Sri Bhagawan Mahaveer Jain Educational & Cultural Trust's

JAIN COLLEGE OF ENGINEERING, BELAGAVI

(Approved by AICTE, New Delhi, Affiliated to VTU, Belagavi, Recognized by GoK)
(Accredited by NBA: Department of Civil, CSE, ECE and EEE)

Department of Electrical & Electronics Engineering

Date: 25/08/2025

NOTICE

All the students of 5th semester are hereby informed that the proposed Skill Lab on **"AI for EEE using Python"** will be conducted as per slots in the time-table w.e.f 29/08/2025 onwards attendance mandatory.

Venue: B-404, Computer Lab
Time: 10:30 am to 12:30 pm

Mr. Ashokh Bajantrri
Coordinator

Dr. Venkatratnam Chitturi
HOD

Department of Electrical and Electronics Engineering
JCE
Belagavi

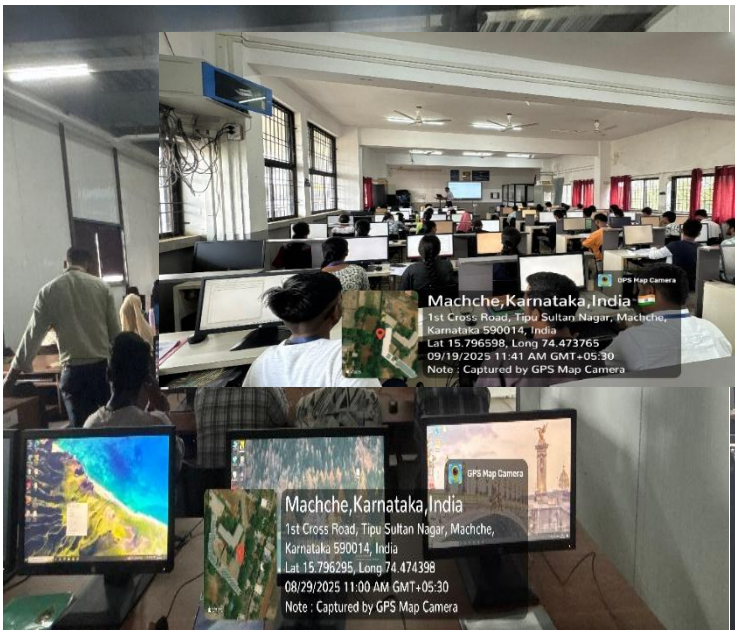
Sri Bhagawan Mahaveer Jain Educational & Cultural Trust's

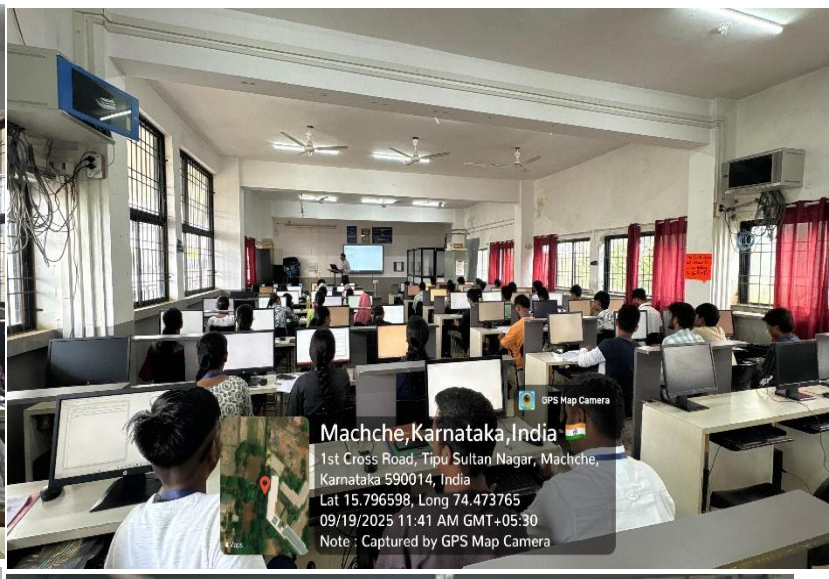
JAIN COLLEGE OF ENGINEERING, BELAGAVI

(Approved by AICTE, New Delhi, Affiliated to VTU, Belagavi, Recognized by GoK)

(Accredited by NBA: Department of Civil, CSE, ECE and EEE)

Department of Electrical & Electronics Engineering





Description (Duration: 25/08/2025 to 29/11/2025) :

The Skill Lab on **Artificial Intelligence (AI) for Electrical and Electronics Engineering (EEE)** using **Python** was successfully conducted for the students to equip with usage of modern computational tools and intelligent techniques that are transforming the electrical engineering domain.

The 40-hour Skill Lab on **Artificial Intelligence for Electrical and Electronics Engineering (EEE)** using **Python**, conducted from **25th August 2025 to 29th November 2025**, provided a comprehensive, practice-oriented learning experience aimed at equipping students with AI-driven analytical skills relevant to modern electrical engineering applications.

The session focused on using Python as a powerful programming platform to implement AI algorithms relevant to power systems, control systems, signal processing, and industrial automation.

To ensure continuous learning, multiple **assessments** were conducted throughout the duration. These included quizzes, coding exercises, dataset analysis tasks, and small implementation-based evaluations. The assessments strengthened learning retention and monitored student progress at different stages of the skill lab.

The Skill Lab highlighted the increasing role of AI in smart grids, renewable energy integration, predictive maintenance, and IoT-based monitoring.

Overall, the program enhanced students' understanding of how AI, combined with Python, can be effectively applied in modern electrical engineering systems.

Outcomes:

- Ability to apply Python programming for solving real-time electrical engineering problems using AI techniques.
- Understanding of basic AI and machine learning concepts, including data preprocessing, model training, and performance evaluation.
- Improved analytical and problem-solving skills through hands-on experimentation on EEE datasets.
- Exposure to AI applications in smart grids, automation, and power systems, enhancing industry readiness.
- Enhanced ability to integrate AI tools into EEE projects, mini-projects, and internships.

Summary:

Overall, the Skill Lab conducted between **25/08/2025 and 29/11/2025** significantly strengthened students' computational thinking, programming confidence, and ability to apply AI tools to practical engineering scenarios.

The program effectively prepared participants for advanced projects, internships, and emerging industry roles in smart energy systems, automation, and data-driven electrical engineering.