

GOVERNMENT CO-ED POLYTECHNIC, RAIPUR
DEPARTMENT OF ELECTRICAL ENGINEERING

LESSON PLAN

Session:- July-Dec 2024

Semester:-3rd

Session start date as per University Calendar:-

Course Name:- **Electrical Drawing and CAD**

Course Code:- 2024374(024)

Name of Subject teacher:- Devendra Verma

Unit -1 Symbols and Codes

Class Room Instruction (CI)

	No. of Periods	Remarks
SI Symbols in electrical engineering	3	10/09/24
Conventions for circuit and schematic representation of electrical and electronic components, instruments and equipment	3	13/09/24 14/09/24 17/09/24 18/09/24 19/09/24

Number of periods planned (CI + LI) : 6

Number of periods actually taken : 06

Unit - 2 Installation, mounting and layout of power and safety equipment

Class Room Instruction (CI)

	No. of Periods	Remarks
1 Different types of mountings for static(transformers): pole and ground mounted	3	20/09/24 21/09/24 23/09/24
2 Mountings for dynamic equipment (electrical rotating machines)	3	24/09/24 25/09/24
3 Substation layout with circuit breaker, on-load and off-load tap changers, Buchholz's relay and other protective devices of transformers up to 2MVA Plate and Pipe earthing Extension of range using shunt reactor, multiplier, CT, PT	4	26/09/24 27/09/24 28/09/24 30/09/24

Number of periods planned (CI + LI) : 10

Number of periods actually taken : 09

Unit -3 Constructional Features of Electrical Machines

Class Room Instruction (CI)	No. of Periods	Remarks
3.1 Parts of a transformer up to 2 MVA	1	1/10/24
3.2 DC Machines: pole, pole shoe, simplex lap and wave winding	1	3/10/24
3.3 Alternators: salient and cylindrical rotor	1	4/10/24
3.4 Induction motors: squirrel cage and slip ring	1	7/10/24
3.5 AC Machine winding: full pitch winding and short pitch winding	2	8/10/24

Number of periods planned (CI + LI) : 6

Number of periods actually taken : 05

Unit -4 Domestic and Commercial wiring for LV Equipment

Class Room Instruction (CI)	No. of Periods	Remarks
4.1 Illumination fixtures: types and Internal circuit diagram	2	9/10/24 14/10/24
4.2 Control wiring of go down, staircase, street light and for houses Wiring of energy meters for domestic and commercial loads	4	16/10/24 17/10/24 18/10/24
4.3 Internal Wiring of Refrigerators and Air conditioners Starter, 4-point starter Wiring diagram of submersible and centrifugal pumps	4	21/10/24 22/10/24 23/10/24 24/10/24

Number of periods planned (CI + LI) : 10

Number of periods actually taken : 09

Unit -5 Antifriction Bearings

Class Room Instruction (CI)	No. of Periods	Remarks
5.1 Computer Aided Drawing: Draw command, edit command, Coordinate entry, Osnap, Layers, Dimensioning, Text in a drawing, Ortho command, Zoom command and plot command	4	19/11/24 21/11/24 25/11/24 28/11/24
5.2 General electrical and electronic symbols, Layouts of domestic,	3	29/11/24 30/11/24
5.3 Commercial and industrial wiring (2D only) Cross Sectional view of: Fuse and cables (2D) D.C. Motor and their parts Single phase Transformer, Power transformer Induction Motor	6	6/12/24 7/12/24

Insulators, Circuit Breakers, Lightning Arresters
11 kV Pole Mounted Substation
Single line diagrams of
11kV/33 kV Substation

10/12/24

13/12/24

Number of periods planned (CI + LI) : 13

Number of periods actually taken : 10

Number of Total periods planned : 45

Number of Total periods actually taken : 39

Subject Teacher : Devendra Verma

HOD

Department of Electrical