

# ADVANCED PLANNING AND CONTROL WITH MICROSOFT PROJECT

## COURSE DESCRIPTION

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### OVERVIEW

This course teaches students how to use Microsoft Project to plan and control complex projects that incorporate multiple phases, advanced precedence relationships and involve typical update challenges including activities performed out-of-sequence and schedule slippage. The use of intermediate milestones (Slack Gates) is demonstrated as a control mechanism for preserving slack in the later stages of the project plan and the use of a project dashboard, schedule metrics and variance analysis are illustrated to support the project governance process. Finally, the course gives examples of the format and use of typical project control reports including project status memos, supervisor metrics, and near-critical activity reports.

### AUDIENCE

The target audience for this course is individuals that already have a solid understanding of basic project planning and control techniques and are interested in learning how to successfully plan and control complex projects using Microsoft Project.

### COURSE DURATION

The course consists of 8 hours of instruction taught in a one-day program, including lecture and hands-on exercises, using Microsoft Project. The course includes exercises on the following topics:

- Utilizing Advanced Precedence Relationships With Lags
- Incorporating Intermediate Milestones (Slack Gates) In Project Plans
- Initiating the Update Cycle and Updating a Complex Project Plan
- Resolving Out-of-Sequence Project Progress
- Crashing an Updated Project Plan to Meet Key Milestone and/or Deadline Dates
- Performing Schedule Variance Analysis and Using a Project Dashboard
- Analyzing and Tracking Schedule Metrics
- Producing Project Control Reports

### COURSE CONTENT

Each student is provided a six-chapter notebook at the beginning of the course that is used during the program to follow the lecture material and to perform individual exercises. In addition, each student is provided a CD with advanced add-in utilities for Microsoft Project (the utilities are compatible with Microsoft Project 2000/2002/2003 as well as Primavera P3, and SureTrak) that enhance the functionality of the software and enable users to overcome limitations in the "out-of-the-box" version.

### PREREQUISITES

Successful completion of PM Alliance's courses: Project Management; Duration-Driven<sup>SM</sup> Planning and Control and Project Management; Advanced Microsoft Project (or equivalents) are prerequisites for this course. A basic understanding of personal computers and Microsoft Windows is also expected.



# COURSE OUTLINE

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## INSTALLING PMALLIANCE UTILITIES

## ADVANCED PLANNING CONCEPTS

- Finish-to-Start Precedence Relationships
- Start-to-Start Precedence Relationships
- Finish-to-Finish Precedence Relationships
- Composite Precedence Relationships
- Choosing the Correct Precedence Relationship
- The Use of Intermediate Milestones (Slack Gates)

## ADVANCED UPDATING METHODS

- Alternate Methods for Conducting the Project Update Process
- Initiating the Update Cycle
- Updating The Schedule
- Resolving Out-of-Sequence Progress
- Crashing the Schedule to Meet Intermediate Milestone and/or Deadline Dates

## PROJECT ANALYSIS TOOLS

- Key Milestone Variance Analysis
- Project Dashboard
- Dashboard Exception Report
- Project Metrics

## PROJECT CONTROL REPORTS

- Supervisor Metrics
- Supervisor Dashboard
- Near-Critical Activities Report
- Project Status Memo

## PMALLIANCE WEB UPDATE TOOL DEMONSTRATION