

Course Plan
Software Engineering
CS20006
Spring – 2020

Overall marks distribution: (100%)						
TA (20%)	Class Test - I	5%	Mid-semester	30%	End-semester	50%
	Class Test – II	5%				
	Class Test - III	10%				

Week – 1 (Jan 6-10, 2020)	Course Plan
	Basics of Software Engineering
	Requirement Analysis and Feasibility Study
Week – 2 (Jan 13-17, 2020)	Software Engineering process model - I
	Software Engineering process model - II
	Analysis and comparisons of Models
Week – 3 (Jan 20-24, 2020)	Software design: Basic concept
	Function-oriented design - I
	Function-oriented design - II
Week – 4 (Jan 27-31, 2020)	Case study with Function-oriented design
	Q&A discussion
	Class Test - I (10)
Week – 5 (Feb 3-7, 2020)	Object-oriented design: Basic concept
	Object-oriented design using UML - I
	Object-oriented design using UML - II
Week – 6 (Feb 10-14, 2020)	Object-oriented design using UML - III
	Case study with Object-oriented design
	Q&A discussion
Week – 7 (Feb 17-25, 2020)	Mid-semester Test (30%)
Week – 8 (Feb 26-28, 2020)	Software Project Planning and Management: Introduction
	Software Project Planning - I (Task planning)
	Software Project Planning - II (Staff planning)
Week – 9 (Mar 2-6, 2020)	Risk mitigation and configuration management
	Case study + Q&A discussion
Week – 10 (Mar 9-13, 2020)	Software economics: Introduction
	Size estimation model - I
	Size estimation model - II
Week – 11 (Mar 16-20, 2020)	Cost estimation model - I
	Cost estimation model - II
	Case study
	Q&A discussion
Week – 12 (Mar 23-27, 2020)	Class Test - II (10)
	Software quality and Reliability Analysis
	Q&A discussion
Week – 13 (Mar 30 - Apr 3, 2020)	Software testing: Introduction
	Testing approaches: Top-down/Bottom up
	Testing environment: Test case, Test oracle, etc.
Week – 14 (Apr 6-10, 2020)	System testing strategies
	Integration testing strategies
	Unit testing strategies

Week – 15 (Apr 13-17, 2020)	Case study
	Q&A discussion
	Class Test - III (20)
Week – 16 (Apr 20-29, 2020)	End-semester Test (50%)

Syllabus for Class test	
Class Test - I	Week 1 - 4
Class Test – II	Week 5 - 11
Class Test - III	Week 1 – 15

Syllabus for semester	
Mid-sem	Week 1 - 6
End-sem	Week 1 – 15