JUPITER PRIME

Consulting • Training • Advisory

جوبيتر برايم للاستشارات والتدريب

COURSE BROCHURE

Advanced Capital Project Cost Control and Forecasting Training Course

16 – 27 August 2027
Singapore

Advanced Capital Project Cost Control and Forecasting Training Course

Ref: 484_17734 **Date:** 16 – 27 August 2027 **Location:** Singapore **Fees:** 12000 GBP

Capital Project Cost Control and Forecasting is the focus of this 2-week advanced training course for cost controllers, project controls engineers and commercial managers on engineering, procurement and construction work, who produce a monthly cost control report with forecasts. Owners now expect early warning of overruns, not explanations after the money has gone. Jupiter Prime Training runs this course for specialists who keep capital projects financially visible from award to close-out.

Why Capital Project Cost Control and Forecasting Matters Now

Three pressures shape cost control on capital projects: owners and lenders who demand reliable outturn forecasts every month, contractors whose claims and variations move the cost base constantly, and executives who must decide early whether to recover, descope or seek more funding. Teams that link commitments, progress and earned value to a disciplined trend process see overruns while they can still act; teams that rely on invoices alone discover them at completion. The course applies the PMBOK Guide 7th edition measurement performance domain and ISO 21502:2020 guidance on project management control, illustrated with energy, infrastructure and industrial plant cases.

Who Gains Most from Capital Project Cost Control and Forecasting

- Controllers who maintain cost reports and reconcile commitments with actuals
- Engineers who measure physical progress and calculate earned value
- Commercial leads who value contractor variations and assess claims exposure
- Package managers who own control account forecasts and explain variances
- Reporting leads who brief owners, lenders and boards on outturn cost

A project controls department gains most when its cost controller, progress engineer and commercial manager attend together and agree one measurement and forecasting routine.

Capital Project Cost Control and Forecasting Capabilities

Participants follow money from award through commitments, progress and change to a forecast that leaders can act on.

- Build a control budget and commitment structure aligned with contract packages — the controls lead setting reporting rules
- Calculate earned value, cost and schedule performance indices from measured progress — the project manager judging performance
- Apply variance analysis to separate price, quantity and productivity effects — the package manager explaining deviations
- Specify a trend and change control routine from early warning to approved variation — the commercial manager protecting margin
- Test estimate at completion methods against independent bottom-up forecasts — the owner relying on outturn figures
- Communicate monthly cost reports with clear narratives and recovery actions — the steering board deciding interventions

Key Capital Project Cost Control and Forecasting Terms

- Control budget — the approved cost baseline broken into control accounts against which commitments, actuals and earned value are measured
- Commitment — a contractual obligation to spend, such as an awarded purchase order or subcontract, recorded before invoices arrive
- Earned value — the budgeted cost of work actually completed, used to compare progress with planned and actual cost
- Cost performance index — the ratio of earned value to actual cost, showing how efficiently money is converted into progress
- Trend — an early notice of a potential cost or scope change logged before it becomes a formal variation
- Estimate at completion — the forecast final cost of the project or package, combining actuals to date with remaining cost

Capital Project Cost Control and Forecasting Day by Day

Day 1: Cost Control on Capital Projects

- Award-to-Close-Out Cost Lifecycle — Mapping Control Points Across Execution
- PMBOK Guide Measurement Domain — Framing Performance Tracking
- ISO 21502 Control Processes — Setting Approval and Reporting Points
- Contract Strategy and Cost Exposure — Lump Sum, Reimbursable and Unit Rate
- Cost Control Procedure — Defining Roles, Cut-Off and Reporting Cycle

Day 2: Control Budget and Structure

- Control Budget Breakdown From Award Value — Establishing the Measurement Base
- Control Account and Package Coding — Linking Contracts, Ledger and Schedule
- Allowances and Provisional Sums — Tracking Uncommitted Scope
- Cost Code Mapping to Procurement Packages — Enabling Commitment Reporting
- Baseline Freeze and Transfer Log — Protecting Budget Integrity

