



## ARSD College, University of Delhi

### Lesson Plan

Course Name: Software Engineering      B.Sc. (Hons.) Computer Science (Practical)						
Semester	Course Code	Course Title	Lecture (L)	Tutorial (T)	Practical (P)	Credit (C)
VI	32341402	DSC- 4 Software Engineering	4 Credit-4	0	4 Credit-2	6
Teacher/Instructor(s)		Ms. Uma Ojha				
Session		2021-2022				

#### Course Objective:

The course introduces fundamental Software Engineering approaches and techniques for software development. The students also develop a case study using appropriate software model.

#### Course Learning Outcomes:

On successful completion of the course, students will be able to: [SEP]

1. Analyse and model customer's requirements and model its software design.
2. Use suitable software model for the problem at hand.
3. Estimate cost and efforts required in building software.
4. Analyse and compute impact of various risks involved in software development.
5. Design and build test cases, and to perform software testing.

## List of practicals in Project

Details of the Lab Course		
Session	Name of Experiment	Contact Hours
1	Identifying the problem statement.	4
2	Requirement analysis: a. Creating a Data Flow b. Data Dictionary c. Modeling UML Class Diagrams and Sequence diagrams	12
3	Estimation, Scheduling and Risk Management: a. Computing FP b. Effort using COCOMO 2 Model c. Risk Table d. Timeline chart <sup>[SEP]</sup>	16
4	Design Engineering: a. Architectural Design b. Data Design c. Component Level Design	8
5	Testing: a. White Box Testing: Basis Path Testing b. Black Box Testing	12
Total		52

### Evaluation Scheme:

No.	Component	Duration	Marks
1.	End Semester Examination	4 Hours	50

### Suggested Books:

S. No.	Name of Authors/Books/Publishers	Year of Publication/Reprint
1.	Aggarwal, K. K., & Singh, Y. (2007). <i>Software Engineering</i> . 3rd edition. New Age International Publishers.	2007
2.	Pressman, R. S., & Maxim, B. R. (2015). <i>Software Engineering: A Practitioner's Approach</i> . 8th edition. McGraw-Hill.	2015

### Mode of Evaluation:

End Semester Exam