

Estimating and Risk Management (2 Day)

COURSE TOPICS

- Learn basic Project estimating concepts
- Learn to use models to size Projects
- Learn to estimate costs and effort
- Learn to estimate effort using multiple models
- Learn to estimate duration
- Learn to calculate expected time for the project
- Learn to measure risk and determine its impact
- Learn to structure and categorize risk
- Learn to use qualitative and quantitative risk analysis
- Learn techniques for Risk Response planning
- Learn to monitor and control risk
- Learn to improve estimating success

COURSE OVERVIEW

Software projects present their own unique set of characteristics and concerns, including development costs, speed of completion, quality and reliability. Mastering best practices for estimation and risk management techniques is critical if one expects to deliver projects on time and within budget. This Estimating and Risk Management training not only helps students become more proficient at estimating the parameters of a project's time, cost and performance, but also demonstrates the most effective methods of identifying and quantifying risks.

COURSE OUTLINE

1. Definitions and Concepts

- A. Estimating
- B. Reasons for Estimating a Project
- C. Accuracy in Estimating
- D. Obstacles to Good Estimating
- E. Enabling Good Estimating
- F. Approaches to Estimating
- G. Metrics Used in Estimating
- H. Techniques Used in Estimating & Problem Definition

2. Project Sizing

- A. Project Sizing
 - B. Direct Comparison

- C. Models
- D. Rayleigh Model
- E. Life Cycle Resource Distribution
- F. Function Point and Delphi Technique

3. Estimating Costs

- A. Estimating Costs

4. Estimating Effort

- A. Estimating Effort
 - B. Parametric Models
 - C. Function Point Estimating
 - D. Function Point Estimating Process Steps
 - E. What Do You Count in Function Point Estimating
 - F. Function Point Estimating Information
 - G. General System Characteristics
 - H. Task Based Estimating
 - I. Estimating Task Effort
 - J. Resource Profiling

5. Estimating Duration

- A. Effort Conversion
 - B. Statistical Analysis of Project Length
 - C. Weighted Average Results
 - D. Beta and Normal Distributions
 - E. Normal Distribution and Standard Deviation
 - F. Calculating Expected Time for the Project
 - G. Using a Z Table to Calculate Probability Answer
 - H. How Long Should the Project Be
 - I. When Should You Use this Technique

6. Risk Management

- . Dealing with Risk
 - A. Risk Measurement
 - B. Risk Impact
 - C. Risk During Project Life Cycle
 - D. Psychology of Risk
 - E. Project Risk Management Processes
 - F. Risk Management Planning Definition
 - G. Risk Management Plan

7. Risk Identification

- A. Risk Identification Definition
 - B. Effect on Project Success Factors
 - C. Project Success Factor Chart
 - D. Structuring by Project Management Knowledge Areas
 - E. Structuring by Category

- F. Risk Influencing Factors
- G. Documentation Review
- H. Historical Information
- I. Other Information Gathering Techniques

8. Qualitative Risk Analysis

- A. Definition
 - B. Example Table from the PMBOK
 - C. Outputs

9. Quantitative Risk Analysis

- A. Definition
 - B. Techniques
 - C. Outputs

10. Risk Response Planning

- A. Risk Definition
 - B. Techniques
 - C. Outputs

11. Risk Monitoring and Control

- A. Definition
 - B. Assessing Success
 - C. Tools and Techniques
 - D. Recognizing New Risks
 - E. Outputs
 - F. Success Factors

12. Infrastructure

- A. To Improve Estimating Success

13. Summary and Conclusion

- A. To Develop Good Estimates
 - B. To Effectively Manage Risks

PROFESSIONAL DEVELOPMENT UNITS

12 PMI® PDUs

CLASS MATERIALS

Each student in our Live Online and our Onsite classes receives a comprehensive set of materials, including course notes and all the class examples.