



**EVENGINE**  
WORLD CLASS EVPM

## Project Financial Measurement and Control Using Earned Value Performance Management (EVPM)

This **ONE-day** classroom or **TWO 4-hour** distance learning sessions course was designed for project management professionals who want to understand the concepts, terminology and principles of Earned Value Performance Management (**EVPM**) based Portfolio / Program / Project financial measurement and control. The **EVPM** concepts are illustrated using Supertech Project Management's **EVENGINE™** —Project Control software.

**EVENGINE STANDARD** is a Microsoft® Office Excel Add-in utility that covers all computational requirements to deliver commercial **EVPM** performance reporting to internationally accepted standards and guidelines. Specifically:

- Project Management Institutes *PMBOK® Guide* - Fourth Addition, together with their Practice Standard for Earned Value Management, and
- ANSI/EIA-748-B — Standard on Earned Value Management System guidelines.

For more information on **EVENGINE**, visit the product's website [www.evengine.net](http://www.evengine.net).

### Who should attend?

Experienced Business, Portfolio and Project Managers, Cost Engineers, Quantity Surveyors, Investment Analysts, Financial Controllers & Accountants, Product & Production Managers, Strategic Business Planners, in fact any person, wanting to track, evaluate, trend and report project performance to internationally accepted standards and guidelines.

### Learning Objectives:

- The principles and practices of Earned Value Performance Management (**EVPM**) applied to analyze the project's life cycle performance with respect to cost, work and material / quantity usage.
- The prerequisites for **EVPM**.
- **EVPM** basic terminology plus EVPM variance & performance analysis, as well as for trend analysis.
- **Earned Schedule (ES)** metrics, indicators and predictors based on EVPM data.
- **EVPM** software solutions, various software based solutions to support EVPM.
- Extending **EVPM** to undertake contract management, and to determine a project's cash position.
- Extending **EVPM** to support project financial appraisal and investment analysis.
- How to use **EVPM** to model and evaluate a project's financial status (profitability or otherwise) and its ability to perform Return on Investment [ROI] analysis.
- The business process change requirements necessary to successfully implement an **EVPM-based** project controls and financial performance reporting system.



This course qualifies for **6 PDU** from **PMI®**.

## Course Content:

This course makes extensive use of industry case studies to illustrate the principles and practice of **EVPM**-based project control. Case studies are demonstrated using Microsoft Office Project scheduling software together with **EVENGINE STANDARD**.

### **EVPM (Earned Value Performance Management) History and References**

- Development history.
- Governance guidelines and standards.
- EVPM references.

### **Prerequisites for EVPM**

- Define and review the project schedule requirements to support EVPM:
  - A comprehensive project schedule to and appropriate Work Breakdown Structure (WBS)
  - Tasks have cost — mandatory — work and materials / quantities — optional — assigned.
  - Tasks / activities are coded to allow for EVPM processing.
  - Schedule is baselined.
  - Schedule is updated with progress data, and actual costs — mandatory — actual work and quantities / materials — optional — are posted.

### **Extending Basic Terminology**

- Introducing of the basic EVPM terminology:
  - Budget At Completion (BAC)
  - Estimate At Completion (EAC)
  - Planned Value (PV)
  - Earned Value (EV)
  - Actual Cost (AC)
  - Estimate At Completion (ETC).

### **EVPM for Variance & Performance Analysis**

- Explain the use of EVPM for variance analysis.
- Explain the use of EVPM for performance analysis.

### **EVPM for Trend Analysis**

- Introduce a series of very powerful EVPM trend analysis values, including:
  - To Complete Performance Index (TCPI-BAC and TCPI-EAC)
  - Independent Estimates At Completion (IEAC1 through IEAC6)
  - Mathematical Estimate at Completion (MEAC).

### **Extending EVPM to Work and Material Quantity Usage Performance**

**Earned Schedule (ES)** using standard EVPM data to perform Earned Schedule analysis.

### **EVPM Software Solutions**

- From Microsoft Office Project, Primavera Planning software.
- EVPM by spreadsheets.
- Commercial, Off-The-Shelf (COTS) applications

### **Extending the EVPM Methodology to Manage the Project's Cash Position**

### **Extending the EVPM Methodology to Project Financial Appraisal and Investment Analysis**

### **Next Steps**

- Organization Readiness Check List
- A recommended set of next steps.

### **Workshop Content:**

Each participant is given a copy of the facilitator's PowerPoint slides plus an EVPM Quick Reference card.