COURSE NAME	: ELECTRICAL ENGINEERING GROUP
COURSE CODE	: EE/EP
SEMESTER	: SIXTH
SUBJECT TITLE SUBJECT CODE	: PROJECT :

Teaching and Examination Scheme:

Teaching Scheme				Examinati	on Scheme			
TH	TU	PR	PAPER HRS.	TH	PR	OR	TW	TOTAL
		04				50#	50@	100

- External

@ - Internal

* On Line Examination

Note: The term Work will be done for assessment of assignments on Action Plan of Project of Fifth and Sixth semester together

Rationale:

Diploma holders need to be capable of doing self study throughout their life as the technology is developing with fast rate. Student will be able to find out various sources of technical information and develop self-study techniques to prepare a project and write a project report. This subject is intended to teach students to understand facts, concepts and techniques of electrical equipments, its repairs, fault finding and testing, estimation of cost and procurement of material, fabrication and manufacturing of various items used in electrical field. This will help the students to acquire skills and attitudes to work in industry and can start his own enterprise.

Objectives:

The students will be able to,

- 1. Work in Groups, Plan the work, and Coordinate the work.
- 2. Develop leadership qualities
- 3. Analyse the different types of Case studies.
- 4. Develop basic technical Skills by hands on experience
- 5. Write project report.
- 6. Develop skills to use latest technology in Electrical field.

Learning Structure:

Application	Implementations of skills developed in the World of work, Generating innovative ideas for promoting self-employment of students.	
Procedure	Identification of Project, Procurement of Components, Fabrication and Testing, Performance Analysis, Costing, etc	
Concepts	Information Gathering Techniques, Presentation Techniques, Basic Engineering Skills, etc	
Facts	Students Have already studied Electrical Circuits, Electrical Machines, Electrical Power System, Electrical Estimation, Utilisation of Electrical Energy, etc.	

Contents:

Projects
1. Design of Illumination Scheme(Up to 20 KW) for Hospital / Shopping
Mall/Cinema Theatre/Commercial Complex/Educational
Institute/Industrial Complex.
2. Design of Rural Electrification Scheme for small Village, Colony.
3. Case Studies Related to Industries - Operation / Maintenance / Repair and
Fault Finding. (Refer Guideline Document).
4. Energy Conservation and Audit.
5. Substation Model (Scaled)
6. Wind Turbine Model (Scaled)
7. Pole Mounted Substation Model (Scaled)
8. Rewinding of Three Phase/Single Phase Induction Motor.
9. Rewinding of Single Phase Transformer.
10. Fabrication of Inverter up to 1000 VA, Battery Charger.
11. Fabrication of Small Wind Energy System for Battery Charging.
12. Fabrication of Solar Panel System for Battery Charging.
13. Microprocessor/ Micro controller Based Projects.
14. PC Based Projects and Simulation Projects.
Seminar
A group seminar to be conducted after completion of Project work and marks
to be allotted separately under head Seminar in CIAAN format of Project

Note: Out of Four hours two hours should be allotted for giving the Instructions for preparing a Project Report. (Refer Guideline Document for Format of Project Report)

Learning Resources:

1. Books/Magazines:

Sr. No.	Name of the Magazine	
1.	IEEE Transactions/Journals	

2.	Electrical India
3.	IEEMA Journal
4.	Elecrama
5.	Technorama
6.	Urja
7.	Industrial Automation
8.	Electronics for You
9.	Electronics Projects
10.	Computer World
11.	Chip
12.	Any Journal Related to Electrical Engg./Electronics/Computer/Information
	Technology

Components of Project Report:

- 1. Synopsis- Project Summary (One page summary of entire project)
- 2. Action Plan of Project for both Semesters
- 3. Introduction (Promoters, Market Scope/ requirement)
- 4. Project Concept & Product (Details of product)
- 5. Manufacturing Process & Technology
- 6. Material and Machinery Required
- 7. Raw materials, Consumables & Utilities
- 8. Estimation (Assumptions, requirements)
- 9. Market (Survey, Demand & Supply)
- 10. Cost of Project,
- 11. Future Scope/ Benefit to Society
- 12. Conclusion.
- 13. References