

**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 outcomes :**

**a.Knowledge 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.Intellectual Skills: :**

1 -	Utilize critical thinking in analysis and evaluation of different models and techniques that are used in software development
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**c.Professional 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

