

1. Subject Code: **CO301** Course Title: **Software Engineering**
2. Contact Hours : L: 3 T: 0 P: 2
3. Examination Duration (ETE)(Hrs.) : Theory 3 Hrs Practical 0
4. Relative Weightage : CWS 15 PRS 15 MTE 30 ETE 40 PR 0
5. Credits : 4
6. Semester : IV
7. Subject Area : DCC
8. Pre-requisite : Nil
9. Objective : To introduce fundamentals of software engineering including requirement specifications, software design, testing and maintenance.

10. Details of Course

S.No.	Contents	Contact Hours
1.	Introduction: Introduction to software Engineering, Software characteristics, Software components, Software applications, Software Engineering Principles, Software metrics and measurement, monitoring and control. Software development life-cycle, Water fall model, prototyping model, Incremental model, Iterative enhancement Model, Spiral model.	8
2.	Software Requirement Specification: Requirements Elicitation Techniques, Requirements analysis, Models for Requirements analysis, requirements specification, requirements validation.	8
3.	System Design: Design Principles: Problem partitioning, abstraction. Top down and bottom up – design, structured approach. Functional versus object oriented approach of design, design specification, Cohesiveness and Coupling. Overview of SA/SD Methodology, structured analysis, data flow diagrams, extending DFD to structure chart.	6

