Comprehensive Microsoft® Project®

Course Overview
Through a blend of key project management concepts and techniques for effectively using Microsoft Project through the project life cycle, this course enables project managers to increase their efficiency and productivity. Participants will gain better control over their projects, resulting in improved schedule and cost performance 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 various tasks like recurring and level-of-effort tasks as well as 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 and setup the application to provide accurate and reliable schedule, cost and staffing status and forecasts.
• Scope definition concepts and implementation in Project
• 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
• Assign job titles to tasks and then later replace those job titles with people once it’s clear who will be on the project team
• Assign resources to tasks in the most efficient and reliable way
• Develop and interpret schedules, and assess their risk
• Enter 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
• Customize components within project and then share those customizations among users
• Utilize Project’s baselining capability to manage projects in which the scope of the entire project is unclear at the outset of the planning process
• Establish different charge rates for a given resource in the project and for accommodating expected changes in those charge rates during the project’s life
• Create custom formulas in Project such as cost per day and custom variance calculations so that you get the information you need from the software
• Efficiently manage multiple projects in Microsoft Project and how to reflect and manage dependencies between those projects
• Set up Project so that resources can be shared across multiple projects
• Evaluate project status, predict future performance, and get early indications of potential problems on the project using earned value

At-a-Glance:
Course Length: 3 days
Course Number: 105.MSP3 – Proficient
Professional Development Units (PDUs): 21 (Technical)
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
- Scheduling Options in Project
- The Task Mode Setting
- 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
- Numbering the Tasks—The Unique Identifier Field
- Establishing Recurring Tasks
- Building the Team of Resources
- Types 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
- Setting Scheduling Parameters
- Relationship Types
- Lag and Lead Time
- Linking Tasks
- Converting from a Manually Scheduled to an Auto Scheduled Schedule
- Managing Links Between Manually Scheduled Tasks
- 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
• 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
• Replacing Job Titles with Resource Names
• Entering Fixed Costs
• Establishing Task Properties
• Task Types
• Effort-Driven Tasks
• Establishing Task Calendars

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
• Optimizing the Use of Resources
• Identifying Resource Over-allocations
• Resolving Resource Over-allocations with Microsoft Project
• Establishing the Baseline
• Setting the Baseline

Communicate the Plan
• Communicating the Plan to Others
• Sorting & Grouping
• Using Filters
• Utilizing Auto Filters
• Customizing the Gantt Chart
• 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

**Managing Complex Projects**

- Planning When There’s Uncertainty
- Rolling Wave Planning
- Advanced Resource Management
- Cost Tables
- Work Contouring
- Customizing & Enhancing the Plan
- Performing Custom Calculations in the Plan

**Managing Multiple Projects**

- Managing Multiple Projects
- Methods for Managing Multiple Projects
- Multiple Separate Files in a Window
- Multiple Files in a New Window
- Inserting Projects into a Master Project
- Linking Between Projects
- Sharing Resources Across Multiple Projects

**Evaluating Project Status Using Earned Value**

- Evaluating Project Status Using Earned Value
- Setting the Status Date for Earned Value Analysis
- Conducting Earned Value Analysis