

## INDIAN INSTITUTE OF TECHNOLOGY TIRUPATI

## भारतीय प्रौद्योगिकी संस्थान तिरुपति

| 1.  | Title of the course  | Software Engineering Laboratory                |
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| 2.  | Course number  | CS302P   |
| 3.  | Structure of credits   | 0-0-3-2  |
| 4.  | Offered to   | UG   |
| 5.  | New course/modification to   | Modification To CS3294/8                       |
| 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 gain hands-on experience on the design and development of a reasonably complex software system through application of software engineering knowledge and skills.   |  |
| 10. | <b>Course Content:</b> Design, development and deployment of a reasonably complex software system over multiple iterations; Application of software engineering concepts and knowledge such as requirements engineering, software architecture, design, development and testing; Usage of technology frameworks and tools for software development; Exposure to real world software development environment under constraints of uncertain requirements and deadlines. |  |
| 11. | Textbook(s): 1. Sommerville I, Software Engineering, Pearson Education (2017).   |  |
| 12. | Reference(s): 1. Fowler M, Refactoring: Improving the Design of Existing Code, Addison-Wesley Professional (2018). 2. Martin R C, Clean Code: A Handbook of Agile Software Craftsmanship, Prentice Hall (2008). 3. Martin R C, Agile Software Development, Principles, Patterns, and Practices, Pearson Higher Education (2013).   |  |