S.A. ENGINEERING COLLEGE, CHENNAI-77

(An Autonomous Institution, Affiliated to Anna University)

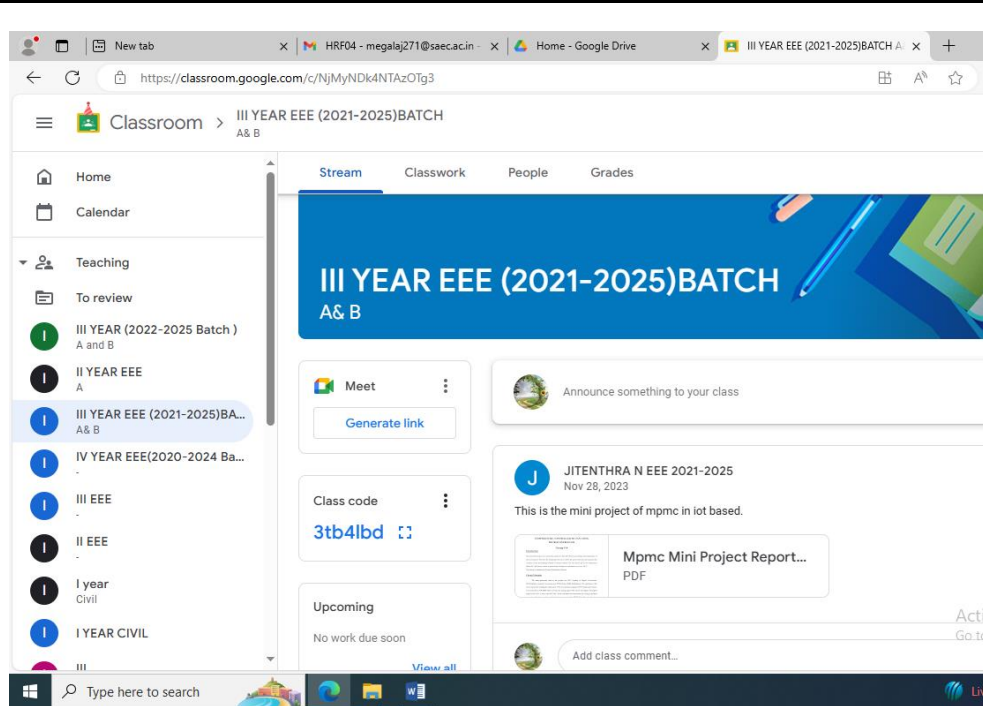**Accredited by NAAC with 'A' Grade, ISO 9001:2015 Certified Institution**

Department of Electrical and Electronics Engineering

INNOVATIVE TEACHING METHODS
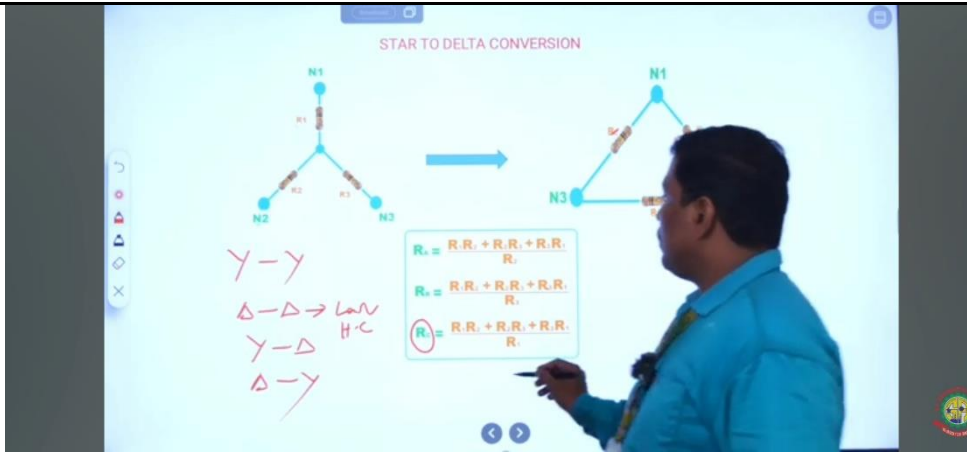
Sl.No.	Pedagogical Methods	Outcomes	Activities
1	**USE OF ICT TOOLS** - Information and Communication Technology (ICT)tools are valuable tools in the field of education, enhancing the teaching and learning experience in various ways.Assist educators in presenting information in a structured and visually appealing manner. Use images, graphs, and charts to supplement verbal explanations. Add visual interest to maintain student focus.	Students will be able to understand the concept clearly as complex processes or experiments can be visually demonstrated.	

