

Ministry of Higher Education

Syrian Virtual University



الجمهورية العربية السورية

وزارة التعليم العالمي

الجامعة الافتراضية السورية

Course Definition File

1. Basic Information:

Course Name	Software Engineering
Course ID	
Contact Hours (Registered Sessions)	
Contact Hours (Synchronized Sessions)	18
Mid Term Exam	
Exam	
Registered Sessions Work Load	
Synchronized Session Work Load	
Credit Hours	

2. Pre-Requisites:

Course	ID

3. Course General Objectives:

This course covers the main concepts of object-oriented software engineering concepts. Topics include: Introduction – Software processes: Software process models, process activities, Computer-Aided Software Engineering, Unified Modeling Language (UML): Process of requirements engineering, requirements documentation and review, requirements management, System Design, Coding phase, System testing and system maintenance Here are several course goals:



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- To help students to develop skills that will enable them to construct software of high quality and to function effectively to accomplish a common goal.
- To make students aware of key aspects of current software engineering approaches.

4. Intended Learning Outcomes (ILO):

Learning	Learning Outcomes			
Outcomes codes				
	Introduction to Software Engineering:			
	Software Engineering principles – Professional software			
LO1	development - Software Characteristics - Software Applications -			
	Software engineering ethics – Computer-Aided Software			
	Engineering (CASE).			
LO2	Software processes:			
LO3	Software process models, process activities.			
	Software Requirements Engineering:			
LO4	Process of Requirements Engineering, Requirements			
LO5	Documentation and review, Requirements Validation,			
	Requirements Management, Use Case Diagram			
LO7	Software Design:			
LO8	Architectural Design, Design Principles, Interfaces Design			
LO6	Unified Modeling Language (UML)(activity Diagram, Sequence			
LO9	Diagram, Collaboration Diagram, Class Diagram, State Diagram,			
LO10	Package and Component Diagram)			
	Coding, Testing and Maintenance:			
LO11	Unit Testing, Testing Principles, Levels of Testing, Structural			
LO12	Testing, Functional Testing, Test Plan, System Operation and			
	Maintenance.			



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5. Course Syllabus (18 hours of total synchronized sessions)

	Course Syllabus	Recorded	Synchronize	Туре	Additional Notes	
LO	Course Synabus	Sessions	d Sessions	туре	Additional Notes	
				Exercises		
				□ Assignments		
				Seminars		
				Projects		
				Practices		
				□ Others		
				Exercises		
				□ Assignments		
				□ Seminars		
				Projects		
				Practices		
				□ Others		
				Exercises		
				□ Assignments		
				□ Seminars		
				Projects		
				Practices		
				Others		
				Exercises		
				□ Assignments		
				Seminars		
				Projects		
				Practices		
				□ Others		

Syrian Arab Republic		الجمهورية العربية السورية وزارة التعليم العالــــي		
Ministry of Higher Education	SVU			
Syrian Virtual University	الجامعة الافتراضية السوريية Syrian Virtual University	الجامعة الافتراضية السورية		
		□ Assignments		
		□ Seminars		
		□ Projects		
		□ Practices		
		□ Others		
		□ Assignments		
		□ Seminars		
		□ Projects		
		□ Practices		
		□ Others		

6. Assessment Criteria (Related to ILOs)

			Assessment Type				
LO Code	LO	Intended Results	Interactive Synchronized Collaboration	Practice	Exams	Presentations And Face- to-Face Assessments	Reports
L01							
LO2							
LO3							
LO4							
LO5							
L06							



7. Practice Tools:

Tool Name	Description		

8. Main References

Ian Sommerville, Software Engineering, 9th Ed, Addison-Wesley, 2011.

Roger S. Pressman, Software Engineering: A practitioner's Approach, 6th ed, McGraw-Hill Science, 2009.

Grady Booch, Robert A. Maksimchuk, Bobbi J. Young, Jim Conallen, Kelli A. Houston: Object

- Oriented Analysis And Design with Applications, 3th Ed, Addison-Wesley, 2007.

9. Additional References

