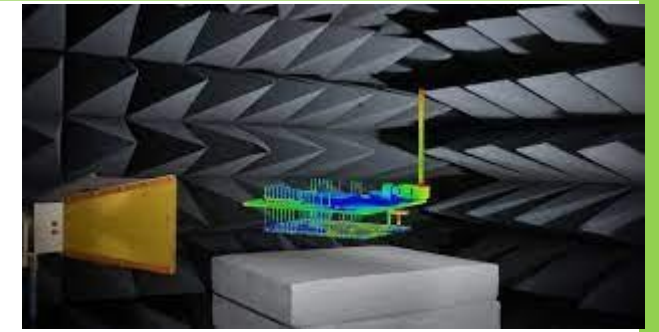




School of Electronics Engineering

Department of Communication Engineering

Value Added Course



Advanced RF and Microwave Design for Smart Device Applications – (VAC2521)

Week 1 (14/12/2025): 4 Hours (9:00 AM - 1:00 PM)

- ♦ Overview of RF/Microwave: Antennas, Filters,
- ♦ Radar Antennas: Design and Applications
- ♦ Microwave Filters, Absorbers, and Frequency Selective Surfaces

Week 2 (20/12/2025): 4 Hours

- ♦ Antennas and Filter: Design,
- ♦ Numerical Modelling and Characterization

Week 3 (11/01/2026): 4 Hours

- ♦ Sustainable IoT-Based Smart Phased Array
- ♦ MIMO Antenna: Design and Characterization

Week 4 (08/02/2026): 4 Hours

- ♦ Additive Metallic Printed Waveguide for millimeter waves
- ♦ Design Principles of Additive Metallic Printed Waveguides for 6G

Week 5 (21/02/2026): 4 Hours

- ♦ Radio-frequency energy harvesting microwave components Design
- ♦ Ground penetrating Radar (GPR): Design and Characterization

Week 6 (07/03/2026): 4 Hours

- ♦ Wearable and Implantable Sensors for Biomedical Applications.
- ♦ SAR Analysis and Measurements for WBAN Applications

Project Phase : 07/03/2026 - 15/04/2026

Week 7 (29/03/2025): 4 Hours (9:00 AM - 1:00 PM)

- ♦ AI and Machine learning (ML) Based Antenna Array Design
- ♦ Reconfiguration Intelligence Surface (RIS) for 6G Application

Week 8 (05/04/2026): 5 Hours

- ♦ Discussion on Fabrications of the prototype
- ♦ Hands-on Session using the Anechoic Chamber
- ♦ Prototype Development

Mandatory for Certificate:

- ♦ Minimum 50% Marks in Final Assessment Test
- ♦ Completion of Project

Eligibility: UG/ PG/Ph.D Students

Starting from
14th December, 2025 (Sunday)

Interaction ON-LINE

Registration fee: **Rs. 200/- + 18% GST**

Registration Link: <https://events.vit.ac.in/>

Co-ordinators: Dr. Avinash Chandra, Dr. Rajkishor Kumar, Dr. Vijay Kumar



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