One-Day Workshop on Introduction to Machine Learning Fundamentals using Python for Electrical Engineers

Date: 14/02/2026

The Electrical Department organized a one-day workshop for TE Electrical students titled *'Introduction to Machine Learning Fundamentals using Python for Electrical Engineers'* on February 14th, 2026, from 10:00 AM to 5:30 PM. The workshop was conducted for 20 registered TE students who actively participated in the sessions.

As the department has introduced the theme of "Machine Learning in Electrical Engineering Projects" for Semester-VI projects, and in response to the interest shown by TE Electrical students, this workshop was arranged to equip them with the necessary foundational and practical skills required for ML-based Electrical Engineering applications.

The workshop consisted of three focused sessions covering Python basics, data handling and preprocessing using Pandas, introduction to machine learning, supervised learning algorithms such as regression and classification, and their applications in Electrical Engineering.

The sessions emphasized hands-on learning, enabling students to implement coding examples and understand real-world problem-solving approaches. Practical demonstrations and guided exercises helped students connect theoretical concepts with engineering applications.

The workshop was conducted under the guidance of **Prof. Rupesh B. Ingle**, with coordination from **Prof. Priya A. Potdar** and valuable encouragement from the Head of the department, **Dr. Jayant J. Mane.**

All registered students actively participated throughout the sessions. Feedback received from participants indicated that the workshop significantly improved their understanding of Python, data science fundamentals, and machine learning techniques. Students appreciated the practical orientation of the workshop and expressed interest in pursuing ML-based Electrical Engineering projects.

The workshop successfully bridged the gap between theoretical learning and practical implementation, aligning with the department's objective of promoting skill-based and technology-driven education.

Prof. Rupesh B. Ingle conducting session-01 on Python for Data & Numerical Computing

Students practicing data handling and preprocessing using Pandas during the hands-on session

Students implementing Machine Learning Algorithms during the hands-on practical session

Group photograph of TE Electrical students with Prof. Rupesh B. Ingle at the conclusion of the Machine Learning workshop