Duration(Hour)		21	21	21	21	21
S-1	SLO-1	Introduction to software Engineering	System Engineering	Introduction to Testing	Project Management Spectrum	Risk Management
	SLO-2	Characteristics of software	Components of System Engineering	Definition , Characteristics of Testing	Four P's	Reactive and Proactive Risk Strategies
S2	SLO-1	The Changing Nature of software	Requirements Engineering Tasks	Testing Strategies for Conventional Software	The People and the Product	Software Risks
	SLO-2	Legacy Software and Software myths	Process, Initiating and Eliciting requirements.	Unit testing and Integration testing	Role of People	Risk Identification and Risk Projection
S3	SLO-1	A Generic view of process Software Engineering	Building the Analysis Model	Validation Testing	The Process and the Project	Risk refinement
	SLO-2	A layered Technology	Analysis Modeling Approaches	Verification Vs Validation	Role of Process	Risk Mitigation
S4 –S7	SLO-1	Laboratory1:Identifing Project Objective and Scope	Laboratory 4:Project Planning	Laboratory 7: Function Oriented Diagram	Laboratory 10:Test Case design for unit testing	Laboratory 13: Preparation of Timeline charts and Tracking the Scheduling
	SLO-2					
S8	SLO-1	A process framework	Data Modeling Concepts	System Testing	Metrics for Process and Projects-Estimation	Monitoring and Management
	SLO-2	Capability Maturity Model Integration	Example Diagram	Non-Functional testing	LOC, FP, Object Oriented.	Example
S9	SLO-1	Process Models	Scenario based Modeling	Debugging Process	Estimation	Quality Concepts
	SLO-2	Water fall , RAD model	USE-CASE Diagram	Testing Tactics	Estimation models	SQA Activities
S10	SLO-1	Iterative Process Models	Flow Oriented Modeling	White Box Testing, Basic-Path testing	The Project Planning Process	Software Reviews and FTR
	SLO-2	Incremental ,Prototype and Spiral	Data Flow Diagram	Cyclomatic complexity calculation	Resources	Statistical Quality Assurance
S11-14	SLO-1	Laboratory 2:Selection of Suitable software process Model of the suggested system	Laboratory 5:Performing Various Requirement Analysis	Laboratory 8:User's View Analysis	Laboratory 11:Test Case design for Integration testing	Laboratory 14: Estimation of Effort and Risk Identification
	SLO-2					
S-15	SLO-1	Prescriptive models	Design Engineering	Black Box Testing	Decomposition Techniques	The Software Configuration Management

	SLO-2	Phases of the model	Example	Equivalence Partitioning	calculations of Decomposition techniques	SCM Repository
S-16	SLO-1	Specialized Process Models	Software Design Concepts	BVA , Error Guessing	Empirical Estimation Models	Business Process Reengineering
	SLO-2	The Unified Process Model	Example Diagrams	Cause-Effect Graphing	COCOMO model	Reengineering Diagram and Example.
S-17	SLO-1	An agile view of Process	The Design Model	Testing for Specialized Environments	Project Scheduling Concepts	Reverse Engineering
	SLO-2	Case study on Best SDLC selection based on the Scenario	Examples for all designs	Preparation of Test case Plan and Report	Examples	Forward Engineering
S18-21	SLO-1	Laboratory 3:Problem Statement Preparation	Laboratory 6:Develop Software Requirement Specification Sheet (SRS)	Laboratory 9:Structure view diagram	Laboratory 12:Perforing Testing and Debugging for a sample code	Laboratory 15: Software Quality Assurance Components.
	SLO-2					

Learning Resources	1. Roger, S. Pressman (2004), Software Engineering: A Practitioner Approach, McGraw Hill International Edition, Sixth Edition, New Delhi 2. Waman, S Jawadekar (2004), Software Engineering: Principles and Practice, McGraw Hill Education Pvt. Limited, New Delhi. 3. RohitKhurana (2011), Software Engineering-Principles and Practices, Vikas Publishing House Pvt. Ltd., Second Edition, New Delhi. 4. Chairperson, Counting Practices Committee, Valerie Marthaler, EDS, Troy, Michigan, Function Point Counting Practices Manual Release 4.1.1, The International Function Point User Group, April 2000. 5. Carlo Ghezzi, Mehdi Jazayari, Dino Mandrioli (1991), Fundamentals of Software Engineering, Prentice Hall of India, New Delhi.

Learning Assessment											
Bloom's Level of Thinking		Continous Learning Assessment(50% Weightage)								Final Examination (50% weightage)	
		CLA – 1 (10%)		CLA – 2 (10%)		CLA – 3 (20%)		CLA – 4# (10%)			
		Theory	Practice	Theory	Practice	Theory	Practice	Theory	Practice	Theory	Practice
Level 1	Remember	20%	20%	15%	15%	15%	15%	15%	15%	15%	15%
	Understand										
Level 2	Apply	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%
	Analyze										
Level 3	Evaluate	10%	10%	15%	15%	15%	15%	15%	15%	15%	15%
	Create										
	Total	100 %		100 %		100 %		100 %		100%	

CLA – 4 can be from any combination of these: Assignments, Seminars, Short Talks, Mini-Projects, Case-Studies, Self-Study, MOOCs, Certifications, Conf. Paper etc

Course Designers		
Experts from Industry	**Experts from Higher Technical Institutions**	**Internal Experts**
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