

K D K College of Engineering, Nagpur
Department of Electrical Engineering
Teaching and Learning
Innovations in Teaching and Learning

The faculty members of Department of Electrical Engineering brought following innovations in teaching – learning process aiming at achieving the intended purposes.

Sr. No	Methods of delivery	Description	Tools	Impact
1.	Interactive Learning	Time table, Course/syllabus. Course Outcomes, PO, Course Information Sheet (CIS), Question Papers, Attendance, Teaching Plan, Notes	Teaching Plan, Assignments, Models, charts	CO-PO Attainment
2.	Guest Lecture	Expert Lectures on various contemporary and advanced topic in Electrical Engineering field	ICT Tools	The lectures provide a platform for students to clear their doubts, get answer to their innumerable questions, and even put forth their views on matters relevant to their studies and their careers
3.	Tutorial	Group of approximately 25 students in one batch. Given individual attention.	Teaching plan, Problem sheet,	Improvement in problem solving ability. Builds confidence in the learner.
4.	Computer Based learning	Practical are supported with computer based experimentation.	Computer, software, ICT Tools	Students learn modeling, analysis and system behavior through computer simulations. They use software for graphical visualization of results for better understanding.
5.	Use of AV Resources	NPTEL is a portal dedicated and provides technical e-content to solve the issue of increased e-resource demand. Demonstration videos and lectures competitive exam classes	ICT Tools	Student gets relevant and current information as on time. This study will definitely focus the evaluation of usage and road map for access successfully.
6.	Project Based Learning	It is a style of Active learning and Inquiry-based learning	Previous Project Reports, Computers	The Teacher plays the role of Facilitator, working with students to frame worthwhile questions, Structuring meaningful tasks, Coaching both Knowledge Development And Social Skills, and carefully assessing about learning the experience

7.	Educational visits/tours	Industry Visits- to observe the different activities, techniques carried out and to explore various types of machineries used and also enhance interaction.	Industry visit, Departmental Advisory Board, Expert Lecture, Seminar, etc	Industrial visits are an important part of learning. Visiting an industry allows to develop a greater understanding of how electrical engineering theory is put into practice. Teamwork is also important in the field where different professionals come together to work. Global Exposure.
8.	Field Visits/Internships	Field Visits- to observe the different activities, techniques carried out on field.	Industry visit, Industry Internship, Advisory Board, Expert Lecture, Seminar, etc	Industry visits are an important part of learning. Visiting a Industry allows to develop a greater understanding of how Electrical engineering theory and applications is put into practice. Industry visits helps to visualize the items that need to be measured and that how it is properly placed in real time. Get idea for final year project work.
9.	Interaction with alumni	Regular interaction with alumni for industrial /field updates	Interaction and lectures/workshops	Become aware of current trends, job expectations, career planning.
10.	Student Association & Technical chapter activities	Electrical Engineering Student Association (EESA)	Students activities related to enhancements of skill and personality quotient	Student organizations help strengthen leadership and managerial skills. Manage resources like finance, plan, and organize events. Student organizations can be an important part of students' growth during their college career.
11.	Robot Club & other Technical activities	An understanding between the person representing an organization for the exchange of knowledge	Project assistance, Expert lectures, Seminar, thesis evaluation, etc.	Harnessing the expertise of the persons from the organization for the benefit of students and staff.

12.	Software Training	Workshop on Continuous Education Program (CEP) for MATLAB, PLC-SCADA, AUTO CAD , etc.	Computer, Software ,PLC Allen Bradley	Electrical engineers should contain adequate working knowledge in AutoCAD to make drawing smarter. Knowledge of PLC SCADA enhanced the application of electrical engineering and its application. MATLAB Provides knowledge of real time applications and simulation of various Electrical design and controls.
13.	Encouragement for outside Participation	Students participate in competitions in other organization.	Seminar, Conferences, Workshop, Competition, etc.	Participants have the opportunity to learn and explore various issued by participating along with other organization participants.
14.	GAP Analysis	Gap is identified based on the course curriculum and PO attainment.	Gap is bridged through content delivery through PPT presentation, expert lectures, students seminar co/extra-curricular activities, etc.	GAP Analysis and action taken by based on CO assessment & PO attainment, teacher identifies the area in which gap exist and will cover the gap through subject activities/seminar/expert lecture, etc.

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