pmcollege®

Project Management with Microsoft® Project®

Course Overview

At-a-Glance:

Course Length:
2 days

Course Number:
106.MSP2 – Proficient

Professional Development Units (PDUs): 14 (Technical)

Enable project managers to increase efficiency and productivity with Microsoft Project. By blending key project management concepts with techniques for effectively using Microsoft Project® throughout the project life cycle, this course prepares participants to better control projects, resulting in improved schedule and cost performance on projects and corresponding improved profitability and customer satisfaction.

Project management concepts covered in the course include understanding and being able to assemble a work breakdown structure or WBS, network diagrams and the types of logic that should and shouldn't be included in them in Microsoft Project, and a rigorous look at how tasks and milestones should and shouldn't be linked into the network diagram.

Periodically, course participants will take an "under-the-hood" look at Microsoft Project® to really understand how it develops schedules and the algorithms that drive its behavior and as a result will master the application so that it can be put to use for their purposes.

Key Outcomes

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

- Efficiently navigate throughout the user interface
- Setup the application to provide accurate and reliable schedule, cost and staffing status and forecasts, including a thorough understanding of the many calendar settings in Project
- Define scope concepts and implementation in Project
- Quickly develop a preliminary schedule and staffing plan in Project and learn how to refine the plan later, if desired
- Sequence tasks in Project so that the plan automatically adjusts to delays
- Enter resources into Project including material resources
- Control the formula that serves as the basis for much of the scheduling in Project and how to enable, disable, and tailor that formula in order to gain control of the application
- Efficiently and reliably assigning resources to tasks
- Define how Microsoft Project develops schedules and what inputs are vital in order for it to do so
- Interpret the schedule and assess its risk
- Enter a variety of cost types including resource and fixed costs and how to view the spending plan for the overall project
- Use Project's reporting capability as well as export data in a variety of formats for use by those without Microsoft Project
- Track actuals in Project so that project status is known and understood and future schedule and cost status is automatically calculated
- Describe key settings in Project for managing change to the plan
- Sort, filter and group project data for maximum usability

Course Outline

Getting Oriented in Microsoft Project

- Microsoft Project Versions
- Components of the User Interface
- Making Changes to the File
- The Fluent User Interface
- Backstage View

- Viewing and Setting Project Options
- The Status Bar
- The Entry Bar
- Views
- The Timeline View
- Combination Views
- Tables
- Field Types
- Dialog Boxes
- User Assistance
- Navigation Tips

Developing a Preliminary Plan

- Setting Up the Project
    - Documenting File Properties
    - Entering Project Information
    - Defining a Day, Week and Month
    - Establishing the Project Calendar
    - Making the Project Calendar Available to Others
- Defining Project Scope
    - Building a Work Breakdown Structure
    - Establishing Task Hierarchy
    - Numbering the Tasks--The Outline Number
    - Establishing Recurring Tasks
- Building the Team of Resources
    - Identifying Resources for the Project
- Developing a Preliminary Schedule
    - Estimating Task Duration
    - The Team Planner View
    - Sequencing Tasks & Assigning Task Owners

Refine the Plan

- Sequencing the Work
    - The Task Mode Setting
    - Setting Scheduling Parameters
    - Relationship Types
    - Lag and Lead Time
    - Linking Tasks
    - Managing Links Between Manually Scheduled Tasks
    - Converting from a Manually Scheduled to an Auto Scheduled Schedule
    - Working in the Network Diagram View
    - Changing the Layout of the Network Diagram
    - Establishing Task Constraints
    - Setting Deadlines
    - Establishing Milestones
- Refining the Team of Resources
    - Types of Resources
    - Editing Resource Calendars
    - Entering Material Resources
    - Entering Cost Resources
- Assigning Resources to Tasks
    - Understanding “Work”
    - Understanding “Duration”
    - “Work” versus “Duration”
    - The Work Formula
    - The Work Formula Precedence

    - Assigning Resources and Work
    - Establishing Task Length When Resources are Not Assigned
    - Assigning Cost Resources
- Tailoring Schedule Calculations to Fit the Work Environment
    - Different Environments Require Different Scheduling Techniques
    - The Various Types of Units
    - Task Types
    - Re-visiting the Work Formula
    - Effort-Driven Tasks
    - Establishing Task Calendars
- Entering Fixed Costs
    - Entering Fixed Costs

Optimize the Plan

- Understanding the Project Plan
    - Identifying Total and Free Slack
    - Identifying and Assessing the Critical Path
- Planning for Uncertainty
    - Adding Schedule Reserve
- Improving the Schedule
    - Understanding the Driver Resource
    - Evaluating Options for Improving the Schedule
- Establishing the Baseline
    - Setting the Baseline

Communicate the Plan

- Communicating the Plan to Others
    - Sorting & Grouping
    - Using Filters
    - Utilizing Auto Filters
    - Creating and Printing Tabular Reports
    - Creating and Printing Visual Reports
    - Creating a Picture or PDF of the Plan
    - Defining and Printing Views
    - Saving the Plan in Other Formats

Execute the Plan

- Preparing to Track Progress
    - Determining the Level of Detail to Track
    - Task Progressing Methods
    - The Tracking Gantt View
- Entering Actuals
    - Tracking Progress at the Task Level
    - Updating Progress for Many Tasks
    - Tracking Progress by Resource
    - Tracking Progress by Resource & Time Period
- Revising the Plan
    - Rescheduling the Project
    - Rescheduling Tasks
    - Adding and Removing Tasks to and from the Plan
    - Tracking Changes to the Plan
    - Discontinuing Work on a Task
    - Delaying Work on a Task
- Evaluating Project Status
    - The Variance Table