

College of Computer Science and Information Systems
 Course Code : 342CSS-3
 Contact Hour : 3(0)

Department of Computer Science
 Software Engineering
 Prerequisite : 212CSS-4

Coordinator -

2. Course Description

Software Engineering provides basic source of information for industrial engineers. This course introduces to students to computer science. Students will also learn about the design and implementation of software products using Unified Modeling Language.

3. Course Learning Outcomes

SL	By the end of this course, students should be able to:	Linkages to POs
1.	Model a system in UML using rational rose or ArgoUML.	a(S),k(S)
2.	Describe various software process models for information system.	a(S),c(S)
3.	Collect software requirements and build system requirements specification document.	a(S),b(S),c(S),d(S)
4.	Develop software architecture and understand detailed software design.	a(S),c(S),d(S),i(S)
5.	Implement the concept of software project management and perform software testing.	b(S),d(S),e(S),h(S),i(S)

4. Learning Resources

Text	Sommerville 8, Software Engineering 8, 2015
Text	Laudon, K. & Laudon, Management Information Systems: Managing the digital Firm, 2006.
Text	Ammann & Offutt, Introduction to Software Testing,
Text	Boch, Jacobson, Rumbaugh, The Unified Modelling Language User Guide, 1996.

5. Course Content : The list below provides a summary of the material that will be covered during the course

Week	Topics	References Book / Others Source	Special Event	Tutorial Activities	Lab Activities
1.	The Digital Firm	Section 1.3 (Book (i))			
2.	Managing the Making of Information Systems	Section 1.2 (Book (i))			Lab Activity I, II
3.	Managing the Making of Information Systems	Section 1.2 (Book (i))			Lab Activity I, II
4.	Software Process Models for Information Systems Development	Chapter 4 (Book (ii))	Quiz-1	Tutorial -1	Lab Activity III, IV
5.	Software Process Models for Information Systems Development	Chapter 4 (Book (ii))			Lab Activity III, IV
6.	Software Requirements Engineering	Chapter 6 (Book (ii))			Lab Activity V, VI
7.	An Introduction into Object-Orientation	Chapter 14 (Book (ii))	Assignment-1 Mid Exam-1 (Theory)	Tutorial - 2	Lab Activity VII
8.	Software Architecture	Chapter 11 (Book (ii))	Quiz-2	Tutorial - 3	Lab Activity VIII
9.	Software Detailed Design	Chapter 16 & 16.2 to 16.5 (Book (ii))			Lab Activity IX, X

10.	Software Detailed Design	Chapter 16 & 16.2 to 16.5 (Book (ii))			Lab Activity IX, X
11.	Software Testing	Provided Chapter Book (iii)	Mid Lab Exam	Tutorial - 3	Lab Activity IX, X
12.	Software Project Management	Chapter 5		Tutorial - 5	Lab Activity XI
13.	Software Project Management				Lab Activity XI
14.	Revision				

6. Evaluation Scheme: The following list is the contribution of course components to the final grade for the course.

Component	Weight (%)
Assignment 1	06
Quiz 1& 2	10
Mid Term-1 Exam	12
Mid Term-2 Exam	12
Lab report and assignment	10
Final Lab Examination	10
Final Exam	40
Total	100

