

INDIAN INSTITUTE OF TECHNOLOGY TIRUPATI

भारतीय प्रौद्योगिकी संस्थान तिरुपति

Yerpedu-Venkatagiri Road, Yerpedu Post, Tirupati District, Andhra Pradesh - 517 619

1.	Title of the course	Software Engineering
2.	Course number	CS211L
3.	Structure of credits (L-T-P-C)	3-0-0-3
4.	New course/modification to	Modified with CS302L/SOFTWARE ENGINEERING
5.	To be offered by	Computer Science and Engineering
6.	Proposed by	SRIDHAR CHIMALAKONDA
7.	Prerequisite	None
8.	Course Objective(s): To discuss and analyze core principles and practices of software engineering for systematic development of software systems.	
9.	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; Design, development and deployment of a moderately complex software system over multiple iterations.	
10.	Textbook(s): 1. Ghezzi C, Jazayeri M and Mandrioli D, Fundamentals of Software Engineering, 2nd Edition, Pearson India Education (2015). 2. Sommerville I, Software Engineering, 10th Edition, Pearson Education (2017).	
11.	Reference(s): 1. Brooks Jr. F P, The Mythical Man-Month: Essays on Software Engineering, AnniversatAddison Wesley (2015). 2. Fowler M, UML Distilled With Access Codes: A Brief Guide to the Standard Object Modeling Language, 3rd Edition, Addison-Wesley Professional (2015). 3. Pressman R S, Software Engineering: A Practitioner's Approach, 9th Edition, Tata McGrawHill (2019).	