



**GOVERNMENT POLYTECHNIC DARLIPALI, SUNDARGARH**  
ସରକାରୀ ବହୁବୃତ୍ତି ଅନୁଷ୍ଠାନ ଦର୍ଲିପାଲି, ସୁନ୍ଦରଗଡ଼  
GOVERNMENT OF ODISHA | ଓଡ଼ିଶା ସରକାର

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**LESSON PLAN(2025-26)**

Discipline: ELECTRICAL		Semester: 4 <sup>th</sup>	Name of the Teaching faculty: Suchismita Sahoo
Subject: ELECTRICAL ESTIMATION AND CONTRACTING Subject Code: EEPE204(b) TH:5(B)		No of Days/Week class allotted: 3	Semester from Date: 22/12/2025 to 18/04/2025 No of weeks: 18 No. of Periods available: 50
Month Week	No of periods available	Class Day	Theory topics to be covered
DECEMBER/ 1 <sup>st</sup>	3P	1	Electric Installation and Safety 1.1 Scope and features of National electric code 2011
		2	Electric Installation and Safety 1.1 Scope and features of National electric code 2011
		3	Electric Installation and Safety 1.1 Scope and features of National electric code 2011
JANUARY/ 2 <sup>ND</sup>	3P	1	Electric Installation and Safety 1.1 Scope and features of National electric code 2011
		2	Electric Installation and Safety 1.1 Scope and features of National electric code 2011
		3	1.2 Types of electrical installation
JANUARY/ 3 <sup>RD</sup>	3P	1	1.2 Types of electrical installation
		2	1.3 Fundamental principles for electrical installation
		3	1.3 Fundamental principles for electrical installation
JANUARY/ 4 <sup>TH</sup>	3P	1	1.4 Permit to work, safety instructions and safety practices
		2	1.4 Permit to work, safety instructions and safety practices
		3	1.5 Purpose of estimating and costing

JANUARY/ 5 <sup>TH</sup>	3P	1	<b>Estimation and Costing</b> 2.1 Meaning and purpose of- Rough estimate
		2	2.2 Detailed estimate
		3	2.3 Supplementary estimate
JANUARY/ 6 <sup>th</sup>	3P	1	2.4 Annual maintenance estimate and revised estimat
		2	2.5 Factors to be considered while preparation of detailed estimate and economical execution of work
		3	2.6 Contracts 2.6.1 Concepts of contracts 2.6.2 Types of contracts
FEBRUARY/ 7 <sup>TH</sup>	3P	1	2.6.3 Contractor 2.6.4 Role of contractor
		2	2.7 Tenders and Quotations 2.7.1 Type of tender
		3	2.7.2 Tender notice 2.7.3 Preparation of tender document, and method of opening of tender
FEBRUARY/ 8 <sup>TH</sup>	3P	1	2.7.4 Quotation 2.7.5 Quotation format
		2	2.7.6 comparison between tender and quotation
		3	2.8 Comparative statement
FEBRUARY/ 9 <sup>TH</sup>	2P	1	2.8.1 Format comparative statement 2.8.2 Order format
		2	2.8.3 Placing of purchasing order
		3	2.9 Principles of execution of works, planning, organizing and completion of work, Billing of work
FEBRUARY/ 10 <sup>TH</sup>	2P	1	<b>Non-Industrial Installations</b> 3.1 Types of Non-industrial installations-Office buildings, shopping and commercial centre, residential installation, Electric service and supply
		2	3.2 Design consideration of electrical installation in commercial buildings
		3	3.3 Design procedure of installation- steps involved in detail 3.4 Estimating and costing of unit
MARCH/ 12 <sup>TH</sup>	3P	1	3.5 Earthing of commercial installation

		2	3.6 Design electrical installation scheme of commercial complex.
		3	3.7 Erection, Inspection and testing of installation as per NEC
MARCH/ 13 <sup>TH</sup>	3P	1	<b>Industrial Installation</b> 4.1 Classification of industrial buildings based on power consumption
		2	4.2 Drawing of wiring diagram and single line diagram for single phase and three phase Motors
		3	4.3 Design consideration in industrial installations
MARCH/ 14 <sup>TH</sup>	3P	1	4.4 Design procedure of installation-detailed steps
		2	4.5 Design electrical installation scheme of factory/ small industrial unit
		3	4.6 Preparation of material schedule and detailed estimation
APRIL/ 15 <sup>TH</sup>	1P	1	4.7 Installation and estimation of agricultural pump and flourmill
	2P	1	<b>Public Lighting Installation</b> 5.1 Classification of outdoor installations streetlight/ public lighting installation
		2	<b>Public Lighting Installation</b> 5.1 Classification of outdoor installations streetlight/ public lighting installation
	3P	1	5.2 Street light pole structures
		2	5.2.1 Selection of equipment
		3	5.2.2 Sources used in street light installations.
APRIL/ 15 <sup>TH</sup>	2P	1	5.3 Cables 5.3.1 Recommended types and sizes of cable
		2	5.3.2 Control of street light installation
		3	5.4 Design, estimation and costing of streetlight
APRIL/ 15 <sup>TH</sup>	3P	1	REVISION
		2	PREVIOUS YEAR QUESTION DISCUSSION
		3	DOUBT CLEARING CLASS

Prepared by

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