

1.	Title of the course	Software Engineering
2.	Course number	CS302L
3.	Structure of credits	3-0-0-3
4.	Offered to	UG
5.	New course/modification to	Modification To CS3105/8
6.	To be offered by	Department of Computer Science and Engineering
7.	To take effect from	July 2022
8.	Prerequisite	Nil
9.	Course Objective(s): To understand and apply core principles and practices of software engineering for systematic development of non-trivial software systems.	
10.	Course Content: Software engineering as a discipline; software process and product engineering; software development lifecycle models; agile software development; requirements engineering; software architecture; software design; Unified Modeling Language (UML); design patterns; software construction; testing; verification and validation; software metrics; software project management; advanced software engineering topics such as reuse, reengineering and evolution.	
11.	Textbook(s): 1. Ghezzi C, Jazayeri M and Mandrioli D, <i>Fundamentals of Software Engineering</i> , Pearson India Education (2015). 2. Sommerville I, <i>Software Engineering</i> , Pearson Education (2017).	
12.	Reference(s): 1. Brooks Jr. F P, <i>The Mythical Man-Month: Essays on Software Engineering</i> , Addison Wesley (2015). 2. Fowler M, <i>UML Distilled: A Brief Guide to the Standard Object Modeling Language</i> , Addison-Wesley Professional (2007). 3. Pressman R S, <i>Software Engineering: A Practitioner's Approach</i> , Tata McGrawHill (2017).	