2	**USE OF MODELS IN TEACHING**- The use of models in teaching is a valuable pedagogical approach that involves the use of representations or simplified versions of real-world concepts to aid in the learning process. Models help students understand complex ideas, visualize abstract concepts, and make connections between theory and practice.	Students will be able to understand abstract concepts clearly. Increases the students interest inclass and makes the class more interactive.	
3	**PROJECT BASED LEARNING**- Project-Based Learning (PBL) is an instructional methodology that involves students working on a project over an extended period to explore and answer a complex question, solve a real-world problem, or create a tangible product. PBL is designed to engage students in active, hands-on learning, promoting critical thinking, collaboration, and the application ofknowledge.	Students obtain creative capacity to work through difficult or ill-structured problems, commonly in small teams. It helps the students to develop the skills to work in Industry.	

4	**ACTIVITY BASED LEARNING-** Activity-Based Learning (ABL) is an instructional approach that emphasizes active engagement, participation, and hands-on activities as the primary means of learning.	Students will be actively engaged in learning, enhance understanding, improves critical thinking skills. Students will acquire the skills of working in teams.	
5	**NPTEL SESSIONS-** offer online courses and certification in various disciplines. NPTEL provides video lectures, course materials, and assignments to learners.	Students will be able to access high-quality content delivered by experts in the field, offering a deeper Understanding of academic subjects.	

6	**GOOGLE CLASSROOM-** Google Classroom is an online platform developed by Google that enables teachers to create, distribute, and manage assignments, as well as facilitate communication and collaboration with students.	Students will be able to track their progress, view their feedback and easily access the study mateiral.	
7	**NDL facility available in central library-** The National Digital Library is an initiative by the Ministry of Education, Government of India, to provide access to a vast collection of digital educational resources. The NDL aims to facilitate learning by providing high-quality content in various formats, including text, audio, video, and images. It covers a wide range of subjects and is accessible to students, teachers, and learners across	Students will be able to enhance their knowledge by accessing wide range of educational resources, including textbooks, lecture notes, research papers, and multimedia content	

8	**HACKATHONS-** A hackathon is an event, where individuals or teams come together to collaboratively work on solving problems, developing software, creating innovative projects, or tackling specific challenges.	Students will be able to work in team, within a specific time, focus on project, learn new things	
9	**MENTORING-** The purpose of mentoring is to facilitate the personal and professional development of the mentee through guidance, advice, and sharing of experiences.	Mentors provide guidance and advice based on their own experiences and expertise. They offer insights into navigating challenges, making decisions, and achieving goals. Mentoring often involves the transfer ofknowledge and skills from the mentor to the mentee. This can include industry-specific knowledge, problem-solving approaches, and interpersonal skills.	
10	**GROUP BASED ACTIVITIES IN CLASSROOM-** Group-based activities in the classroom are instructional strategies that involve students working together in small groups to achieve specific learning objectives. These activities promote collaboration, communication, critical thinking, and problem-solving skills.	Students become active participants in their learning. Students develop skills valued by employers (such as problem - solving, negotiation, conflict resolution, leadership, critical thinking and time management) exposes students to diverse ideas andapproaches.	

11	**PRODUCT DEVELOPMENT LAB FACILITATING EQUIPMENTS-** The use of product development lab facilitating equipment is crucial in various industries and fields where organizations are engaged in creating and improving products.	Understand modern product development processes. Understand andexplain the concept of Industrial design and robust design concepts. Understand the concept ofdesign for manufacture and assembly.	
12	**YOU TUBE VIDEOS - Faculty Members Lecture Series** A YouTube lecture series refers to a collection of educational videos available on the YouTube platform that are organized in a sequential manner. These series are often created by educators, experts,or institutions to deliver instructional content on a particular subject.	Students will be able to access the videos at any time. The resource can be utilized by anyone.	

| 13 | **GUEST LECTURE**-A guest lecture refers to a presentation or talk delivered by an expert or specialist in a particular field who is invited to speak to an audience, typically in an educational or professional setting. | Students will be able to bridge the gap between theory and lab. Students understands the current industry trends enrichng their educational experience and obtain insights beyond the curriculum. | |

| 14 | **DEMONSTRATION BASED-** "Demonstration-based" typically refersto a teaching or learning method whereeducators use demonstrations to illustrate concepts, processes, or techniques to students. | Students will be able to demonstrate as a result of a completing a course | |