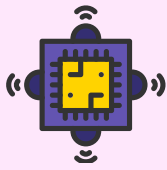


Product Research and Innovation in bioMedical Engineering (PRIME) Lab
&
Translational Healthcare Research Innovation using Value Engineering (THRIVE) Lab

One Day Workshop on

Design of Point of Care Biosensors and Medical Devices

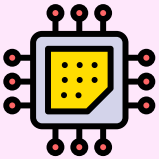
Session 1



Design of Colorimetric POC Biosensors

- Overview of biosensors and their importance in healthcare.
- Colorimetric Detection Mechanism, Device Architecture & Fabrication.
- Signal Readout and Data Interpretation.
- **Hands-on Demonstration:** Fabrication of a colorimetric sensor for detection of vitamins.

Session 2



Lab-on-chip technologies with smartphone imaging

- Introduction to Lab-on-Chip (LoC) Technologies.
- Microfluidic Platform Design.
- Smartphone-Based Imaging and Data Acquisition.
- **Hands-on Demonstration:** Design LoC biosensor integrated with smartphone imaging for real-time analysis of a colorimetric assay.

Session 3



Introduction to Medical Device Design

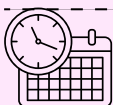
- Medical device design vs Consumer product design.
- Role of Regulation in medical device design.
- Failure mode effect analysis of medical device.

Session 4



Reverse Engineering common medical devices

- Building blocks and reverse engineering principles for medical devices
- Product dissection and analysis of medical devices



04th March 2025
10:00 AM - 5:00 PM



Room No 413, 4th Floor, Laboratory complex, IIITDM Kancheepuram



Registration Fees: 300/- for students and 400/- for faculties

To Register Please use the SBI E Collect payment link and select Category as Medical Devices

Registration link: <https://www.onlinesbi.sbi/sbicollect/icollecthome.htm?corpID=634626>



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