



MALAVIYA MISSION TEACHER TRAINING CENTRE IIITDM KANCHEEPURAM

CUTTING-EDGE INNOVATIONS IN WEARABLE TECHNOLOGY DEVICES

About MMTTC:

The Malaviya Mission Teacher Training Center (MMTTC) at IIITDM Kancheepuram is funded by the Ministry of Education (MoE) under the Malaviya Mission Teacher Training Programme. The mission aims to transform higher education by integrating Indian values and ethos into teaching, research, publications, patents, and institutional development. Established as one among the 116 centers in the country, the MMTTC at IIITDM Kancheepuram focuses on design and manufacturing education. It develops e-learning materials, low-cost laboratory instruction modules, and innovative projects for students and teachers.

About the programme:

This program explores the latest innovations in wearable devices, focusing on their role in continuous, non-invasive health monitoring and energy-efficient solutions. With advancements in wireless technology, wearable devices have become essential tools for personalized healthcare, offering real-time data on vital signs and health parameters. The program emphasizes the growing relevance of these devices in self-powered systems, early detection, timely interventions, and patient empowerment. By addressing the intersection of power generation, health monitoring, technology, and energy efficiency, the course equips participants with the knowledge to leverage these cutting-edge devices to improve patient outcomes, promote sustainable healthcare practices, and transform the future of medical diagnostics.



REFRESHER COURSE

December 08-19, 2025
Residential (Offline)

Topics covered:

- Introduction to Wearable Technology
- AI & Machine Learning in Wearables
- Gesture & Neural Interfaces
- Non-Invasive Biochemical Sensing
- ECG and Cardiac Monitoring in Wearables
- Smart Textiles & Clothing Integration
- Battery, Power & Miniaturization Innovations
- Materials for Wearable Devices
- Fabrication of Wearable Devices
- Assistive & Accessibility Wearables
- Augmented Reality (AR) & Smart Eyewear
- Privacy, Security & Ethical Concerns
- BIS for Wearable Technology (India)



Registration:

1. Register and login as a participant in mmc.ugc.ac.in 
2. In the dashboard click on "Apply for Other Programmes"
3. Select Apply for "Refresher Course" and from the dropdown select the Programme Name and Center Name as "Indian Institute of Information Technology, Design and Manufacturing, Kancheepuram (08/12/2025- 19/12/2025)"
4. Choose the title "Recent Trends in Biomedical Engineering" from the dropdown menu and enter the remaining personal information including year of joining, total years of experience etc.
5. Upload the NOC on Institute/College/University letterhead as per the format provided in <https://docs.google.com/document/d/1o1QNURKaYJod7uuqmKtmu2RgXGBRoo0o/edit?usp=sharing&ouid=115411563109741780255&rtpof=true&sd=true> 
6. Click on Submit to complete the registration process.



Resource Persons :

The course content will be delivered from a pool of resource persons from leading prestigious academic institutions, research labs and industry.

Eligibility:

- Faculty members working in universities and colleges that are included under Section 2(f) of the UGC Act are eligible to attend RC.
- This programme shall be taken into consideration for fulfillment of the requirements as laid down in Career Advancement Scheme as per UGC Regulations.

Note: It is mandatory for participants to bring their laptop for the refresher Course.

Coordinators:

Dr. Pandiyarasan Veluswamy

Assistant Professor,
Department of ECE,
IIITDM Kancheepuram, Chennai
pandiyarasan@iiitdm.ac.in

Dr. Rohini P

Assistant Professor,
Department of ECE,
IIITDM Kancheepuram, Chennai
rohinip@iiitdm.ac.in

Prof. Jayabal K

Professor,
Department of ME,
IIITDM Kancheepuram, Chennai
jayabal@iiitdm.ac.in