Kingdom of Saudi Arabia
National Commission for
Academic Accreditation & Assessment

المملكــة العربيــة السعوديــة
الهيئــة الوطنيــة للتقويــم
والاعـتـمــاد الأكـاديـمــي

ATTACHMENT 5.

Kingdom of Saudi Arabia

The National Commission for Academic Accreditation & Assessment

14014902-4 Graduation Project II

(CS)

المملكــة العربيــة السعوديــة
الهيئــة الوطنيــة للتقويــم
والاعـتـمـاد الأكـاديـمـي

Course Specifications

Institution Umm Al Qura University	Date 8 / 7 / 1437

College/Department College of Computers and Information Systems

A. Course Identification and General Information

1. Course title and code: 14014902-4 Graduation Project II

2. Credit hours 4
3. Program(s) in which the course is offered. Computer Science

4. Name of faculty member responsible for the course Curriculum Committee

5. Level/year at which this course is offered : 4rd year / level 10
6. Pre-requisites for this course 14014901-4 Graduation Project I
7. Co-requisites for this course

8. Location if not on main campus Al-Abidiyah campus (Boys) and Al-Zaher campus (Girls), Makkah Al Mukarramah

9. Mode of Instruction (mark all that apply)

a. traditional classroom	✓	What percentage?	100
b. blended (traditional and online)		What percentage?	
c. e-learning		What percentage?	
d. correspondence		What percentage?	
f. other		What percentage?	

Comments:.

Kingdom of Saudi Arabia
National Commission for
Academic Accreditation & Assessment

المملكــة العربيــة السعوديــة
الهيئــة الوطنيــة للتقويــم
والاعـتـمــاد الأكـاديـمــي

B Objectives

1. What is the main purpose for this course?
This course is the first semester of the required major design experience. In a two semester-long project, student teams will propose, design, produce and evaluate a software and/or hardware system. The project will culminate in the delivery of a working system, a formal public presentation, and written documentation. Oral and written progress reports are required.

1. Ability to apply knowledge of mathematics, computing, science, and engineering appropriate to the discipline.
2. Ability to analyze a problem, and identify and define the computing requirements appropriate to its solution.
3. Ability to function effectively on teams to accomplish a common goal.
4. Ability to communicate effectively.
5. Recognition of the need for, and an ability to engage continuing professional development.
6. Ability to use the current techniques, skills, and tools necessary for computing practice.
7. Apply mathematical foundations, algorithmic principles, and computer science theory in the modeling and design of computer based systems in a way that demonstrates comprehension of the trade-offs involved in design choices
8. Ability to apply design and development principles in the construction of software systems of varying complexity
.

2. Briefly describe any plans for developing and improving the course that are being implemented. (e.g. increased use of IT or web based reference material, changes in content as a result of new research in the field)

1. Increase the use of textbooks.
2. Gather students' opinions about their success in achieving course objectives by the end of the semester. This is done through number of survey questions that map one-to-one with course objectives.
3. Review and indicate which assessment instrument(s) to be used for assessing each course outcome, and what grading rubric will be used for each instrument.

C. Course Description (Note: General description in the form used in Bulletin or handbook)

Course Description:
This course is the second semester of the required major design experience. In a two semester-long project, student teams will propose, design, produce and evaluate a software and/or hardware system. The project will culminate in the delivery of a working system, a formal public presentation, demo and written documentation. Oral and written progress reports are required.

1. Topics to be Covered

Kingdom of Saudi Arabia
National Commission for
Academic Accreditation & Assessment

المملكــة العربيــة السعوديــة
الهيئــة الوطنيــة للتقويـم
والاعـتـمــاد الأكـاديـمــي

List of Topics		No. of Weeks	Contact hours
N/A		N/A	N/A

2. Course components (total contact hours and credits per semester):						
	Lecture	Tutorial	Laboratory or Studio	Practical	Other:	Total
Contact Hours	30	0	30			
Credit						

3. Additional private study/learning hours expected for students per week.

4 hours

4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy

On the table below are the five NQF Learning Domains, numbered in the left column.

First, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). **Second**, insert supporting teaching strategies that fit and align with the assessment methods and intended learning outcomes. **Third**, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy ought to reasonably fit and flow together as an integrated learning and teaching process. (Courses are not required to include learning outcomes from each domain.)

