SOFTWARE PROJECT MANAGEMENT

Course Code: BIT 384

TOPICS

1. Course overview Introduction to Software Project Management
   * Importance of Software Project Management
   * Activities Methodologies
   * Categories of Software Projects
   * Setting Objectives
   * Management Principles
   * Management Control
2. Software Life Cycle Process (ISO/IEC 12207)
   * Software Process and Process Models
   * Choice of Process Models
3. Software Life Cycle Models
   * Waterfall Model / Traditional Model
   * Rapid Application Development
   * Agile Methods
   * Extreme Programming
   * SCRUM
   * COCOMO Model
4. Software Estimation
   * Project Schedules
   * Activities
   * Sequencing and Scheduling
5. Project Planning Project Monitoring & Control
   * Strategic Program Management
   * Stepwise Project Planning
   * A generic project model
6. Risk Management
   * Concepts of risks and risk management
   * Risk management activities
   * Network Planning Models
   * Critical path methods
   * Risk identification
   * Assessment monitoring
   * PERT Chart
7. Software Measurement
8. Requirements Management
9. Software Test Management Verification & Validation
   * Types of Software Testing
   * Manual Testing
   * Automated Testing
   * Black Box Testing
   * White Box Testing
10. Software Configuration Management (SCM)
    * Centralized control team organization
    * Decentralized control team organization
    * Mixed control team organization
11. Problem Resolution
    * Project Metrics
    * Earned Value Analysis
12. Software Quality Assurance (SQA)
    * Software Qualities
    * Software Quality Standards – ISO Standards for software organization
    * Comparison between ISO 9001 & SEI CMM
13. Software Reviews
    * Gantt Chart
    * Automated Tools
14. Software Process Improvement
    * Budgeting