Faculty of Computers & Information Technology

Software Engineering-2

Information :

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

Department :	Department of Information Systems

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 -	1. Understand that the engineering discipline is necessary for software development.
2 -	2. Understand the concept of reuse and its benefits
3 -	3. Understand the special characteristics of Critical System Development.
4 -	4. Understand the different types of testing

b.Intellectual Skills: :

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

c.Professional and Practical Skills: :

1 -	1. Develop a Software Architectural Design for a given system requirement document,
2 -	2. Design and implement an Object Oriented System
3 -	3. Practice teamwork in developing software project.
4 -	4. Develop a standard software design document.

d.General and Transferable Skills: :

1 -	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

Course Topic And Contents :

Topic	No. of hours	Lecture	Tutorial / Practical
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

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