



**ATTACHMENT 2 (e)**

**Course Specifications**

**Kingdom of Saudi Arabia**

**The National Commission for Academic Accreditation & Assessment**

**Course Specifications  
(CE)**

**14034903-2 Graduation Project-I**



## Course Specifications

Institution <b>Umm Al-Qura University</b>	Date of Report 17/04/2016
College/Department <b>College of Computer &amp; Information Systems</b>	

### A. Course Identification and General Information

1. Course title and code: <b>14034903-2 Graduation Project-I</b>		
2. Credit hours 2		
3. Program(s) in which the course is offered. (If general elective available in many programs indicate this rather than list programs) <b>Computer Engineering</b>		
4. Name of faculty member responsible for the course Dr. Majid al-Gethami		
5. Level/year at which this course is offered Level 9		
6. Pre-requisites for this course (if any) Computer Org. & Architecture and Eng. Design Process and Tools		
7. Co-requisites for this course (if any) N/A		
8. Location if not on main campus <b>Al-Abidiyah Umm Al Qura University - Makkah Al Mukarramah</b>		
9. Mode of Instruction (mark all that apply)		
a. Traditional classroom	<input type="text"/> What percentage?	<input type="text"/>
b. Blended (traditional and online)	<input type="text"/> What percentage?	<input type="text"/>
c. E-learning	<input type="text"/> What percentage?	<input type="text"/>
d. Correspondence	<input type="text"/> Yes What percentage?	<input type="text"/> 100
f. Other	<input type="text"/> What percentage?	<input type="text"/>
Comments:		



## B Objectives

1. What is the main purpose for this course? Accomplish a complete integrated computer-engineering project design. Write a design report and defend his work.
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. Use of PowerPoint slides.

## C. Course Description (Note: General description in the form to be used for the Bulletin or handbook should be attached)

1. Topics to be Covered		
List of Topics	No. of Weeks	Contact Hours



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

3. Additional private study/learning hours expected for students per week.	10
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4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy
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Course Learning Outcomes, Assessment Methods, and Teaching Strategy work together and are aligned. They are joined together as one, coherent, unity that collectively articulate a consistent agreement between student learning, assessment, and teaching.

The *National Qualification Framework* provides five learning domains. Course learning outcomes are required. Normally a course has should not exceed eight learning outcomes which align with one or more of the five learning domains. Some courses have one or more program learning outcomes integrated into the course learning outcomes to demonstrate program learning outcome alignment. The program learning outcome matrix map identifies which program learning outcomes are incorporated into specific courses.

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. **Fourth**, if any program learning outcomes are included in the course learning outcomes, place the @ symbol next to it.

Every course is not required to include learning outcomes from each domain.



	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
<b>1.0</b>	<b>Knowledge</b>		
1.1	Depends upon the project.	1. The project requires use of library reference material and web sites to identify information required to complete tasks.	1. Project defense.
1.2			
1.3			
<b>2.0</b>	<b>Cognitive Skills</b>		
2.1	Depends upon the project.	1. Weekly meetings for follow-up.	1. Group and individual assignments require application of analytical tools in problem solving tasks.
<b>3.0</b>	<b>Interpersonal Skills &amp; Responsibility</b>		
3.1	Improvement of capacity for self-directed learning.	1. 50% of assessment is based on individual's contribution to the group task. (Instructor meets with each group part way through project to discuss and advise on approach to the task)	1. Assessment of group assignment includes component for individual contribution. 2. Capacity for independent study assessed in individual assignments.
3.2	Improvement of personal and social responsibility.		
<b>4.0</b>	<b>Communication, Information Technology, Numerical</b>		
4.1			
4.2			
4.3			
4.4			
<b>5.0</b>	<b>Psychomotor</b>		
5.1			
5.2			

#### Suggested Guidelines for Learning Outcome Verb, Assessment, and Teaching

NQF Learning Domains	Suggested Verbs
<b>Knowledge</b>	list, name, record, define, label, outline, state, describe, recall, memorize, reproduce, recognize, record, tell, write
	estimate, explain, summarize, write, compare, contrast, diagram,



