## ABOUT SENSE

The School of Electronics Engineering (SENSE) at VIT offers state-of-the-art education in Electronics and Communication Engineering, accredited by ABET. With modern laboratories in areas like robotics, VLSI, embedded systems, sensors, and nanotechnology, along with industry-sponsored research facilities, students gain hands-on experience using advanced simulation and analysis tools. The school fosters global collaboration through MoUs with universities, research organizations, and industries, ensuring opportunities for student and faculty exchange. Many students secure placements in core companies, while faculty actively pursue R&D projects funded by agencies such as DRDO, ISRO, BRNS, and DST.

## ABOUT VAC

Our Value Added Program on PCB Design and Fabrication offers unique, hands-on learning experience for UG, PG students, and Research Scholars to move beyond theory and dive into the complete process of creating professional-grade electronic circuits. You will learn schematic design, component layout, and routing using industry-standard software tools.

The program culminates in the practical fabrication and assembly of your own functional PCB. This essential skill set is invaluable for academic projects, cutting-edge research prototypes, and a competitive career in electronics. Gain the confidence to transform your circuit ideas into physical reality. Secure your spot to build a critical foundation in modern electronics design and manufacturing. This is your gateway to innovation.

## KEY BENEFITS

Practical, project-based learning with real world applications. Mastery of design for manufacturability, reliability, and testability. Understanding of PCB fabrication processes, materials, and quality standards Techniques for routing, signal integrity, power distribution, and thermal management.

## ORGANIZING COMMITTEE

**Convenor**

Dr. Jasmine Pemeena Priyadarisini
Professor and Dean, SENSE

**Coordinators**

Dr. Elizabeth Rufus
Dr. Sivacoumar R
Dr. Sathya P
*SchoolofElectronics Engineering, VIT Vellore.*

## WHO CAN ATTEND?

All UG, PG students and research scholars.

## REGISTRATION & PAYMENT

**Registration Fee:**

Rs. 500 (Inclusive of GST)

**Registration & Payment Links:**

`https://events.vit.ac.in`

## CONTACT

**Dr. P Sathya**
Phone: 9790902453
Email: sathya.p@vit.ac.in

VIT®
Vellore Institute of Technology
(Deemed to be University under section 3 of UGC Act, 1956)

## School of Electronics Engineering

Department of Sensor and Biomedical Technology

VALUE ADDED COURSE ON

# VAC1553
# PCB Design and Fabrication

**06 Jan 2027 – 10 April 2027**

### SUSTAINABLE DEVELOPMENT GOALS

**SDG-4: Quality Education**
4.4 – Skills for Employment
4.7 – Education for Sustainable Development

**SDG-8:DecentWorkandEconomic Growth**
8.6 – Reduce Youth Unemployment

HANDS-ON DESIGN • SIMULATION • FABRICATION

## VAC1553 – PCB Design and Fabrication

**ProgramSchedule:30Hours | Venue: TT501**

### SESSION MODULE 01 — 3 Hours

**Introduction to PCB Design**

**Resource Persons:** Dr. Elizabeth Rufus, Dr. Sivacoumar R, Dr. Sathya P

| Date | Time |
|---|---|
| 6.1.27 | 7.00 – 8.00 PM |
| 7.1.27 | 7.00 – 8.00 PM |
| 8.1.27 | 7.00 – 8.00 PM |

### SESSION MODULE 02 — 4 Hours

**Circuit Design**

**Resource Persons:** Dr. Elizabeth Rufus, Dr. Sivacoumar R, Dr. Sathya P

| Date | Time |
|---|---|
| 11.1.27 | 7.00 – 8.00 PM |
| 12.1.27 | 7.00 – 8.00 PM |
| 13.1.27 | 7.00 – 8.00 PM |
| 20.1.27 | 7.00 – 8.00 PM |

**From Design to Device: See PCB Fabrication in Action!**

### SESSION MODULE 03 — 5 Hours

**Design Schematicand Selection of Foot Prints for the Components**

**Resource Persons:** Dr. Elizabeth Rufus, Dr. Sivacoumar R, Dr. Sathya P

| Date | Time |
|---|---|
| 21.1.27 | 7.00 – 8.00 PM |
| 6.2.27 | 10.00 AM – 12.00 Noon |
| 6.2.27 | 2.00 – 4.00 PM |

### SESSION MODULE 04 — ONLINE • 4 Hours

**SingleLayerPCBLayout Design(ONLINE)**

**Resource Person:** Mr. Harish, Hardware Design Engineer, Rapyuta Robotics Pvt. Ltd., Chennai.

| Date | Time |
|---|---|
| 20.2.27 | 10.00 AM – 12.00 Noon |
| 20.2.27 | 2.00 – 4.00 PM |

### SESSION MODULE 05 — ONLINE • 4 Hours

**MultilayerPCBLayout Design(ONLINE)**

**Resource Person:** Mr. Harish, Hardware Design Engineer, Rapyuta Robotics Pvt. Ltd., Chennai

| Date | Time |
|---|---|
| 27.2.27 | 10.00 AM – 12.00 Noon |
| 27.2.27 | 2.00 – 4.00 PM |

**Learn It. Build It. Own It — Your Mini Project Starts Here!**

### SESSION MODULE 06 — 2 Hours

**GerberFileGeneration and Printing**

**Resource Persons:** Dr. Elizabeth Rufus, Dr. Sivacoumar R, Dr. Sathya P

| Date | Time |
|---|---|
| 15.3.27 | 7.00 – 8.00 PM |
| 17.3.27 | 7.00 – 8.00 PM |

### SESSION MODULE 07 — 8 Hours

**HandsonExperiencein PCB Fabrication**

**Resource Persons:** Dr. Elizabeth Rufus, Dr. Sivacoumar R, Dr. Sathya P

| Date | Time |
|---|---|
| 3.4.27 | 10.00 AM – 12.00 Noon |
| 3.4.27 | 2.00 – 4.00 PM |
| 10.4.27 | 10.00 AM – 12.00 Noon |
| 10.4.27 | 2.00 – 4.00 PM |

**Course Code:** VAC1553 – PCB Design and Fabrication
**Total Duration:** 30 Hours
**Venue:** TT501
**Organized by:** Dept. of Sensor & Biomedical Technology, SENSE, VIT Vellore