

Karakambadi Road, Opposite LIC Training Centre, Tirupati – 517 507. Accredited by NBA (B.Tech – CSE, ECE, EEE, Mech., Civil and IT) & NAAC with 'A' Grade Approved by AICTE, New Delhi permanently affiliated to JNTUA, Ananthapuram.

Department of Electrical and Electronics Engineering

Summary of Flipped Class Room Activities in AY 2024-25

S. No.	Course	Topic	Date of Activity	Mode of Delivery	Assessment Method	Faculty In- Charge
1	Solar and Wind Energy Systems	MPPT Techniques	17.03.2025	Tutorial + MATLAB Comparison	Comparison chart, simulation demo, viva	Dr. R. Sireesha
2	Control Systems	Time Domain Analysis of Second-Order Systems	07.03.2025	Video Tutorial + MATLAB Activity	Simulation, group discussion, short test	Y. Hari Krishna
3	Power System Protection	Differential Protection of Transformer	25.02.2025	Video Lecture + Discussion	Quiz, relay setting task, case study discussion	Dr. Shaik Rafi Kiran
4	Electric Circuit Analysis	Superposition Theorem	03.10.2024	Instructional Video + Practice	Problem-solving sheet, simulation verification, oral test	E. Nanda Kumar
5	Power Electronics	Single Phase Full-Bridge Inverter Operation	23.09.2024	Recorded Lecture + Simulation	Circuit design exercise, simulation output report	Dr. K. Kumar



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Department of Electrical and Electronics Engineering

Report on Flipped Classroom Activity

Objective:

The flipped classroom model was implemented to promote active learning, improve student engagement, and foster critical thinking and problem-solving abilities. Pre-class materials were provided to students, and classroom time was used for interactive discussions, simulations, and assessments.

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- Enhanced Conceptual Clarity: Students demonstrated a better understanding of practical applications.
- Improved Participation: More students engaged in discussions and simulation-based tasks.
- Collaborative Learning: Activities promoted peer-to-peer learning through team-based tasks.
- Performance: Assessment scores for flipped topics were higher compared to traditional lectures.



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Photograph of the Activity



Conclusion:



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	Power	Differential		Video	Quiz, relay	Dr. Shaik
1	System	Protection of	25.02.2025	Lecture +	setting task, case	Rafi Kiran
	Protection	Transformer		Discussion	study discussion	Kali Kifali

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1	Electric Circuit Analysis	Superposition Theorem	03.10.2024	Instructional Video + Practice	Problem-solving sheet, simulation verification, oral test	E. Nanda Kumar

Outcomes Observed:

- Enhanced Conceptual Clarity: Students demonstrated a better understanding of practical applications.
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Summary of Flipped Class Room Activities in AY 2023-24

S.No	Year	Subject	Торіс	Date	Faculty Name
1	III	Utilisation of Electrical Energy	Electrolytic Process	05.12.2023	Y. Hari Krishna
2	III	Digital Circuits	Combinational Circuits	24.11.2023	K. Yamuna



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Report on Flipped Classroom Activity: 24.11.2023

The Department of Electrical and Electronics Engineering conducted Flipped Classroom activity for Digital Circuits subject on 24.11.2023 as part of active learning initiatives. The topic of Combinational circuits is discussed. Pre-class materials were shared in advance, and students came prepared for in-class discussions, problem solving, and simulation-based tasks.

Students actively participated in all the sessions with enthusiasm. The sessions were interactive and engaging, enabling students to better understand the concepts through collaborative learning. The photographs below capture the active involvement of students during the flipped classroom sessions.





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Report on Flipped Classroom Activity: 05.12.2023

The Department of Electrical and Electronics Engineering conducted Flipped Classroom activity for Utilisation of Electrical Energy subject on 05.12.2023 as part of active learning initiatives. The topic of Electrolytic process is discussed. Pre-class materials were shared in advance, and students came prepared for in-class discussions, problem solving, and simulation-based tasks.

Students actively participated in all the sessions with enthusiasm. The sessions were interactive and engaging, enabling students to better understand the concepts through collaborative learning. The photographs below capture the active involvement of students during the flipped classroom sessions.





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Summary of Flipped Class Room Activities in AY 2022-23

S.No	Year	Subject	Topic	Date	Faculty Name
1	II	DC Machines And Transformers	Three Phase Transformers	05.01.2023	Dr. Shaik Rafi Kiran
2	III	Power Systems - II	Power Factor Improvement	03.12.2022	Dr Y V Krishna Reddy



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Report on Flipped Classroom Activity: 05.01.2023

The Department of Electrical and Electronics Engineering conducted Flipped Classroom activity for DC Machines and Transformers subject on 05.01.2023 as part of active learning initiatives. The topic of three phase transformers is discussed. Pre-class materials were shared in advance, and students came prepared for in-class discussions, problem solving, and simulation-based tasks.

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Report on Flipped Classroom Activity: 03.12.2022

The Department of Electrical and Electronics Engineering conducted Flipped Classroom activity for Power Systems-II subject on 03.12.2022 as part of active learning initiatives. The topic of Power Factor Improvement is discussed. Pre-class materials were shared in advance, and students came prepared for in-class discussions, problem solving, and simulation-based tasks.

Students actively participated in all the sessions with enthusiasm. The sessions were interactive and engaging, enabling students to better understand the concepts through collaborative learning. The photographs below capture the active involvement of students during the flipped classroom sessions.

