## Minor Project EG3107CT

Year: III Total: 3 hours/week
Part: I Lecture: ... hours/week
Tutorial: ... hour/week
Practical: 3 hours/week

Lab: ... hours/week

### **Course description:**

This course provides students with an idea of how to transform the theoretical knowledge gained in earlier semesters into practical applications. The students will build a real-life project during this course using the knowledge gained in earlier semesters.

## **Course objectives:**

After completing this course, the students will be able to:

- 1. Learn and gain the knowledge about the programming tool they used to implement the real-life project.
- 2. Plan, design, develop and implement the real-life problem as a project.
- 3. Formulate project documentation and oral presentation for his/her final year project.

## **Project Overview:**

- 1. Group formation (3-4 persons / group)
- 2. Project concept development
  - a. Finding Project concept
  - b. Scope of project
  - c. Completion time
- 3. Proposal preparation and presentation-2 weeks
- 4. Mid-term defense (should complete literature review, methodology, project design and project progress report)-8 weeks after the proposal acceptance
- 5. Final defense (should deliver complete project and report)-4 weeks after mid-term defense
- 6. Project documentation (must follow project documentation guide line given by supervisor or the department)
- 7. Submission of hard cover project document to department-1 week after final defense

### The project should:

- 1. Be intended to develop an Computer Engineering solution to a practical problem
- 2. Be carried out using an engineering approach
- 3. Emphasize design
- 4. Be carried out in a group (3-4 person/group)
- 5. Normally result in the production of a piece of software
- 6. Include technical documentation based on documentation guideline.
- 7. Be fully described from inception to completion in a written report produced to a good level of professional competence

### **Procedure:**

- 1. Explain the minor project concept in a class by project teachers.
- 2. Preliminary selection of topic.
- 3. Discussion with department regarding the feasibility/practicality of the project (e.g. cost, usefulness, market).
- 4. Finalization of topic.

- 5. Submission of the detail proposal (Extensive literature review).
- 6. After approval by project teachers, start of minor project work in laboratory /home
- 7. Monitoring of the work progress by project teachers and report to department.
- 8. A mid-term progress report should be submitted by the student on the date fixed by department.
- 9. Presentation of mid-term progress of the minor project along with report.
- 10. Final presentation of minor project should be conducted by the department and should be evaluated by the project teachers in the presence of other teachers in the related field, not involved in minor projects, but from the same department.
- 11. Students must submit a group report in the format prescribed below.

## **Requirements for report writing:**

Font Name: Times New Roman

Top Margin: 1 inch Left Margin: 1 inch Right Margin: 1 inch Bottom Margin: 1 inch Gutter: 0.25 inch (left)

Header and Footer: 0.5 inch

Line Spacing: Single Paragraph Spacing: 8 pt

Font Size: 12 pt (for normal text) Follow following standard for headings

# 1. Heading1 (16pt, Bold)

**1.1.** Heading 2 (14pt, Bold)

**1.1.1.** Heading3 (13pt, Bold)

1.1.1.1. Heading4 (12pt, Bold)

### **Arrangement of Contents in a report:**

The sequence of contents in a major project report is as follows

- 1. Cover Page
- 2. Title Page
- 3. Certificate of Approval
- 4. Acknowledgment
- 5. Executive Summary
- Executive Summary should be one-page synopsis of the project report and it must clearly give the overview of the project.
- 6. Table of Contents
- The table of contents should list all material following it as well as any material which precedes it.
- 7. List of Figures (if any)
- The list should use exactly the same captions as they appear below the figures in the text.
- 8. List of Tables (if any)
- The list should use exactly the same captions as they appear above the tables in the text.
- 9. List of Symbols (if any)
- The list should provide the detail of the symbols used in the report.
- 10. Abbreviations (if any)

- Abbreviation list should provide the details of the abbreviations used in the report in alphabetical order.

## 11. Main body

- 11.1. Chapter 1: Project Overview (Introduction, Objectives and Scope, Project Features,
  - Feasibility, System Requirement)
- 11.2. Chapter 2: Literature Review
- 11.3. Chapter 3: Design and Methodology (e.g. System Design, methods used, tools, data source)
- 11.4. Chapter 4: Result and Analysis
- 11.5. Chapter 5: Conclusion, Recommendation and Limitations

### 12. References

- The reference material should include the author name, title, year. Do not mention the references of the websites in the report.

### 13. Appendices (if any)

- Appendices are provided to give supplementary information, which is included in the main text may serve as a distraction and cloud the central theme. Appendices should be numbered using Arabic numerals, e.g. Appendix 1, Appendix 2, etc. Tables and References appearing in appendices should be numbered and referred to appropriate places just as in the case of chapters.

**Page numbering**: The preliminary parts (Acknowledgement, Executive Summary, Table of Contents, List of symbols, List of figures, List of tables) are numbered in roman numerals (i, ii, etc). The first page of the first chapter (Introduction) onwards will be numbered in Arabic numerals 1 2 3 etc at the bottom.

**Figure and Table numbering:** It is useful and convenient to number the figures also chapter-wise. The figures in chapter 4 will be numbered as Figure 4.1: Figure Name. This helps you in assembling the figures and putting it in proper order. Similarly, the tables are also numbered as Table 4.1: Table Name. All figures and tables should have proper captions. Usually the figure captions are written below the figure and table captions on top of the table.

#### **Evaluation Scheme:**

The marks should be evaluated by project teachers as well as other teachers in the related field on the basis of:

S.N.	Topic	Marks Distribution
1	Proposal Defense	10
2	Mid-term progress report/presentation	20
3	Final project report/presentation	70
		(project coordinator =10
		supervisor =20
		external examiner =40)
	Total	100

## **Detailed evaluation scheme:**

S.N.	Topic	Marks Distribution
1	Presentation skill	20%
2	Team work	10%
3	Understanding of project work and related theory	20%
4	Project demonstration	20%
5	Project Applications	10%
6	Documentation	20%
	Total	100%