



**Professional training  
in Project Engineering  
for Scientists, Engineers and Managers**

► **Project Scheduling and Costing** ◀  
Project Risk Management  
Quality Assurance

**[www.classic.highware.info](http://www.classic.highware.info)**

## SCOPE

### ▶ Competencies

- ▶ Achieving results
- ▶ Optimising resources
- ▶ Organisation, planning and control

### ▶ Target audience

- ▶ Managers, engineers or scientists with budgetary and scheduling responsibilities in a project.

### ▶ Prerequisite

- ▶ Prior education in project engineering or professional exposure to project management.

### ▶ Objectives

- ▶ To become familiar with techniques in use for project time and cost management (and especially as implemented in project scheduling software as OpenProj, GanttProject or Microsoft-Project).

### ▶ Duration: two days

### ▶ Features

- ▶ Terminology used in this course complies with PM BoK (Project Management Body of Knowledge published by Project Management Institute).
- ▶ Techniques presented in this course are implemented in project management software tools.
- ▶ Practices presented in this course are consistent with PRINCE2 (Projects IN Controlled Environments) published by the OGC (Office of Government Commerce).

## CONTENTS

### ▶ Construction of project schedule

- ▶ Construction of project network diagram using different types of links (finish-to-start, start-to-start, finish-to-finish, start-to-finish).

### ▶ Earned Value Management

- ▶ Cost control standard criteria: PV (Planned Value), AC (Actual Cost) and EV (Earned Value). Case study: integration of time and cost management in projects

### ▶ Resource analysis

- ▶ Resource and budget estimates.
- ▶ Resource histograms and the S-curve: application with software tools (GanttProject, OpenProj, Microsoft Project).
- ▶ Case study to integrate time and resource analysis.
- ▶ The two types of resource leveling (duration driven and effort driven).

### ▶ Time analysis

- ▶ PERT-CPM and the negative float.
- ▶ Application with software tools (GanttProject, OpenProj, Microsoft Project).