

Project Management Essentials



course factsheet

duration	Two days
availability	Company course listing Public course schedule Project Learning+
course overview	Containing the essential tools and techniques to help create, plan, optimise and control projects more effectively, based on current best practices. A detailed case study and ten practical syndicate exercises confirm topics learned.
designed for	Anyone responsible for managing projects or project teams, wanting a fuller understanding of the modern tools and techniques available and how they apply to real projects.
prerequisites	None, other than a willingness to participate in group discussions and syndicate work.
follow on learning	To expand upon the competences developed, the following should be considered: <ul style="list-style-type: none">• Microsoft Project Essentials• Project Mentor

Project management preliminaries

This first section discusses essential PM principles. Why projects fail and the various types of project lead into interpersonal issues, team building and communication. An exercise creates a project methodology and a basic test determines initial PM knowledge.

Project startup

From an understanding of PM fundamentals, the project begins to take shape. The three project resources of work, time and cost are discussed, along with task delegation. The planning sequence is commenced, starting with an understanding of a client's requirements. A practical exercise discusses a project's feasibility.

Defining what to do

With a project's feasibility confirmed, the project definition can be expanded into just what is required (and at what level of detail for reporting and control). A top-down approach creates a work and cost breakdown, confirmed with a syndicate exercise.

How to accomplish work

With the project scope expanded, how it will be achieved is discussed. The work, cost and time content of tasks is explained, along with sources of this information. Task relationships are introduced and an exercise creates a project network.

When things happen / further timing influences

The network says how things will be done. Critical path analysis determines when: how quickly and how slowly. Gantt charts depict the schedule of tasks and their spare time. Task relationships are expanded to increase flexibility. Influences external to the project are added to create a more realistic model of reality. Practical exercises confirm the appropriate techniques.

- What is a project and why do they go wrong?
- How do projects and programmes differ?
- Types of projects
- Interpersonal issues
- Team building and communication
- Creating a feedback mechanism

- The role of project planning
- The three project resources
- Knowing what the client wants
- Creating a project definition
- How feasible is the project?

- Levels of detail required for control
- Levels of reporting
- Creating a Work Breakdown Structure
- Cost breakdown and coding structures
- Adding milestones

- Sources of time / work information
- Time vs. work
- The cost of doing work and tasks
- Relationships between tasks
- Tasks with multiple predecessors / successors

- How quickly / slowly can tasks be done?
- Tasks with spare / no spare time
- Gantt charts to show when
- Overlapping or delaying tasks
- Constraining tasks starts / finishes
- Influences from other projects

Who does what and when

People to perform the tasks need to be added to the project to be a true model of reality. Their influence is discussed in how they are assigned and the problems that they can bring. Techniques for resource management are introduced, along with the implications in applying them. Practical exercises optimise this resource usage and create a cost schedule.

- Simple / effort-driven assignments
- How resource usage adds up
- Resource management options
- Resource levelling with / without delays
- Substituting alternative resources
- Scheduling project costs

Assessing project risks

As projects are modelling the future, this implies an element of risk. Where the risk comes from and when it should be reviewed are discussed. Different types of risk are explained, together with their probability of happening and the impact if they do happen. Syndicate work confirms sources of risk and contingencies for removing / alleviating the risk.

- When and why manage risk?
- Using risk diagrams and matrices
- P.E.R.T. as a risk management tool
- When to apply contingencies
- Contingency effects

Controlling work in progress

Once a project goes live, it is subject to (often dramatic) change. The necessity for tracking what has happened is expanded to encompass updating cycles and their frequency. What is captured and how it is done are discussed, together with what is different to as before and why it is different. A practical exercise tracks a project's progress, compared to what should have been achieved.

- Change: its impact and opportunities
- Update cycles and their frequency
- Capturing: what; how & who
- Comparisons to original plans
- Introducing earned-value analysis
- Evaluating the impact of the change

Replanning to stay on track

Actual work accomplished creates a requirement for replanning - at varying levels of detail. Options to control time, cost and quality are discussed, together with the need for timely action. The importance of reporting and communication is emphasised. A practical exercise deals with alleviating a number of project problems, arising out or an update.

- Why replan, and at what detail?
- Changing how long things take
- Changing task relationships
- Keeping control of costs and quality
- Keeping people informed
- The need to update regularly