

MINOR PROJECT

ENEE 355

Credit :1

Year: III

Part: II

Course Objectives:

The objective of this course is to enable students to undertake a minor project based on the concepts acquired from theoretical and laboratory courses in Electrical Engineering. The course emphasizes hands-on learning through practical implementation of engineering principles, fostering the ability to apply theoretical knowledge to real-world problems. It also aims to enhance students' skills in teamwork, problem-solving, project planning, and technical documentation.

General Procedures

Under the supervision of the course instructor, students will be organized into groups of 4–5 members. Each group will select a project topic related to electrical engineering, with emphasis on areas such as power and control, electrical machines, electrical installations, power electronics and energy management, considering technical, economic, and practical aspects. Students may conduct field visits, where appropriate, for data collection, system observation, and analysis. Each group will systematically complete the project through stages including topic selection, planning, data collection, analysis, report preparation, and final presentation. Continuous guidance, monitoring, and feedback will be provided by the instructor throughout the duration of the course to ensure effective project development and learning outcomes.

1 Project Selection and Planning

- 1.1 Selection of minor project based on theory/practical subjects studied
- 1.2 Problem identification and scope definition
- 1.3 Approval of project by faculty supervisor

2 Literature Review and Proposal

- 2.1 Basic literature review and background study
- 2.2 Preparation of brief project proposal including objective and methodology
- 2.3 Selection of tools, components, and resources

3 Design and Development

- 3.1 Design and development of mini project (hardware/simulation)
- 3.2 Application of practical skills and engineering tools
- 3.3 Integration of concepts from different subjects

4 Testing and Implementation

- 4.1 Testing and validation of the developed project
- 4.2 Performance observation and improvement

Evaluation

The final written report, formatted as per provided guidelines, should be submitted by the 12th week of the semester. This report will be evaluated by the course instructor and an oral examination of the final report will take place during the 15th week as indicated in the table below:

Evaluation Method	Marks distribution	Remarks
Viva / Report Presentation	50	
Total	50	