



## Project Cost & Schedule Management

### Course Overview

The triple constraints of project management – scope, time, and cost – are the focus of this intensive, three-day course. Mastering the art of planning is a key to controlling these constraints. Using facilitated discussion, complex case studies, hands-on exercises, and problem analysis, this course emphasizes the key elements of the project plan – the project work breakdown structure (WBS), project cost estimates and budgets, project schedules, and resource assignment tools. Participants will learn valuable techniques to set plan expectations with key stakeholders, kick off the execution work, monitor and control project performance (using Earned Value Management practices).

### Key Outcomes

Upon completion of this course, participants will be able to:

- » Identify and use various techniques to develop effective project cost estimates
- » Interpret and analyze cost and schedule performance
- » Demonstrate the ability to effectively use various tools to make cost and schedule decisions
- » Identify and manage cost and schedule changes

### Course Outline

#### Scope Planning

- » Distinguish attributes of an effective WBS
- » Use project cost and schedule inputs to create a detailed scope statement and WBS
- » Analyze a WBS for completeness

#### Estimating Costs

- » Estimate project costs
- » Describe cost estimating terms and concepts
- » Differentiate among units of project time
- » Identify project cost estimating techniques
- » Build an initial project cost estimate

### At-a-Glance:

**Course Length:**

3 days

**Course Number & Level:**

201.CSM3 – Development

**Professional Development Units**

(PDUs): 21

**Continuing Education Units (CEUs):**

2.1

**PMBOK® Guide Knowledge Areas****Covered:**

- » Project Integration Management
- » Project Scope Management
- » Project Cost Management
- » Project Time Management
- » Project Risk Management
- » Project Human Resource Management

**Tracks:**

- » Project Manager

## **Scheduling**

- » Describe key scheduling terms and concepts
- » Identify the benefits of accurate schedules and the pitfalls that lead to ineffective project schedules
- » Discuss types of schedule relationships
- » Build a project schedule
- » Identify techniques to schedule under varying circumstances (lean, resource constraints, and uncertainty)

## **The Project Baseline**

- » Describe the importance of the project baseline
- » Identify components of a project baseline
- » Explain the process of establishing the project baseline
- » Describe methods of communicating the project baseline with stakeholders

## **Monitoring Cost and Schedule Performance**

- » Identify various approaches to monitoring project cost and schedule baselines
- » Recognize the effectiveness of various techniques for monitoring project performance
- » Recognize key terms and concepts related to Earned Value management
- » Calculate point in time performance data such as cost variance (CV), schedule variance (SV), cost performance index (CPI), and schedule performance index (SPI)
- » Calculate forecasts of performance using earned value algorithms such as estimate at completion (EAC) and estimate to completion (ETC)

## **Controlling Cost and Schedule Performance**

- » Recognize key activities for cost and schedule control
- » Identify effective techniques for managing resource variation
- » Identify the activities and results of duration compression techniques
  - » Crashing
  - » Fast-tracking
- » Identify the elements of change control and configuration management
- » Apply the change control system step

## **Cost, Schedule, and Course Close**

- » Describe the benefits of the project cost and schedule “Close-out” process
- » Identify tools for capturing lessons learned
- » Identify Cost and Schedule course lessons learned