

Dr. D. Y. Patil Institute of Technology Pimpri, Pune

Department of Electrical Engineering

Activity: "Innovative Teaching Learning Pedagogy"

Date & Day: 6/03/2025

Activity Name:

Game -Based Learning on smart grid

Subject: Smart Grid

Venue: B 206

Activity conducted by: R.V.Katre

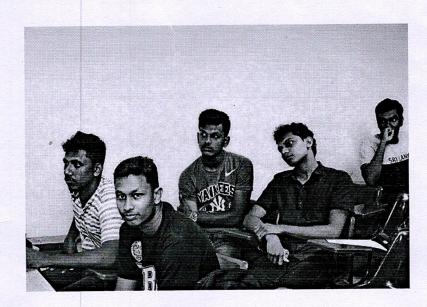
Objectives:

1. Understand the structure and components of a smart grid.

2. Apply knowledge of communication, control, and automation in energy systems.

3. Demonstrate the ability to make real-time decisions in grid operation.

Photographs:





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Outcome:

- 1. Explain the architecture and operation of a smart grid.
- 2. Evaluate the role of renewable integration and storage in smart grids.
- 3. Analyze data from smart meters and grid sensors.

Mapping of Pedagogy with POs and PSOs:

PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	Po11	PO12	PSO1	PSO2	PSO3
3	-	•		-	-	-	•	-	•	3	3	2		-

Mapping of POs and PSOs with Justification:

POs and PSOs Mapped	Justification								
PO1	Demonstrates basic knowledge of smart grid structure and operation.								
PO11	The game includes cost-based decision making, energy trading, and time management teaching students basic project and resource management skills.								
PO12	The game instills adaptability and a mindset for continuous learning in energy systems.								
PSO1	Students engage in operating, analysing, and maintaining smart grid components (like transmission, distribution, and control systems) during simulation gameplay, reinforcing core electrical engineering applications.								

Course Coordinator

DAC

HOD