Electrical & Electronics Engineering

Report

Faculty Development Programme (FDP) on

"Research Methodologies for Interdisciplinary Research"

(8- 12th December, 2025)

The Department of Electrical & Electronics Engineering organized a Faculty Development Programme (FDP) on "Research Methodologies for Interdisciplinary Research" from 8th to 12th December 2025, in collaboration with NITTTR Chandigarh. The programme began with an inaugural session led by Dr. U. N. Roy and the faculty, followed by an engaging introduction to the nature and types of research, as well as the growing importance of interdisciplinary projects. Dr. Sunil Dutt conducted insightful sessions on formulating research questions, developing hypotheses, designing research, and understanding survey techniques and data collection tools, enabling participants to structure research problems more effectively. Dr. U. N. Roy further strengthened the participants' foundations by discussing sampling techniques, literature review strategies, and the process of identifying suitable research topics. Dr. Rupinder Singh enhanced the learning experience with a session on bibliography management tools, demonstrating how these tools streamline reference organization and citation generation. Dr. Reshmi from IIPS Mumbai delivered comprehensive sessions on types of data and parametric and non-parametric tests, enhancing participants' understanding of analytical methods and statistical testing. Dr. Gaurav Kumar introduced a range of powerful open-source and AI-supported research tools, including SciScape, Research Rabbit, and **OpenCAD**, demonstrating how these tools facilitate literature mapping, citation tracking, idea exploration, and maintaining research databases. A key highlight of the programme was the hands-on SPSS training conducted by Dr. Archana Roy from IIPS Mumbai, where participants gained practical experience in data handling, variable assignment, statistical testing, and analytical reporting. The FDP concluded with a session on writing research proposals by Dr. U. N. Roy, followed by the sharing of research experiences and a valedictory session organised by the Faculty of the Rural Development Department. Overall, the programme significantly enriched participants' knowledge and skills in research methodology, data analysis, SPSS usage, and interdisciplinary research practices through both conceptual insights and practical tools.









