



Course Specification

(Bachelor)

Course Title: **Requirements Engineering**

Course Code: **IS 1130**

Program: **Bachelor of Information Systems**

Department: **Information systems**

College: **College of Computer and Information Sciences**

Institution: **Imam Mohammad Ibn Saud Islamic University**

Version: **1**

Last Revision Date: **July 10th, 2025**

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A. General information about the course:

1. Course Identification

1. Credit hours: 3 credit hours (lectures:3)

2. Course type

A. ☐ University ☐ College ☒ Department ☐ Track ☐ Others
B. ☒ Required ☐ Elective

3. Level/year at which this course is offered: First Year

4. Course general Description:

This course discusses the processes, methods, techniques and tools that organizations use to manage their information systems requirement engineering. This course assumes that this topic within the broader information Systems context in the modern organization is a complex team-based activity, where various types of technologies (including software as well as complete systems) are an inherent part of the field. This course also acknowledges that this area involves both the use of resources from within the firm, as well as contracted from outside the organization.

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

No Pre-requirements

6. Co-requisites for this course (if any):

No Co-requisites

7. Course Main Objective(s):

The aim of this course is to introduce students the knowledge of the processes, methods, techniques and tool that organizations use to manage their information systems requirement engineering needs along with different related methods, techniques and tools.

2. Teaching mode (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	3 hours/week	100%
2	E-learning		
3	Hybrid		





No	Mode of Instruction	Contact Hours	Percentage
	- Traditional classroom - E-learning		
4	Distance learning		

3. Contact Hours (based on the academic semester)

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

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

Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies	Assessment Methods
1.0	Knowledge and understanding			
1.1	Describe the fundamental systems development life cycle.	K1(I)	Class lectures	Quiz1, Midterm
1.2	Demonstrate knowledge and understanding of issues related to requirements analysis.	K2(I)	Class lectures	Midterm, Final
1.3	Describe methods for requirement elicitation and investigation.	K3(I)	Class lectures	Midterm, Final
2.0	Skills			
2.1	Interpret the requirements using different techniques along with managing them.	S1(I)	Class lectures	Final Exam, Assignment





Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies	Assessment Methods
2.2	Develop business requirements along with documentation.	S2(I)	Class lectures	Quiz2, Final Exam
...				
3.0	Values, autonomy, and responsibility			
3.1	Function effectively on teams to accomplish a common goal	V1(I)	Class lectures	Project, Presentation
3.2	Present a topic in a compelling manner	V3(I)	Class lectures	Project, Presentation
...				

C. Course Content

No	List of Topics	Contact Hours
1.	<i>System Development Life Cycle</i>	5
2.	<i>The essentials of requirements and analyst</i>	5
3	<i>Requirements elicitation and investigation</i>	5
4	<i>Analyzing the requirements</i>	5
5	<i>Documenting the requirements</i>	5
6	<i>Modeling the requirements</i>	5
7	<i>Validating the requirements</i>	5
8	<i>Requirements Management</i>	5
9	<i>Project Discussions</i>	5
Total		45

D. Students Assessment Activities

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	Quiz	4,11	10%
2.	Midterm Exam	8	20%
3.	Assignment	7	10%
4	Group Project	15	20%
5	Final Exam	16	40%

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





E. Learning Resources and Facilities

1. References and Learning Resources

Essential References	Karl Wieggers and Joy Beatty: Software Requirements (3rd Edition) (Developer Best Practices). Microsoft Press, 2013.
Supportive References	1. Dick, Jeremy, Hull, Elizabeth, Jackson, Ken. Requirements Engineering, Springer, 2017. 2. Koelsch, George. Requirements Writing for System Engineering, 2016 3. Axel van Lamsweerde: Requirements Engineering, from System Goals to UML Models to Software Specifications. John Wiley, 2007.
Electronic Materials	Blackboard
Other Learning Materials	N/A

2. Required Facilities and equipment

Items	Resources
facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	1. At least 30 seats 2. A projector connected to a PC preferably with Internet connection 3. Sliding board
Technology equipment (projector, smart board, software)	
Other equipment (depending on the nature of the specialty)	N/A

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching	Students	Indirect using course evaluation survey
Effectiveness of Students assessment	Faculty members	Direct method using TOS file
Quality of learning resources	Students and Faculty	Indirect using course evaluation survey and faculty survey
The extent to which CLOs have been achieved	Faculty members	Direct method using TOS file
Other		

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



Assessment Methods (Direct, Indirect)

G. Specification Approval

COUNCIL /COMMITTEE	IS CURRICULUM APPROVAL & DEVELOPMENT COMMITTEE IS QAC / / IS COUNCIL
REFERENCE NO.	
DATE	