<b>Cognitive Skills</b>	subdivide, differentiate, criticize, calculate, analyze, compose, develop, create, prepare, reconstruct, reorganize, summarize, explain, predict, justify, rate, evaluate, plan, design, measure, judge, justify, interpret, appraise
<b>Interpersonal Skills &amp; Responsibility</b>	demonstrate, judge, choose, illustrate, modify, show, use, appraise, evaluate, justify, analyze, question, and write
<b>Communication, Information Technology, Numerical</b>	demonstrate, calculate, illustrate, interpret, research, question, operate, appraise, evaluate, assess, and criticize
<b>Psychomotor</b>	demonstrate, show, illustrate, perform, dramatize, employ, manipulate, operate, prepare, produce, draw, diagram, examine, construct, assemble, experiment, and reconstruct



Suggested **verbs not to use** when writing measurable and assessable learning outcomes are as follows:

Consider	Maximize	Continue	Review	Ensure	Enlarge	Understand
Maintain	Reflect	Examine	Strengthen	Explore	Encourage	Deepen

Some of these verbs can be used if tied to specific actions or quantification.

**Suggested assessment methods and teaching strategies are:**

According to research and best practices, multiple and continuous assessment methods are required to verify student learning. Current trends incorporate a wide range of rubric assessment tools; including web-based student performance systems that apply rubrics, benchmarks, KPIs, and analysis. Rubrics are especially helpful for qualitative evaluation. Differentiated assessment strategies include: exams, portfolios, long and short essays, log books, analytical reports, individual and group presentations, posters, journals, case studies, lab manuals, video analysis, group reports, lab reports, debates, speeches, learning logs, peer evaluations, self-evaluations, videos, graphs, dramatic performances, tables, demonstrations, graphic organizers, discussion forums, interviews, learning contracts, antidotal notes, artwork, KWL charts, and concept mapping.

Differentiated teaching strategies should be selected to align with the curriculum taught, the needs of students, and the intended learning outcomes. Teaching methods include: lecture, debate, small group work, whole group and small group discussion, research activities, lab demonstrations, projects, debates, role playing, case studies, guest speakers, memorization, humor, individual presentation, brainstorming, and a wide variety of hands-on student learning activities.

**5. 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	Weekly meeting	every week	40
2	Report	end of semester	20
3	Presentation	end of semester	20
4			
5			
6			
7			
8			

#### 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)

Faculty is available 3 hours per week for student help and consulting.

#### E. Learning Resources

1. List Required Textbooks

Depends upon the area.

2. List Essential References Materials (Journals, Reports, etc.)

- Depends upon the area.

3. List Recommended Textbooks and Reference Material (Journals, Reports, etc)

- Depends upon the area.

4. List Electronic Materials (eg. Web Sites, Social Media, Blackboard, etc.)

- Depends upon the area.

5. Other learning material such as computer-based programs/CD, professional standards or regulations and software.

- Depends upon the area.

#### 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.)

Accommodation (Lecture rooms, laboratories, etc.), Final year projects laboratory



2. Computing resources (AV, data show, Smart Board, software, etc.)
<ul style="list-style-type: none"> <li>Computers are required for presentations</li> </ul>
3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list)
N/A

## G Course Evaluation and Improvement Processes

1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching
<ul style="list-style-type: none"> <li>Confidential completion of standard course evaluation questionnaire.</li> <li>Focus group discussion with small groups of students.</li> </ul>
2 Other Strategies for Evaluation of Teaching by the Program/Department Instructor
<ul style="list-style-type: none"> <li>Seminar presentation</li> <li>Observations and assistance from colleagues</li> <li>Independent assessment of standards achieved by students</li> <li>Independent advice on assignment tasks</li> </ul>
3 Processes for Improvement of Teaching
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)
<ul style="list-style-type: none"> <li>Seminar presentation</li> </ul>



5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement.

- End of semester review.

**Faculty or Teaching Staff:** \_\_\_\_\_

**Signature:** \_\_\_\_\_ **Date Report Completed:** \_\_\_\_\_

**Received by:** \_\_\_\_\_ **Dean/Department Head**

**Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_