



COURSE SPECIFICATION

(PROJECT)

Programme(s) on which the project is given	Computer Science
Major or Minor element of programs	Major
Department offering the program	Computer Science
Department offering the project	Computer Science
Academic year / Level	4 th Year / 1 st and 2 nd semesters

A- Basic Information

Title	Project			Code	CS481	
Credit Hours	Lecture	1	Tutorial	-	Practical	5
	Total				6	

B- Professional Information

1- Overall aims of course

By completing this project the student should able to:

- Train the students to work within a teamwork environment.
- Get some experience in implementing the theoretical theorems practically.
- Enhance practical skills of both the hardware and software stuff.
- Apply the theoretical knowledge to build practical projects in one of the following fields; logic design, software engineering, programming, system software, networking or expert systems.

2- Intended learning outcomes of course (ILOs)

2a- Knowledge and understanding

- a3 Demonstrate a grasp of the principles of computer systems, including architecture, networks and communication
- a6 Know and understand the principles and techniques of a number of application areas informed by the research directions of the subject, such as artificial intelligence, databases and computer graphics.

2b- Intellectual skills

- b3** Identify a range of solutions and critically evaluate and justify proposed design solutions.
- b6** Be creative in the solution of problems and in the development of designs.

2c- Professional and practical skills

- c4** Use the scientific literature effectively and make discriminating use of Web resources.
- c6** Use appropriate computer-based design support tools
- c8** Appreciate the features of complex computing hardware and software and operate them effectively

2d- General and transferable skills

- d4** Strike the balance between self-reliance and seeking help when necessary in new situations.
- d7** Demonstrate significantly enhanced group working abilities.

3- Contents

Topic	No. of Hours	Lecture	Tutorial/ Practical
<p>The student must submit a project report to the department for evaluation and discussion by the oral examination committee. This committee must contain internal and external examiners. The report may include the following units:</p> <p>1 Introduction</p> <ul style="list-style-type: none">Here the goal and methodology of the project should be stated.	2	2	-
<p>2 Previous work</p> <ul style="list-style-type: none">This part may contain some of the previous work (if any), to train the student to have the ability to read and understand some related material.	4	4	-
<p>3 Theoretical considerations</p> <ul style="list-style-type: none">The theoretical background of the project may be considered in this part. It may include the theorems, rules and methodology for the project implementation. When using programming, this part should include the program analysis and data structure.	10	10	-
<p>4 Practical work</p> <ul style="list-style-type: none">The software or hardware implementation of the project is considered here. It may include the program development and hardware analysis of the project. It also contains the circuit diagrams used in the implementation.	110	10	100
<p>5 Results, Discussions,..., etc.</p> <ul style="list-style-type: none">The achieved results of the project and its operation are demonstrated in this section. The results justification and discussion are also	41	1	40

presented.			
6 Conclusions			
<ul style="list-style-type: none"> This part concludes the project work and its applicability and scalability are presented. 	1	1	-
Total number of Hours for the course	168	28	140

4- Teaching and learning methods

The department assigns a supervisor for each project group. External supervisor(s) may also participate in the supervision depending upon the nature of the project.

- 4.1 Lectures.
- 4.2 Practical experiments in the laboratory.
- 4.3 Exercises and tutorials.
- 4.4 Research assignments.

5- Student assessment methods

5-a Methods

- 5.a.1 Reports, assignments, and exercises to assess knowledge and understanding.
- 5.a.2 Regular oral, practical and written quizzes to assess intellectual skills.
- 5.a.3 Practical projects to assess professional skills.
- 5.a.4 Reports, assignments, and discussions to assess general and transferable skills.
- 5.a.5 Final dissertation to assess knowledge and understanding.

5-b Assessment schedule

Assessment 1	5 th week.	Periodical reports
Assessment 2	8 th week.	
Assessment 3	10 th week.	
Assessment 4	23 rd weeks (final dissertation)	

5-c Weighting of assessments

Semester work	20%
Periodical reports	20%
final dissertation	60%
Total	100%

6- List of references

6-a Course notes

There are lectures notes prepared by project advisor.

6-b Essential books (text books)

Any related books. It depends upon the field of the project.

6-c Recommended books

Depends upon the project field.

6-d Periodicals, Web sites, ... etc

IEEE transactions on computers and software.

7- Facilities required for teaching and learning

- Library contains the essential references.
- Laboratory equipments, apparatus and kits.
- Datashow, screen, and laptop computer.

Course coordinator:

No Coordinator

Head of Department:

Prof. Nabil Abd El-Wahed Ismail

Date: / /