

Electrical Engineering Department

1.	Name of the Program	DISTRIBUTED ENERGY SOURCES AND SMART GRID
2.	TAC No.	ICT-52, National Level
3.	Dates	04/08/2025 to 08/08/2025
4.	Venue	Online mode
5.	Target Group	Faculty Members of Polytechnic / Engineering Colleges
6.	Course Coordinators	Prof. Lini Mathew
7.	Objectives/ Learning Outcomes	The participants shall be apprised about the latest trends in Distributed Generation and Smart-Grid such as Challenges of Grid Connection of DER, Distributed Generation Integration and Pricing, Islanding Detection Techniques, Energy Storage and Battery Management and Hardware in Loop.
8.	Course Contents	<ul style="list-style-type: none"> ➤ Types of Distributed Energy Resources ➤ Challenges of Grid Connection of DER ➤ Hybrid Renewable Energy Systems ➤ Integration and Pricing of Distributed Generation ➤ Smart Grid Operation with Integration of RES and EV ➤ Islanding Detection Techniques on Micro Grid ➤ Cyber Security in Smart Grid ➤ Advanced Metering Infrastructure ➤ Energy Storage Systems in Smart Grid ➤ Concept of Hardware in Loop and Modelling and Simulation of Micro-Grid
9.	Methodology	The teaching-learning process of training program will include online theory lectures, doubt clearing sessions and case studies.