





Course Specification

— (Postgraduate Programs)

Course Title Project Implementation

Course Code: MSCS 695

Program: Master Programme in Computer Science

Department: Computer Science

College: Computer Science and Information Technology

Institution: King Faisal University

Version: Course Specification Version Number

Last Revision Date: *Pick Revision Date.*







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A. General information about the course:

1. Course Identification:

1. Credit hours: 6 (3-0-6)

2. 0	2. Course type					
Α.	□University	⊠ College	Depa	rtment	□Track	
В.	Required 🗆 Elective					
3. L	3. Level/year at which this course is offered: : Level 2 , 3 or 4					

4. Course General Description:

The Project Implementation is the implementation phase of Project Proposal. In this course the students will be required to implement proposed design of the project. The students will review the design specification and make any necessary enhancements to synchronize the implementation details. The students will identify and learn the use of tools required for the project implementation. The students will be expected to: prepare application architecture, code, debug, document, and test the application software within suggested timeframe. A key focus of the course is to emphasize the quality of software project through various evaluation aspects such as professional coding style, documentation of code, intuitive user interface design, input validation, verification and user guide. The students will be further required to evaluate the developed system by generating test cases of the critical components of the designed model.

5. Pre-requirements for this course (if any):

MSCS 690 : Project Proposal

6. Pre-requirements for this course (if any):

MSCS 690 : Project Proposal

7. Course Main Objective(s):

The main purpose of the course is to implement a project based on design specification developed during the Project Proposal. The students apply the concept of testing and quality assurance on the developed project. They enhance their soft skills including oral and written communication skills. They also gain an awareness of their ethical, professional and legal responsibilities to the society

2. Teaching Mode: (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage	
1	Traditional classroom			
2	E-learning			
3	Hybrid			



No	Mode of Instruction	Contact Hours	Percentage
	Traditional classroomE-learning		
4	Distance learning		
5	Others	45	100%

3. Contact Hours: (based on the academic semester)

No	Activity	Contact Hours
1.	Lectures	
2.	Laboratory/Studio	-
3.	Field	-
4.	Tutorial	-
5.	Others (specify)	45
	Total	45

B. Course Learning Outcomes (CLOs), Teaching Strategies and

Assessment Methods:

Code	Course Learning Outcomes	Code of PLOs aligned with program	Teaching Strategies	Assessment Methods
1.0	Knowledge and understanding			
1.1	Identify and define basic architecture (main components)	К1	Interaction with supervisor and committee members	Milestone 4 & 5 Evaluations, Supervisor's Evaluation
1.2	Detailed design of the proposed system and implementation	К2	Interaction with supervisor and committee members	Milestone 4 & 5 Evaluations, Supervisor's Evaluation
2.0	Skills			
2.1	Analyze system architecture and alternatives	S1	Interaction with supervisor and committee members	Milestone 4 & 5 Evaluations, Supervisor's Evaluation
2.2	Evaluate the prosed systems implementation	S2	Interaction with supervisor and committee members	Milestone 4 & 5 Evaluations, Supervisor's Evaluation





Code	Course Learning Outcomes	Code of PLOs aligned with program	Teaching Strategies	Assessment Methods
3.0	Values, autonomy, and	d responsibility		
3.1	Develop technical report writing and oral presentation skills	S3	Meeting with supervisor, Brainstorming Group discussion	Milestone 4 & 5 Evaluations, Supervisor's Evaluation
3.2	Practice software testing and design techniques learned during the course work and project proposal	V1	Meeting with supervisor, Brainstorming Group discussion	Milestone 4 & 5 Evaluations, Supervisor's Evaluation

C. Course Content:

No	List of Topics	Contact Hours
	Total	45

D. Students Assessment Activities:

Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
Project Reports Evaluation (Milestone 4 Evaluation by two Committee Members)	8	35%
Project Reports Evaluation (Milestone 5 Evaluation by two Committee Members)	15	35%
Comprehensive Evaluation by the Supervisor	15	30%
	Project Reports Evaluation (Milestone 4 Evaluation by two Committee Members) Project Reports Evaluation (Milestone 5 Evaluation by two Committee Members) Comprehensive Evaluation by the Supervisor	Assessment Activities *timing (in week no)Project Reports Evaluation (Milestone 4 Evaluation by two Committee Members)8Project Reports Evaluation (Milestone 5 Evaluation by two Committee Members)15

*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.)





E. Learning Resources and Facilities:

1. References and Learning Resources:

Required Textbook	Lynn E. Miner & Jeremy T. Miner, "Proposal Planning and Writing", Third Edition, Greenwood Publishing Group, 2003, ISBN: 1573564982		
Essential References	Statistics for Engineers and Scientists by William Navidi, 2nd Edition, McGraw-Hill, 2007. ISBN: 0073309494		
Supportive References			
Electronic Materials	Access to Digital Library of IEEE, ACM, Springer etc.		
Other Learning Materials	Learning Manuals: MATLAB, Python		

2. Educational and Research Facilities and Equipment Required:

Items	Resources	
facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	Sufficient seats (typically 20) as per student registration required in the lecture	
Technology equipment (Projector, smart board, software)	Sufficient computer terminals with required setup having the necessary software installed and configured for the students to complete assignments and projects. Data show is needed to demonstrate in the class	
Other equipment (Depending on the nature of the specialty)	Not Required	

F. Assessment of Course Quality:

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching	Students	Indirect Assessment through Teaching Evaluation
Effectiveness of students' assessment	Faculty	IndirectassessmentthroughCourseEvaluation Survey
Quality of learning resources	Students	Indirect Assessment through Learning Resources Survey
The extent to which CLOs have been achieved	Faculty	Direct assessment through Rubrics analyses
Other		

Assessor (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)





Assessment Methods (Direct, Indirect)

G. Specification Approval Data:

COUNCIL /COMMITTEE	
REFERENCE NO.	
DATE	

