SEMESTER-VI

COURSE CODE:-C 13

COURSE TITLE:-SOFTWARE ENGINEERING.

Module 1: Software : Characteristics, Components and Applications, Software process, Software Engineering –A layered Technology, The software process, Software Process models, Linear Sequential Model, Prototyping Model, RAD Model and Evolutionary Software Models.

Module 2: Software Process & Project Metrics: Metrics in Project & Process Domains, Software Measurement and Metrics for Software Quality,

Module 3: Project Planning Objectives: Software Scope, resources, Software Project Estimation, Decomposition Techniques, Empirical estimation Models, Make-Buy decision.

Module 4:Risk Management: Software risks, Risk Identification, Projection, Defining Task set for software Project, selecting software engineering tasks, scheduling and project plan,

Module 5:Software Quality Assurance. Software reviews, Formal approach to SQA Software Reliability, The SQA plan.

Module 6:Conventional Methods for Software Engg : System Engg. Product Engg., Modeling the System, Architecture, System specifications, Analysis Concepts & Principles, Software prototyping, Specifications, Analysis Modeling, Design Concepts, Principles & Methods, Design for real-time system, Software Testing Methods.

Module 7:Object Oriented Software Engineering, Object Oriented Analysis, Object Oriented Design & Testing.Module 8:Advanced Topics in Software Engg : Software Reuse, Reengineering, Client/Server Software Engg and Computer Aided Software Engg

-Books Recommended :1.Roger S. Pressman –Software Engineering –A Practitioner's Approach –McGraw Hill.2.Richard Fairley –Software Engineering Concepts, TATA McGraw Hill.3.PankajJalote –An Integrated Approach to Software Engineering –Narosa.