



Earned Value Management (EVM) and Project Cost Control



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Technical depth: Practitioner · **Practical mode:** Modelling build

Introduction

Project budgets are often reported as money spent against money planned, which says nothing about the work actually achieved. Overruns then surface late, when recovery options are few and expensive. This Core Concept course builds the cost control and earned value competence to integrate scope, schedule and cost into one performance baseline, measure progress objectively and forecast the final cost while there is still time to act. Participants work with datasets from several sectors and leave with an Earned Value Performance Model and cost control report for a project of their own.

Course Objectives

- Classify and prepare project cost estimates and a cost breakdown structure fit for control
- Establish a time-phased performance measurement baseline with control accounts in line with ISO 21508
- Measure progress objectively and calculate cost and schedule variances, performance indices and estimates at completion
- Control baseline changes, reserves and contingency drawdown, and detect distortions in earned value data
- Forecast completion dates with the earned schedule method and report integrated cost and schedule performance
- Produce an Earned Value Performance Model and monthly cost control report for sponsor review

Target Audience

- Project managers accountable for budget and cost forecast performance
- Project controls managers operating integrated cost and schedule reporting
- Cost managers responsible for budgets, commitments and cost forecasts on capital projects
- PMO managers setting performance measurement standards across projects
- Finance business partners supporting project budgeting and capital expenditure reporting
- Contract managers assessing supplier progress claims against achieved work

Course Outline

Day 1: Cost Management Foundations and Estimating

- Project Cost Management in the PMBOK Guide Eighth Edition Finance Performance Domain
- Cost Estimate Classification to AACE Recommended Practice 18R-97
- Bottom-Up, Parametric and Analogous Cost Estimating
- Cost Breakdown Structure Linked to an ISO 21511 Work Breakdown Structure
- Cost Control Maturity Review Against the AACE Total Cost Management Framework

Day 2: Earned Value Standards and the Performance Baseline

- ISO 21508:2026 Earned Value Management Guidance
- ISO 21512:2024 Earned Value Management Implementation Guidance
- PMI Standard for Earned Value Management Key Concepts
- Control Account Plans and Work Package Planning
- Performance Measurement Baseline and Time-Phased Budget S-Curve

Day 3: Measuring Performance and Forecasting Cost

- Earned Value Techniques: Percent Complete, Weighted Milestones and the 50/50 Rule
- Planned Value, Earned Value and Actual Cost Data Collection
- Cost Variance, Schedule Variance, CPI and SPI Calculation
- Estimate at Completion Methods and the To-Complete Performance Index
- Variance Analysis Report and Corrective Action Log

Day 4: Advanced Control, Reserves and Data Pitfalls

- Earned Schedule Method for Late-Stage Completion Forecasting
- Baseline Change Control and Management Reserve Governance
- Contingency Drawdown Tracking and Cost Risk Exposure
- Front-Loading, Level-of-Effort Distortion and Other EVM Data Pitfalls
- Integrated Cost and Schedule Dashboards in Primavera P6 and Power BI

Day 5: Modelling Build and the Earned Value Performance Model

- Engineering Project Case: EVM Dataset Build and Performance Diagnosis
 - Information Technology Project Case: EAC Challenge and Recovery Options
 - Earned Value Performance Model Build for an Own Project
 - Monthly Cost Control Report Drafting
 - Peer Model Review and Forecast Defence
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Skills You Will Gain

- Cost Estimating
- Performance Baseline Development
- Earned Value Analysis
- Cost Forecasting
- Variance Analysis
- Baseline Change Control
- Reserve Management
- Project Performance Reporting

Why Attend This Course

- Return to work with an Earned Value Performance Model for a live project, its forecast already tested by peers
- Read CPI, SPI and TCPI figures with confidence and explain to sponsors what they mean for the final cost
- Recognise when earned value data is being flattered by front-loaded budgets or level-of-effort work
- Compare cost control practice with managers from engineering, technology and public infrastructure projects

Conclusion

Cost control works only when spending is compared with the work actually achieved, not with the calendar. This course moves from estimate classification and cost structures, through the earned value standards and performance baseline, to the measurement, forecasting, reserve control and data checks that make the numbers reliable. The final day turns that material into an Earned Value Performance Model that participants take back to their project, giving them an objective early warning of overruns and a forecast they can defend to sponsors.
