



Gap analysis

- Curriculum is designed such that students should demonstrate essential knowledge, skills and abilities needed for professional practice and higher education.
- The curriculum contents are decided in alignment with Programme Educational Objectives through its direct support from Program outcomes.
- It is ensured that program curriculum satisfies program specific criteria.
- The curriculum structure is designed keeping in view of broad curricular components, number of contact hours for theory and laboratory practice, prerequisite flow chart of each course, credits/marks allotted to each course.
- Course planning is done based on course delivery methods. course assessment methods are decided both continuous and end semester assessment.
- In this process continuous monitoring is done by course coordinators, Program Assessment Committee (PAC) members, Department Advisory Board (DAB) committee members, Board of Studies (BoS) committee members and improvements are suggested.

Following is the Gap analysis found out by Committee members and suggested to improve on course delivery methods.

Sr. No	Gap	Improvements in Course delivery methods			
1.	Need to have ICT based education	Use of Edhitch software for assignments, discussions	Use of NPTEL videos and discussion with students on that topic	E learning module for Basic Electrical engineering	Use of Virtual lab session, registration to online MOOCS courses Swayam, Impartus software for video lecture capturing.
2.	Awareness of industry practices and requirements	Industry plant visits and report writing	Saturday @BV to interact with industry management	Expert talk and invited alumni interaction	
3.	Need to increase	Skill	Mini projects	Simulation	Simulation



Sr. No	Gap	Improvements in Course delivery methods			
	hands on experience	development training workshops-Land T switchgear, electrical motor rewinding, PLC-SCADA, AUTOCAD	and model making	studies on latest software-ETAP, MATLAB	studies on latest software-ETAP, MATLAB
4.	Interactive teaching modes	Group discussion	Power point presentation by students	Numerical solution of variety of problems in a class to different groups.	Question answer session
5.	Concept clarity	Multiple choice test	Assignments	Feedback on unit test answers	Midterm academic review and repeat turn
6.	Students centric learning activities need improvement	Engagement of people with science and technology	Entrepreneur development cell	Seminar – selection of topic, self learning and presentation	
7.	Project based learning	Use of E journal facility to find out research papers	Encouragement to participate in project exhibitions	Motivation to write paper and publish with proper skills	Use of plagiarism software
8.	Professional skill development	Employability Enhancement Programme	Professional Skill development courses added in revised curriculum		
9.	Electives	More number of electives – Interdisciplinary courses on – Management, electronics, computer, mechanical			



Sr. No	Delivery Methods	Description
1.	Traditional board and chalk method	Typically for courses which are analytical, have mathematical derivations, and conceptual developments, Problem Analysis and solution. By giving analogy simplification of concept, stepwise problem solving, highlighting the important terms
2.	Experimental and simulation studies model making	In laboratories the experiments are designed, data is collected and analyzed for the practical solution using hardware set up or software. The group of students does the task under the supervision of the faculty member. The performance of the students' abilities for completion of the set objectives for the experiment is continuously assessed by the faculty member as Term Work and record of the same is maintained in Academic Record Book
3.	Power Point Presentations	For courses rich in having textual and diagrammatic material presentations having multimedia contents such as Graphics, Animation and short video clips. Students are asked to give presentation in class
4.	Live lectures / Webinars / distance learning mode	Telecast of assorted webinars, Expert lectures, NPTEL courses, Virtual Laboratory Coursework, webinars are arranged for students. The faculty member accompanying the students conducts interaction with the students to confirm the take away. ICT tools enable them to adapt cognitive, affective and behavioral domains. Further the seeds of lifelong learning are also in planted during lectures.
5.	Interactive teaching modes	Such as group discussions, quiz, rigorous assignments are used to improve problem solving capability, critical thinking, control design and analyzing ability. Different questions to different groups to increase inter-personal communication and complete the task in given time.
6.	Industrial visits and Guest Lectures	To understand the application areas of the curriculum contents interaction of the students and faculty members is organized in every academic term with the industrial expertise in the form of guest lectures and industrial visits
7.	Quiz or MCQ Test	Concept clarity and answer in minimum time to assess cognitive level



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Sr. No	Delivery Methods	Description
8.	Project	The students search recent papers and identify the problem, decide team, Budgeting and planning of work, fabrication of circuit, test the circuit and write the report.

