

ABOUT ANNA UNIVERSITY, CHENNAI

Anna University was established on 4th September, 1978 as a unitary type of University. It offers higher education in Engineering, Technology, Architecture and Applied Sciences relevant to the current and projected needs of the society. Besides promoting research and disseminating knowledge gained therefrom, it fosters cooperation between the academic and industrial communities.

AU is ranked with NAAC: A++ 3.54/4,
NIRF Ranking 2023: Over all 18;
University: 14; Engineering: 13;
Research: 13 WUR-Engg. & Tech: 289,
South Asia: 26, SDG 9-Industry,
Innovation & Infrastructure: 101-200.

The University was formed by bringing together and integrating four University Campuses:

- ◆ College of Engineering
- ◆ Alagappa College of Tech.
- ◆ Madras Institute of Tech.
- ◆ School of Architecture & Planning.

In addition, Anna University also consists of 4 Regional Campuses located at Coimbatore, Madurai, Tiruchirapalli, and Tirunelveli, 13 University Colleges of Engineering spread across Tamil Nadu, 9 Government College of Engineering and 480+ affiliated Engineering colleges for extending academic activities in Engineering and Technology sector.

ABOUT DEPARTMENT OF BIOMEDICAL ENGINEERING

The Department of Biomedical Engineering was established in 2024 and stands as a frontrunner in India's technology landscape having 25 years of experience in the field of Medical Electronics and makes meticulous impact in healthcare. Helmed by accomplished Professors. The department's mission revolves around imparting students with a profound understanding of the latest trends in healthcare. To adapt to the swiftly evolving technological environment, DBME maintains a meticulously updated curriculum that incorporates both current and emerging technologies.

ABOUT THE FACULTY EMPOWERMENT PROGRAMME

The **Faculty Empowerment Programme** is intended to provide opportunities for faculty members from University Departments, Constituent Colleges, Government colleges, Autonomous Institutions and Engineering Colleges affiliated to Anna University to enrich their knowledge.

COURSE COVERAGE:

The following Topics will be covered

- Design of Smart Wearables, Wearable sensors and Data Analytics for Holistic Health.
- BioMEMS: From Concept to Reality - Design, Development and Applications.
- Embedded system design using FPGA Development Boards- Vivado IP Integrator – Kintex 7 Ultra, Zynq SoC and Zybo kit.
- Python Productivity using PYNQ22 board for real time Image acquisition.
- Real-Time biosignal acquisition using Embedded System.

PHYSICAL MODE - SIX DAYS FACULTY EMPOWERMENT

PROGRAMME (FEP-WINTER 2024)

ON

BIOMEDICAL DEVICE DEVELOPMENT

(27th Jan 2025 to 01st Feb 2025)

Registration Form

Coordinators

Dr.S.Nirmala Devi,
Professor, Dept. of BME
Dr.R.Parameshwari,
Asst. Prof, Dept of BME



Sponsored by

Centre for Faculty & Professional Development
Anna University, Chennai-25

In Association with



Organized By

Department of Biomedical Engineering,
College of Engineering, Guindy,
Anna University, Chennai-25

**PHYSICAL MODE - SIX DAYS FACULTY EMPOWERMENT
PROGRAMME (FEP-WINTER 2024) on
BIOMEDICAL DEVICE DEVELOPMENT**

(27th Jan 2025 to 01st Feb 2025)

1. Name (in capital):
2. Designation:
3. Qualification:
4. Age & D.O.B:
5. Professional Teaching Experience in Years:
6. Address of the Institute:
7. Research Interest:
8. Phone (Mobile) :
9. E-Mail :

I hereby declare that all the details furnished by
me are true to best of my knowledge.

Date:

Place: Signature of the Applicant

CERTIFICATE FROM THE HEAD OF THE INSTITUTION

Dr. / Mr./ Mrs. _____ Is
a faculty member of our Institution. He/ She will be
permitted to attend the selected programme on Physical
Mode-Six days Faculty Empowerment Programme on
BIOMEDICAL DEVICE DEVELOPMENT.

**Signature of the Head of the Institution
/ Organization with Seal**

ABOUT REGISTRATION:

- No Registration fee, TA and DA.
- Number seats are restricted to 50.
- Selection will be based on first come first serve basis.
- Priority will be given to Junior faculty & Ad-hoc Faculty, Assistant professor & Associate Professor, Professor.
- Selected candidates will be intimated through e-mail.
- Lunch 2 days only (First and Last day of the Program)
- The Certificate will be issued only for those participants who have secured at least 80% Attendance and 60% marks in the test.
- Send the duly filled application form to the coordinators by post and mail the scanned copy.

For Further Details Contact:

The coordinators:

- Dr.S.Nirmala Devi, Professor.
 - Dr.R.Parameshwari, Asst. Professor.
- Department of Biomedical Engineering,
College of Engineering, Guindy,
Anna University, Chennai-25.
Phone: 044 2235 9582,
Cell: 9047884270 / 98400 60120
E-Mail : sndevi2018@gmail.com
parameshwari.shn@gmail.com

Registration Link:

https://docs.google.com/forms/d/e/1FAIpQLSeiq7UqiChntHIZ_al5gN9sStPZjGWDEF6pQ86DX00-Vb9sJA/viewform?usp=sharing

ORGANIZING COMMITTEE

- CHIEF PATRON** : Dr.S.Usa
Member, Convener Committee,
Anna University
- PATRON** : Dr. J. Prakash
Registrar
Anna University
- : Dr.K.S.Easwarakumar
DEAN, CEG Campus
Anna University
- CHAIR** : Dr. P. Vanaja Ranjan
Director, CFPD, Anna University
- CO-CHAIR** : Dr.M.Sasikala
Professor & Head,
Department of Biomedical
Engineering
- Co-ordinators** : Dr.S.Nirmala Devi, Professor,
Dept. of BME
Dr.R.Parameshwari, Asst. Prof,
Dept. of BME

