PSG COLLEGE OF TECHNOLOGY

PSG College of Technology, an institution of academic excellence, was founded in the year 1951 by PSG & Sons’ Charities Trust. The institution is equipped with latest facilities and excellent infrastructure. The college has signed MoUs with research organizations and industries to promote closer interaction in the areas of technology development, student training, curriculum updation and establishment of state-of-art-centers of excellence. The mission of the institution is to provide world-class engineering education, foster research and development, evolve innovative applications of technology, encourage entrepreneurship and ultimately mould young men and women capable of assuming leadership of the society for the betterment of the country.

ABOUT THE DEPARTMENT

The Department of Biomedical Engineering was established in the year 2006 with a vision to in depth knowledge in the area of Electronics and Biomedical Engineering as well as professional skills necessary to face the challenges of the future and enable to find innovative applications of Technology for reaching the goal of Health for all in our Country. The department endeavors to educate students to acquire technical expertise and knowledge in the field of Biomedical Engineering to enable them to communicate and use that knowledge constructively for the benefit of the society.

ABOUT THE WORKSHOP

This workshop aims to design, develop and implement a reconfigurable low-cost biopotential amplifier trainer module. The trainer module can measure Electrocardiogram (ECG), Electroencephalogram (EEG) and Electromyogram (EMG) biopotential signals by reconfiguring the module using the basic circuit and filtering blocks.

COURSE OBJECTIVES

- To design a modular board for biosignal acquisition and implement it in a reconfigurable manner
- To understand the effect of the filters to the biopotential signals.
- To develop a low cost and compact device.
- To recognize the biopotential signals using the developed module and acquisition methods
- To improve the skills of designing biomedical instrument.

COURSE FEE (Inclusive of Service Tax)

UG/PG Students/ Research Scholars : Rs. 2000/-
Faculty from academic institution : Rs. 2500/-
Industry personnel : Rs. 2500/-

The course fee includes course material/ refreshments/ Lunch

No TA/ DA/ ACCOMMODATION will be provided.

REGISTRATION FORM

National level workshop on
DEVELOPMENT OF A MODULAR BOARD FOR BIO-SIGNAL ACQUISITION
09-10 February, 2024

Name: ____________________________
Designation:________________________
Department:________________________
Name of the Institution:_______________
Address: __________________________
________________________________
Email: ____________________________
Mobile: ____________________________

Details of Registration

Amount: ___________________________
Transaction ID:______________________
Transaction Date: ___________________
Bank:______________

Date:_____________________________
Signature:________________________
(Note: Screenshot of the transaction is to be attached with the registration form)
TOPICS
The workshop will focus on the following areas:

- Electrophysiology
- ECG, EEG and EMG signals
- Design of Electrophysiology electrodes
- Design of Instrumentation Amplifier
- Design of second order low pass, high pass and band pass filter
- Assembling and Testing of Instrumentation Amplifier
- Recording of Electro Cardio Gram using Instrumentation Amplifier

RESOURCE PERSONS

- Mr. Satheesh Jadhav
  Director - Biokit
  Mumbai

- Ms. Madhuri
  Technician - Biokit
  Mumbai

ELIGIBILITY
Faculty members, Industry personnel, Research scholars, UG/PG students who wish to improve their skills of designing biomedical instrumentation can attend this training program.

REGISTRATION DETAILS
A maximum of 40 participants are permissible on first come first serve basis. The participants shall pay the Registration Fee through NEFT/Gpay.

PSG COLLEGE OF TECHNOLOGY
DEPARTMENT OF BIOMEDICAL ENGINEERING
COIMBATORE- 641004

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Organized by
PSG-TI Centre of Excellence in Medical Electronics
Department of Biomedical Engineering,
PSG College of Technology,
Peelamedu, Coimbatore – 641004.
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