Course Description

Course Title

Best Practice Project Scheduling Using MS Project

Overview

Scheduling is key to project success. If we get it right, we set ourselves up to deliver well. Conversely, if we fail at the scheduling stage, execution is going to be very hard. As the saying goes, "if we fail to plan, we plan to fail". Microsoft Project is a well-known scheduling tool, used all over the world in many projects. This course will teach you not only how to get the best out of MS Project, but also teach you the best practice scheduling principles that lie behind project success and help your projects complete on time.

What You Will Learn from This Course:

- Why good scheduling is critical to project success
- Principles of best practice scheduling
- A quick start guide to MS Project
- How to use MS Project to:
    - Initiate a project
    - Build your schedule, including creating, linking and constraining tasks
    - Manage resources and cost data
    - Optimise your schedule
    - Perform schedule assurance and quality control activities
    - Baseline your schedule
    - Analyse and report on schedule data
    - Work with critical path and float
    - Manage and control schedule execution
    - Close a project down
- Identify and fix common scheduling problems
- Schedule management in agile and hybrid projects
- Learning lessons to improve future projects

Why Should You Attend this Course?

MS Project is an excellent tool for schedule creation and management, and we will learn how to get the best out of it as we build our plans. But we will do more than that – we will understand and apply the principles behind good scheduling, because by doing so, we maximise our chance of completing on time.

Starting with how scheduling fits into project management and controls, and how MS Project supports them all, we go on to look at how expert schedulers go about their work. Having understood this, we then learn how to use MS Project to implement best practice and how to get the best out of this very capable tool.

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By covering the whole range of activities, including initiation, scheduling, assurance, monitoring, reporting and learning lessons, delegates should emerge with a solid understanding, ready to implement what they have learned. We also look at some common scheduling problems and how we can solve them in MS Project. In addition, we look at some specialist topics such as scheduling for agile and hybrid methods, and schedule risk management. Finally, we cover multi-project scheduling and interfacing MS project data to other applications.

Not only will project planners and schedulers benefit from this course, but other project personnel will also gain a deeper understanding of all that is involved in scheduling, thus helping them to perform better in their own role.

The course includes practical hands-on exercises, intended to turn knowledge into immediate benefit and to make applying the knowledge gained much easier.

Finally, the instructor will include opportunities to discuss the real-world problems and issues and questions that are affecting delegates in their own projects, so that improvements and solutions can be implemented as soon as delegates return to their desks. Often, helpful advice can be gained from the experience of other delegates, and the course setting provides opportunities to do this.

Who Should Attend This Course?

- Project Planners and Schedulers
- Project Controls Team Members
- Project Management Office Staff
- Project Team Members
- Assurance, quality and governance team members

Outcome of this Course

By the end of this intensive 4-day course, attendees will be able to:

- Why good scheduling is critical to project success
- Principles of best practice scheduling
- A quick start guide to MS Project
- How to use MS Project to:
    - Initiate a project
    - Build your schedule, including creating, linking and constraining tasks
    - Manage resources and cost data
    - Optimise your schedule
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    - Work with critical path and float
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    - Close a project down
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Course Length

4 days

Course Content

An interactive mix of lecture, hands-on scheduling, group discussion and activities will be used to illustrate and apply the methods, tools and techniques needed to create and manage a project schedule with MS Project. The following topics will be covered.

Part 1 – Introduction

Fundamental Concepts

- Why project planning and scheduling?
- How planning and scheduling fit into project management and project controls
- How planning tools, such as MS Project fit into planning and scheduling
- Approaches to planning and how to select the best one for the job

Familiarisation with MS Project and Quick Start

- Overview of MS Project
- MS Project key features and look & feel
- Gantt chart view
- Resourcing view
- Calendar view
- Creating a new project - using the templates and manual creation
- Entering tasks and milestones
- Linking task and creating relationships
- Assigning resources
- Estimating task durations
- Baselining
- Tracking
- Closing
- MS Project - high level configuration and definition

Project Initiation

- From project business case to definition
- Project scoping and scope management
- Work breakdown structures (WBS)

Part 2 - Project Scheduling

Scheduling Concepts

- Schedule design, including different scheduling approaches and types
- Schedule construction, including dependencies and constraints
- Estimating
- Resourcing
- Critical path and float
- Assurance, review and quality control
- Baselining and communicating

Working With Tasks

- Entering and editing tasks and task lists
- Summary tasks, subtasks and recurring tasks
- Working with milestones
- Choices of views
- Hyperlinks and notes

Task Relationships - Logic, Links and Constraints

- Detailed look at task logic, linking and dependencies and how to create, amend and use various types
- Detailed look at task constraints and how to create, amend and use various types
- Splitting tasks and using deadlines

Project Resourcing

- How MS Project views resources
- How MS Project views costs
- Defining resources
- Entering resource data - using the resource sheet view and the Resource Dialogue boxes
- Understanding and entering resource cost data
- Resource constraints

Project Work and Relationship to Resources

- Resources and task assignments
- The Work Formula
- Advanced options
- Handling single and multiple resource assignments

Views and Reporting

- Understanding views and tables
- Standard views and tables
- Variations and options
- Filtering, grouping and combining

- Reporting features and options
- Forecasting

Schedule Review, Checking, Assurance and Baselining

- How to perform schedule checks and reviews using MS Project
- Working with critical path and float
- Optimising the schedule, including crashing and fast tracking
- Resource optimisation
- Analysing cost information
- Baselining the schedule

Part 3 – Project Execution

Tracking, Monitoring and Control

- Overview of tracking, monitoring and controlling a schedule
- Entering and amending tracking data – cost and schedule
- Analysing progress and performance data
- Earned value analysis – understanding, set up and use
- Reporting and communications

Revision and Change Control

- Principles of change control
- Revising and amending project data
- When to update the baseline
- Project recovery

Project Completion and Close Out

- How to close a project
- Final reports
- Lessons learned

Part 4 - Specialist Topics

- Customising and tailoring MS Project
- Using MS Project with iterative/agile and hybrid lifecycles
- Solving common problems
- Data import and export
- Multiple projects and project linking
- Scheduling and risk management

Practical Exercises

- Delegates participate in groups or teams to create and manage project schedules using MS Project.

Summary and Next Steps

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- Summary
- Things you can do next
- Useful reference Material