

#### **Faculty of Computers and Information Technology**

#### **Software Engineering-2**

#### Information:

Course Code: CSC 352 Level: Undergraduate Course Hours: 3.00- Hours

**Department:** Department of Computer Science

Instructor Information :				
Title	Name	Office hours		
Professor	Ramadan Moawad Mohamed Ahmed	1		
Professor	Ramadan Moawad Mohamed Ahmed	1		
Assistant Lecturer	Amr Mansour Mohsen Afifi	4		
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## **Area Of Study:**

This course provides a review of Software Development and Requirements Engineering Process. Software Architecture Design, Object Oriented Design, Software Testing, Software Reuse, Component Based Software Development, Software Verification and Validation, Critical System Development

## **Description:**

Critical systems: dependability, critical systems specification, critical systems development. Verification and validation: software testing, critical system validation. Management: managing people, software cost estimation, quality management, processing improvement. Evolution: legacy systems, software change, software re-engineering. Configuration management

Course ou	tcomes:		
a.Knowled	lge and Understanding: :		
1 -	Understand that the engineering discipline is necessary for software development.		
2 -	Understand the concept of reuse and its benefits		
3 -	Understand the special characteristics of Critical System Development.		
4 -	Understand the different types of testing		
b.Intellect	ual Skills: :		
1 -	Utilize critical thinking in analysis and evaluation of different models and techniques that are used in software development		
c.Professi	onal and Practical Skills: :		
1 -	Develop a Software Architectural Design for a given system requirement document,		
2 -	Design and implement an Object Oriented System		
3 -	Practice teamwork in developing software project.		
4 -	Develop a standard software design document.		



# d.General and Transferable Skills::

1 - Use an effective way for oral and written communication

Course Topic And Contents :			
Topic	No. of hours	Lecture	Tutorial / Practical
Review of software development Process	3	2	2
Software Requirements Engineering	3	2	2
Software Architectural Design I	3	2	2
Software Architectural Design II	3	2	2
Object Oriented Design I	3	2	2
Object Oriented Design II	3	2	2
Software Testing I	3	2	2
Software Testing II	3	2	2
Software Verification and Validation I	3	2	2
Software Verification and Validation II	3	2	2
The software Reuse I	3	2	2
The software Reuse II	3	2	2
Critical System Development	3	2	2

Teaching And Learning Methodologies:	
Lectures	
Exercises	
Open Discussion	
Practical training	
Presentation	
Projects	
Case Study	

Course Assessment :						
Methods of assessment	Relative weight %	Week No	Assess What			
1- Mid Term Exam.	20.00	7	To assess Topics No: 1,2,3,4,5,6			
2- Open Discussion	10.00	3	To assess Topics No: 5-12			
3- Project.	20.00	12	To assess Topics No: 3-8			
4- Presentation	10.00	14	To assess TopicsNo:1,2,3,4,13			
5- Final Exam	40.00	16	To assess Topics No:3-8			

