OF 12 LEAD ELECTROCARDIOGRAPHY
- LEAD CONNECTION / ELECTRODE PLACEMENT ERRORS
- WHAT IS A NORMAL ECG?
- PRACTICAL SESSIONS ON ECG RECORDING AND INTERPRETATION
- AUTOMATED ECG ANALYSIS AND INTERPRETATION
- MISCELLANEOUS ECG TOPICS (ECG in clinical trials, Minnesota Coding, Scoring systems [Selvester, Punsar, Aldrich, CIIS], Pediatric electrocardiography, Pacemaker electrocardiography, Some new ECG recording devices, Reasons for Exercise ECG & Holter ECG, Late potentials, MRI/ECG studies, 12 lead vectorcardiography, heart rate variability, etc.)
- VIRTUAL BIOMEDICAL SIGNAL PROCESSING LAB

Dates	Feb 23-27, 2016 (Number of participants for the course will be limited to thirty).
Who Should Attend	<ul style="list-style-type: none"> ▪ Executives, engineers and researchers from manufacturing, service and government organizations including R&D laboratories, hospitals & medical institutes. ▪ Students at all levels (BTech/MSc/MTech/PhD/medical) ▪ Faculty from reputed academic institutions, medical and technical institutions.
Fees	<p>The participation fees for taking the course are as follows: Participants from abroad : US \$500 Industry/ Research Organizations: 20000 Academic Institutions: Rs 10000</p> <p>The above fees include all instructional materials, laboratory equipment usage charges, and internet facility.</p> <p>The participants will be provided with accommodation and food on a payment basis. The Course participants will be lodged in the Trainee Officer's Hostel of the Continuing Education Centre and Other Guest Houses of the Institute.</p>

THE FACULTY



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