

**Course Description:** The goal of this workshop course is to develop skills required to effectively manage the schedule and budget of a project. As part of the Triple Constraints, the schedule and budget of a project (and the management thereof) are Key Performance Indicators regarding the success of any project. This course will enable the participants to hone the skills necessary to effectively manage the schedule and budget of a project.

**Who Should Attend:** All managers, team leaders, and others who work with project teams will benefit from this course.

**Prerequisites:** Students should have taken the Project Management Overview and Project Scope and Requirements Management courses.

**Benefits of Attendance:** Upon completion of this course, students will be able to:

- Determine how to effectively define activities.
- Determine ways to effectively sequence activities.
- Determine how to effectively estimate resource requirements and estimate durations.
- Develop an effective schedule.
- Effectively utilize schedule controls to keep their projects on schedule.
- Effectively 'Crash' and 'Fast Track' their projects to meet time and cost requirements.
- Determine how to estimate costs.
- Determine how to effectively budget for project costs.

### Course Outline:

#### Project Time Management

##### Activity Definition

Enterprise Environmental Factors  
Organizational Process Assets  
Project Scope Statement  
WBS and WBS Dictionary  
Project Management Plan  
Decomposition  
Templates  
Rolling Wave Planning  
Expert Judgment  
Planning Component  
Activity and Milestone Lists  
Activity Attributes  
Requested Changes

##### Activity Sequencing

Project Scope Statement  
Activity and Milestone Lists  
Activity Attributes  
Approved Change Requests  
Precedence Diagramming Method  
Arrow Diagramming Method  
Schedule Network Templates  
Dependency Determination  
Applying Leads and Lags  
Project Schedule Network Diagrams  
Activity List and Attributes  
Requested Changes

##### Activity Resource Estimating

Enterprise Environmental Factors  
Organizational Process Assets  
Activity List and Attributes  
Resource Availability  
Project Management Plan  
Expert Judgment  
Alternative Analysis  
Published Estimating Data  
Project Management Software  
Bottom-up Estimating  
Resource Requirements  
Activity Attributes (Updates)  
Resource Breakdown Structure  
Resource Calendar (Updates)  
Requested Changes

##### Activity Duration Estimating

Enterprise Environmental Factors  
Organizational Process Assets  
Project Scope Statement  
Activity List  
Activity Attributes and Resource Requirements

Resource Calendar  
Project Management Plan  
Expert Judgment  
Analogous Estimating  
Parametric Estimating  
Three-Point Estimates  
Reserve Analysis  
Activity Duration Estimates  
Activity Attributes (Updates)

##### Schedule Development

Organizational Process Assets  
Project Scope Statement  
Activity List and Attributes  
Project Schedule Network Diagrams  
Activity Resource Requirements  
Resource Calendars  
Activity Duration Estimates  
Project Management Plan  
Schedule Network Analysis  
Critical Path Method  
Schedule Compression  
What-If Scenario Analysis  
Resource Leveling  
Critical Chain Method  
Project Management Software  
Applying Calendars  
Adjusting Leads and Lags  
Schedule Model  
Project Schedule  
Schedule Model Data  
Schedule Baseline  
Resource Requirements (Updates)  
Activity Attributes (Updates)  
Project Calendar (Updates)  
Requested Changes  
Project Management Plan (Updates)

##### Schedule Control

Schedule Management Plan  
Schedule Baseline  
Performance Reports  
Approved Change Requests  
Progress Reporting  
Schedule Change Control System  
Performance Measurement  
Project Management Software  
Variance Analysis  
Schedule Comparison Bar Charts  
Schedule Model Data  
Schedule Baseline (Updates)  
Performance Measurements  
Requested Changes  
Recommended Corrective Actions

Organizational Process Assets (Updates)  
Activity List (Updates)  
Activity Attributes (Updates)  
Project Management Plan (Updates)

#### Project Cost Management

##### Cost Estimating

Enterprise Environmental Factors  
Organizational Process Assets  
Project Scope Statement  
WBS and WBS Dictionary  
Project, Schedule and Staffing Management Plan  
Risk Register  
Analogous Estimating  
Determine Resource Cost Rates  
Bottom-up Estimating  
Parametric Estimating  
Project Management Software  
Vendor Bid Analysis  
Reserve Analysis  
Cost of Quality  
Activity Cost Estimates  
Activity Cost Estimate Supporting Detail  
Requested Changes  
CMP (Updates)

##### Cost Budgeting

Project Scope Statement  
WBS and WBS Dictionary  
Activity Cost Estimates  
Activity Cost Estimate Supporting Detail  
Project Schedule  
Resource Calendars  
Contract  
Cost Management Plan  
Cost Aggregation  
Reserve Analysis  
Parametric Estimating  
Funding Limit Reconciliation  
Cost Baseline  
Project Funding Requirements  
Cost Management Plan (Updates)  
Requested Changes

##### Cost Control

Cost Baseline  
Project Funding Requirements  
Performance Reports  
Work Performance Information  
Approved Change Requests  
Project Management Plan  
Cost Change Control System  
Performance Measurement Analysis