Code #	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
1.0	**Knowledge**		
2.0	**Cognitive Skills**		
2.1	Ability to apply knowledge of mathematics, computing, science, and engineering appropriate to the discipline.	Project Supervision	Report. Presentation Demo Poster
2.2	Ability to use the current techniques, skills, and tools necessary for computing practice.	Project Supervision	Report. Presentation

Kingdom of Saudi Arabia
National Commission for
Academic Accreditation & Assessment

المملكــة العربيــة السعوديــة
الهيئــة الوطنيــة للتقويــم
والاعـتـمــاد الأكـاديـمــي

			Demo Poster
2.3	Ability to analyze a problem, and identify and define the computing requirements appropriate to its solution.	Project Supervision	Report. Presentation Demo Poster
3.0	**Interpersonal Skills & Responsibility**		
3.1	Ability to function effectively on teams to accomplish a common goal.	Project Supervision	Report. Presentation Demo Poster
3.2	Recognition of the need for, and an ability to engage continuing professional development.	Project Supervision	Report. Presentation Demo Poster
4.0	**Communication, Information Technology, Numerical**		
4.1	Ability to communicate effectively.	Project Supervision	Report. Presentation Demo Poster
4.2	Apply mathematical foundations, algorithmic principles, and computer science theory in the modelling and design of computer based systems in a way that demonstrates comprehension of the trade-offs involved in design choices	Project Supervision	Report. Presentation Demo Poster
4.3	Ability to apply design and development principles in the construction of software systems of varying complexity	Project Supervision	Report. Presentation Demo Poster
5.0	**Psychomotor**		

Kingdom of Saudi Arabia
National Commission for
Academic Accreditation & Assessment

المملكــة العربيــة السعوديــة
الـهيئــــة الوطنيــــة للتقويـــم
والاعـتــمــاد الأكــاديــمــــي

5. Map course Los with the program Los. (Place course LO #s in the left column and program LO #s across the top.) (I = Introduction   P = Proficient   A = Advanced)

Course Los #	Program Learning Outcomes (Use Program LO Code #s provided in the Program Specifications)														
	1.1	1.2	2.1	2.2	2.3	2.4	2.5	3.1	3.2	3.3	4.1	4.2	4.3	5.1	5.2
2.1				P											
2.2						P									
2.3															
3.1								P							
3.2										P					
4.1											P				
4.2												P			
4.3													P		

6. Schedule of Assessment Tasks for Students During the Semester

	Assessment task (e.g. essay, test, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
1	Process (Weekly Meetings)	Every Week	20%
2	Project Report	14	30%
3	Project Presentation	16	20%
4	Demo	16	20%
5	Internal Seminar	14	5%
6	Poster	16	5%

D. Student Academic Counseling and Support

1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice. (include amount of time teaching staff are expected to be available each week)

Office hours between 2-4 hours per week.

E Learning Resources

Kingdom of Saudi Arabia
National Commission for
Academic Accreditation & Assessment

المملكــة العربيــة السعوديــة
الـهيئــــة الوطنيـــة للتقويــم
والاعــتـمـــاد الأكـاديـمـــي

1. List Required Textbooks
UQU Undergraduate Final Year Project Handbook

2. List Essential References Materials (Journals, Reports, etc.)
Sample Reports from UQU Undergraduate Final Year old Projects

3. List Recommended Textbooks and Reference Material (Journals, Reports, etc)
Sawant, Abhijit A., Pranit H. Bari, and P. M. Chawan. "Software testing techniques and strategies." International Journal of Engineering Research and Applications (IJERA) 2.3 (2012): 980-986.

4. List Electronic Materials, Web Sites, Facebook, Twitter, etc.
Merriam, Sharan B., and Elizabeth J. Tisdell. Qualitative research: A guide to design and implementation. John Wiley & Sons, 2015.

5. Other learning material such as computer-based programs/CD, professional standards or regulations and software.
1. integrated development environment (IDE)   2. MS Project by Microsoft

F. Facilities Required

Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access etc.)
1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)   Lecture room (max 40 students)   Computer lab (max 20 students)
2. Computing resources (AV, data show, Smart Board, software, etc.)   Separate Research Labs for Graduation Projects Students
3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list)   1. IBM Rational Rose Enterprise Edition   2. MS Project by Microsoft

G Course Evaluation and Improvement Processes

1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching
A student-feedback form is distributed at the end of the course.

T6._Course Specifications_1 Feb 2015

Kingdom of Saudi Arabia
National Commission for
Academic Accreditation & Assessment

المملكــة العربيــة السعوديــة
الهيئــة الوطنيــة للتقويــم
والاعـتـمــاد الأكــاديـمــي

2 Other Strategies for Evaluation of Teaching by the Instructor or by the Department
Weekly progress report about project should be submitted by students to their supervisors and also to the department

3 Processes for Improvement of Teaching
1. Introductory Seminar for UQU Undergraduate Final Year Project.
2. Seminars about different domain of Software Engineering Projects.
3. Workshops for modern development environments like Android and IOS development

4. Processes for Verifying Standards of Student Achievement (e.g. check marking by an independent member teaching staff of a sample of student work, periodic exchange and remarking of tests or a sample of assignments with staff at another institution)
Internal Seminars after four weeks to test the achievements/progress of students by Department.

5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement.
Every End of Semester ask faculty members to provide their suggestions to make course more effective.

Name of Instructor: _____

Signature: _____   Date Report Completed: _____

Name of Course Instructor _____

Program Coordinator:_____

Signature: _____   Date Received: _____