

Advanced Topics in Project Management (SDLC PM III)

1. Introduction and Overview for SDLC
 - a. Standards and Frameworks for Software Development
 - b. Gathering and Managing Software Requirements
 - c. Six Sigma for Service and Software Design
 - d. Modern Business Intelligence
2. SDLC Standards and Frameworks
 - a. Understanding ITIL
 - b. Using CMMI
 - c. Using OPM3 for Software Projects
3. Understanding the Requirements Problem
 - a. Finding the voice of the customer
 - b. Requirements frameworks
 - c. Gathering software requirements
4. Managing Software Requirements
 - a. Tools used for managing requirements
 - b. Change Management
 - c. Verification and Risk Management
5. Project Management Methods for Software Development
 - a. Traditional Project Management Methods
 - b. Agile Project Management Methods
 - c. Extreme Project Management Methods
6. Using Six Sigma for Service Organizations
 - a. Understanding the Service problem
 - b. Voice of the customer issues
 - c. Six Sigma tools and techniques for service
7. Using Six Sigma Methods in Software Design

- a. Understanding Software Quality Methods
 - b. Using Six Sigma Measurement methods
 - c. Using Design for Six Sigma in Software Projects
8. Human Capital Management in Software Development
- a. Training and Measurement methods
 - b. Using Analytics
 - c. Balanced Scorecards
9. Service Oriented Architecture (SOA)
- a. Overview of SOA
 - b. SOA and the future of Cloud Computing
 - c. Software Mashups
10. Business Intelligence
- a. Introduction to Modern Business Intelligence
 - b. The Problem of Big Data
 - c. Using Analytics in BI and modern tools