

Report of Departmental Activities – E&CE, VTU PG Centre, Mysuru (2019–Present)

The **Department of Electronics & Communication Engineering**, VTU PG Centre, Mysuru, has proactively organized various academic enrichment programs aimed at empowering faculty, students, and technical staff with industry-relevant skills and exposure to advanced technologies. A summary of the key events held from 2019 to date is presented below:

1. Webinar on “Software Defined Radio (SDR) Platform for Engineering Education & Research using National Instruments (NI)”

Date: 30th July 2020

Organized by: Departments of E&CE and CSE, Mysuru

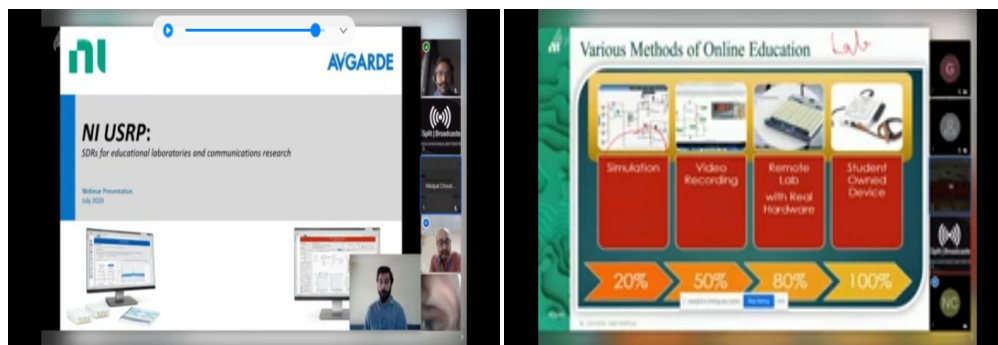
Target Audience: Faculty from various engineering colleges, PG/UG students, research scholars, and IT professionals

Objectives:

- Introduce a common SDR platform using National Instruments tools
- Impart knowledge of Software Defined Radio concepts
- Train participants for conducting online interactive classes using tools like YouTube Live

Highlights:

The webinar featured two expert-led technical sessions. Participants gained fundamental insights into SDR systems and their applications in academia and research.



2. TEQIP-1.3 Sponsored Technical Skill Development Program on MATLAB & Simulink

Date: 13th–14th March 2020

Organized by: Dept. of E&CE, VTU PG Centre, Mysuru

Target Audience: Technical staff and faculty members from various institutions

Objectives:

- Provide exposure to MATLAB & Simulink tools
- Encourage integration of software tools in teaching and student engagement
- Enhance understanding of numerical computation, data visualization, and model-based design

Highlights:

The two-day event consisted of four hands-on sessions led by engineers from CoreEL Technologies. The sessions covered MATLAB basics, toolboxes, and advanced Simulink features. The program concluded with a valedictory function and positive feedback from participants.



3. Three-Day Workshop on Proteus VSM Simulation Software

Date: 9th–11th January 2025

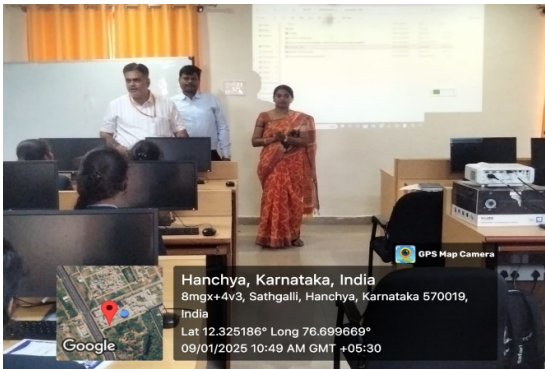
Target Audience: MCA students and faculty from E&CE and CSE

Objectives:

- Provide hands-on training on Proteus for microcontroller and IoT simulations
- Strengthen simulation skills for academic projects

Highlights:

- **Day 1:** Introduction to Proteus and 8051/PIC microcontroller simulations
 - **Day 2:** IoT applications using Arduino and Raspberry Pi
 - **Day 3:** Advanced simulations with ARM Cortex and Proteus debugging tools
- The workshop enhanced participants' skills in project simulation, aligning academic learning with industry trends. Feedback emphasized the usefulness and applicability of the software for future projects.



