

EC & EA

GOVERNMENT CO.ED POLYTECHNIC RAIPUR (C.G)

DEPARTMENT OF ELECTRICAL
LESSON PLAN

Session: JAN-JUNE 2025

Session start as per university calendar.

Course Name: Energy Conservation & Energy Audit

Name of Subject Teacher: Lakeshwar Prasad Sahu

Lecturer plan T+P = 3

Course code: 2024682(024)

Discipline: Electrical			Semester: 6th	Class room Instruction Start Date:					
S.No.	Chapter No.	Topics	Sub Topic to be covered under this unit	Total hours	No. of periods planned	Actual No of periods taken	Date of Class Conduction	Use of AV resources if any	Remarks if any
1	1	Energy Conservation Measures & Management	Current energy scenerio in india	16	2	2	25/01/2025	NA	
			Review of Various sources		1	1	24/01/2025		
			Concept of energy management		1	1	03/02/2025		
			Difference B/W Energy management, conservation, audit, efficiency		2	2	23/01/2025		
			Role of BEE, NPC, MNRE, MEDA		3	3	17, 20, 22/01/2025		
			Function of Energy rating		1	1	07/01/2025		
			Energy conservation act 2001		1	1	28/01/2025		
			Energy units & conservation		1	1	04/02/2025		
			PBP, IRR, Depreciation		2	2	31/01/2025		
			Role of ESCO		1	1	30/01/2025		
			Difference B/W ESCO & EPC		1	1	29/01/2025		
			Energy Conservation in generation		3	3	3, 4, 8/03/2025		
2	2	Energy Conservation in power system	Power factor	16	3	3	20/02/25, 22/02/25	NA	
			economical Power factor		1	1	01/03/25		
			Assesment of T&D losses		2	2	03/03/25, 04/03/25		
			DSM		2	2	08/03/25, 11/03/25		
			Energy Conser. Equipment		2	2	22/04/25, 24/04/25		
			Tarrif		1	1	17/03/25		
			Types of Tarrif		2	2	18/03/25		

3	3	Energy Conservation in lighting system	Basic parameters in lighting	16	2	2	01/04/2025	NA		
			Recommended luminance level		2	2	03/04/2025			
			Procedure for assessing existing lighting		2	1	05/04/2025			
			Energy Conservation technique in lighting		10	5	5/04, 07/04, 8/04, 09/04/25		1	
4	4	Energy Conservation in motors & transformer	Need & Significance of Energy Conser. in motors & transformer	16	2	2	17/04/25, 12/04/25	NA		
			Construction, working of energy efficient motors		3	3	15/04/25, 17/04/25			
			Difference b/w energy efficient & standard motors		2	2	16/04/25			
			Energy Conservation techniques in IM		3	3	19/04/25; 22/04/25			
			Function of Energy Conservation Equipment		3	2	28/04/25			
			Energy Efficient Transformer		3	2	26/04/25			
			Electricity ACT 2003		2	1	04/02/2025			
5	5	Energy Audit	IE rules & regulation for Energy Audit	20	2	1	05/02/2025	NA		
			Energy flow Diagram		1	2	06/02/2025			
			Energy Audit Instruments		2	2	07/02/2025			
			Questionnaires for the Energy Audit		2	1	08/02/2025			
			ABC analysis		1	1	10/02/2025			
			Internal Energy Audit Checklist		2	2	12/02/2025			
			Procedure of Energy Audit		2	2	13-15/02/2025			
			Simple payback period		1	1	30/01/2025			
			Examples on Energy Conservation projects		2	2	17/02/2025			
			Instruments for Audit		3	1	07/02/2025			