Organizing Department

**Department of Biomedical Engineering,
College of Engineering, Guindy,
Anna University, Chennai-25**

IMPORTANT DATES:

- Submission of Application : 22.01.2025
- Intimation of Selection : 24.01.2025
- Confirmation by Participants : 25.01.2025

COLLEGE OF ENGINEERING, GUINDY ANNA UNIVERSITY, CHENNAI-25

DEPARTMENT OF BIOMEDICAL ENGINEERING

PHYSICAL MODE - SIX DAYS FACULTY EMPOWERMENT PROGRAMME (FEP-WINTER 2024) ON BIOMEDICAL DEVICE DEVELOPMENT

Programme Schedule

Day & Date		First Session 9.00-10.30.am		Second Session 10.45-12.15pm		Third Session 1.30-3.00pm		Fourth session 3.15-4.45 pm
27.01.2025 Monday	8.30-9.00 am Inauguration	MEMS: From Concept to Reality - Design, Development, and Applications (Dr. Sreeja B S) Associate Professor Dept. of Biomedical Engineering, Anna University, Chennai		Hands on session: Design and simulation of MEMS piezoresistive pressure sensor (Dr.K. Sripadaraja) Manager, MEMS applications, IntelliSense software		Hands on session: Design and simulation of MEMS piezoresistive pressure sensor (Dr.K. Sripadaraja) Manager, MEMS applications, IntelliSense software		AI Machine vision for all (Dr.K. Sripadaraja) Manager, MEMS applications, IntelliSense software
28.01.2025 Tuesday		Introduction to Wearable devices (Dr.M. Sasikala) Professor & Head, Dept. of Biomedical Engineering, Anna University, Chennai		Designing Smart Wearables: Lessons Learnt from Zeuron's Innovations (Mr. Siddharth Nair) CEO, Xfinito Biodesigns Pvt Ltd, Bangalore		Design: Harnessing AI, Wearables, and Data Analytics for Holistic Health (Mr. Siddharth Nair) CEO, Xfinito Biodesigns Pvt Ltd, Bangalore		Design: Harnessing AI, Wearables, and Data Analytics for Holistic Health (Mr. Siddharth Nair) CEO, Xfinito Biodesigns Pvt Ltd, Bangalore
29.01.2025 Wednesday		Importance of Vivado IP Integrator in FPGA Design using Kintex 7 Ultra scale FPGA and Vivado Design Suite Software (Mr. Prakash.G) Lead Application Engineer, CoreEL Technologies (I) Pvt Ltd Bangalore	Tea Break 10.30-10.45 am	Understand and utilize advanced development techniques of embedded systems design for architecture a complex system in the Zynq SoC (Mr. Prakash.G) Lead Application Engineer, CoreEL Technologies (I) Pvt Ltd Bangalore	LUNCH 12.15-1.30pm	Hands on session: Advanced development techniques of embedded systems design for architecture a complex system in the Zynq SoC. (Dr.S.Nirmala Devi) Professor Dept. of Biomedical Engineering, Anna University, Chennai	Tea Break 3.00-3.15pm	Hands on session: Advanced development techniques of embedded systems design for architecture a complex system in the Zynq SoC. (Dr.S.Nirmala Devi) Professor Dept. of Biomedical Engineering, Anna University, Chennai
30.01.2025 Thursday	Understanding the PYNQ framework and advantages of using PYNQ Python Productivity for FPGA Design and Development (Mr. Prakash.G) Lead Application Engineer, CoreEL Technologies (I) Pvt Ltd Bangalore	Basic Image Processing with PYNQ Library. Demonstration of Python Productivity using PYNQ Z2 Board (Mr. Prakash.G) Lead Application Engineer, CoreEL Technologies (I) Pvt Ltd Bangalore		Demonstration of Python Productivity using PYNQ Z2 Board for Real Time Image Acquisition (Dr.T.Jayasree), Assistant Professor (Sr.Gr), Dept. of Biomedical Engineering, Anna University, Chennai		Demonstration of Python Productivity using PYNQ Z2 Board for Real Time Image Acquisition (Dr.T.Jayasree), Assistant Professor (Sr.Gr), Dept. of Biomedical Engineering, Anna University, Chennai		
31.01.2025 Friday	Medical Embedded system Design using Zybo kit (Dr.S.Nirmala Devi) Professor Dept. of Biomedical Engineering, Anna University, Chennai	Medical Embedded system Design using Zybo kit (Dr.S.Nirmala Devi) Professor Dept. of Biomedical Engineering, Anna University, Chennai		Hands on Training on Bio signal Acquisition using Embedded System (Dr.R.Parameshwari) , Assistant Professor Dept. of Biomedical Engineering, Anna University, Chennai)		Hands on Training on Bio signal Acquisition using Embedded System (Dr.R.Parameshwari) , Assistant Professor Dept. of Biomedical Engineering, Anna University, Chennai)		
01.02.2025 Saturday	Introduction to outcome-based Education & Design of question Paper with rubrics (Dr.S.Muttan) Professor of Eminence, Dept. of Biomedical Engineering, Anna University, Chennai	NBA – Pedagogical Issues (Dr.S.Muttan) Professor of Eminence, Dept. of Biomedical Engineering, Anna University, Chennai		Medical Embedded Project Demo (Dr.R.Parameshwari) , Assistant Professor Dept. of Biomedical Engineering, Anna University, Chennai)		Test for Participants & Group Discussion Valedictory Function		