Faculty Details

Sl.No	Name	Designation
1	Dr.G.F.Ali Ahammed	Program Coordinator & Associate Professor
2.	Dr.T.D.Vishnumurthy	Professor
3.	Meghashree A C	Assistant Professor
4.	Srinivas S.	Assistant Professor
5.	Ashok R.S	Assistant Professor

Student Achievements

University Rank Holders

Sl.No	Name	USN	Rank
1	Nikhila	4VZ18LDS13	1
2	Pavithra S R	4VZ18LDS15	2
3	Ranjitha R	4VZ18LDS16	3

Publications:

- "Design & Simulation of Audio Watermarking Using Empirical Mode Decomposition for Copyright Protection," *International Journal of Scientific Research & Development*, vol. 3, pp. 627–631, 2015.
- "Modernization in Agriculture Using GSM & XBee Technology," *International Journal of Scientific Research & Development*, vol. 3, pp. 3033–3037, 2015.
- "Design & Simulation of DPWM for Cascaded Multilevel Voltage Source Inverter," *International Journal of Scientific Research & Development*, vol. 3, pp. 3366–3368, 2015.
- "Navigation Tool for Blind Using Low Cost Arduino," *International Journal of Scientific Research & Development*, vol. 3, pp. 936–938, 2015.
- "Lifetime Maximization Energy Efficient Routing Protocol for Adhoc Wireless Networks," *International Journal of Scientific Research & Development*, vol. 3, pp. 1516–1518, 2015.
- "Enhancement of Lifetime Using Two-Level Fuzzy Based Clustering in WSN," *International Journal of Scientific Research & Development*, vol. 3, pp. 1599–1604, 2015.
- "A Strategy to Construct a Wireless Sensor Network Using Mobile Robot," *International Journal of Scientific Research & Development*, vol. 3, pp. 945–951, 2015.
- "Emergency Tracking System for Women Using Body Sensors via Wrist Watches Using IoT," *International Research Journal of Engineering and Technology*, vol. 4, no. 8, Aug. 2017.
- "Design of Street Light System with Vehicular Sensing," *International Research Journal of Engineering and Technology*, vol. 4, no. 7, July 2017.
- "Intelligent Wheelchair Based on Internet of Things," *International Research Journal of Engineering and Technology*, vol. 4, no. 8, Aug. 2017.

- "Design of Smart Airfield Lighting System Based on Arduino Uno for Airport Ground Lighting," *International Research Journal of Engineering and Technology*, vol. 4, no. 7, July 2017.
- "A Review on Medical Image Classification Approaches," *Journal of Emerging Technologies and Innovative Research*, vol. 5, pp. 885–888, June 2018.
- "Recovery Analysis of Skin Transplantation Using SVM," *Journal of Emerging Technologies and Innovative Research*, vol. 5, pp. 885–888, June 2018.
- "Microstrip Patch Antenna with Circular Superstrate for Dual Band Generation," *Online International Interdisciplinary Research Journal*, vol. 8, May 2018.
- "A Novel Video Watermarking Technique Based on Implicit Distortions and Quantization Parameter," *Journal of Emerging Technologies and Innovative Research*, vol. 6, pp. 57–60, June 2019.
- "System Verilog Assertion Based Design and Verification of AHB-LITE Protocol," *Journal of Emerging Technologies and Innovative Research*, vol. 6, pp. 950–956, July 2019.
- "Implementation of MQTT-Geolocation to Wireless Sensor Networks," *Journal of Emerging Technologies and Innovative Research*, vol. 6, June 2019.
- "Enhanced Detection of Malaria Disease Using Image Processing and Machine Learning," *Journal of Emerging Technologies and Innovative Research*, vol. 6, pp. 351–354, June 2019.
- "Light Frequency Based In-depth Analysis of Fast Dehazing Technique," *International Journal of Engineering Research and Technology*, vol. 9, no. 6, June 2020.
- "Innovative Approach to Detect Human Actions Using Feature Extraction and Classification," *International Journal of Engineering Research and Technology*, vol. 9, no. 6, June 2020.
- "Machine Learning Framework to Predict Chronic Kidney Disease Using Ensemble Algorithm," *International Journal of Engineering and Advanced Technology*, vol. 9, pp. 1–6, June 2020.
- "A Machine Learning Approach for Predicting Different Types of Stroke," *Compliance Engineering Journal*, vol. 12, no. 7, July 2021.
- "Prediction of Pneumonia Using Big Data, Deep Learning and Machine Learning Techniques," *International Research Journal of Modernization in Engineering, Technology and Science*, vol. 4, no. 9, pp. –, Sep. 2022.
- "Recyclable Waste Classification Using Computer Vision and Deep Learning," *International Journal of Scientific Research in Engineering and Management (IJSREM)*, vol. 7, no. 7, July 2023. ISSN: 2582-3930.
- "Yoga Pose Detection Using Machine Learning," *International Journal of Scientific Research in Engineering and Management (IJSREM)*, vol. 7, no. 7, July 2023. ISSN: 2582-3930.