Day 3: Commitments and Actuals

- Commitment Register Maintenance — Capturing Purchase Orders and Subcontracts
- Accrual Methods for Work Done — Recognising Cost Before Invoicing
- Invoice and Payment Certificate Reconciliation — Matching Actuals to Progress
- Retention, Advance Recovery and Back-Charges — Adjusting Cost Positions
- Committed Versus Forecast Gap Review — Revealing Unbought Scope

Day 4: Progress Measurement

- Rules of Credit and Weighted Milestones — Measuring Physical Progress Objectively
- Quantity-Based Progress for Construction — Linking Installed Units to Earning
- Engineering Deliverable Progress — Measuring Drawings and Documents
- Procurement Progress Stages — Crediting Orders, Fabrication and Delivery
- Progress Verification Walkdowns — Challenging Reported Percentages

Day 5: Earned Value Performance

- Planned Value, Earned Value and Actual Cost — Building the Core Comparison
- Cost and Schedule Variance — Quantifying Deviation in Money Terms
- CPI and SPI Trend Charts — Spotting Deterioration Early
- To-Complete Performance Index — Testing Whether Targets Remain Achievable
- Earned Value at Package Level — Locating Underperforming Contracts

Day 6: Variance Analysis

- Price, Quantity and Productivity Variance Split — Explaining Root Causes
- Labour Productivity Factors — Comparing Earned and Burned Hours
- Material Price Escalation Tracking — Separating Market Effects From Waste
- Variance Thresholds and Explanation Rules — Focusing Attention Where It Matters
- Corrective Action Register — Assigning Owners to Recovery Measures

Day 7: Change and Trend Control

- Trend Notice Process — Logging Potential Changes Early
- Change Order Valuation — Pricing Variations Fairly and Quickly
- Change Impact on Control Budget — Updating Baselines Transparently
- Claims Exposure Register — Estimating Disputed Amounts Prudently
- Change Control Board Operation — Approving, Rejecting or Deferring Changes

Day 8: Forecasting Final Cost

- Estimate at Completion Formula Methods — Choosing CPI or Composite Indices
- Bottom-Up Estimate to Complete — Re-Estimating Remaining Work
- Independent Forecast Comparison — Testing Optimism in Package Forecasts
- Forecast Risk Allowance — Reflecting Open Risks in Outturn
- Forecast Accuracy Tracking — Learning From Past Forecast Errors

Day 9: Cost Reporting and Communication

- Monthly Cost Report Structure — Summary, Packages, Change and Forecast
- Cost Narrative Writing — Explaining Movements Without Jargon
- Dashboards for Executives and Lenders — Showing Trends at a Glance
- Cash Flow Forecast Alignment — Linking Cost Outturn to Funding
- Close-Out Cost Reconciliation — Finalising Accounts and Lessons Learnt

Day 10: Practising the Monthly Cost Control Report

- Commitment and Accrual Exercise — Applying Days 2 and 3 to a Case
- Progress and Earned Value Calculation — Applying Days 4 and 5 to Packages
- Variance and Change Assessment — Applying Days 6 and 7 to Findings
- Forecast Challenge Session — Applying Day 8 Methods Under Review
- Monthly Cost Control Report With Forecasts — Completing the Board Submission

Applying Capital Project Cost Control and Forecasting After the Course

- Run a committed-versus-forecast gap review on one live project and present the unbought scope and its forecast value to the project manager
- Introduce a trend notice log for one contract package and report its first month of entries at the next cost review meeting

Capital Project Cost Control and Forecasting Questions FAQ

What is Capital Project Cost Control and Forecasting and why does it matter now?

Capital Project Cost Control and Forecasting is the discipline of measuring committed, earned and actual cost and predicting final outturn on major projects. It matters now because owners and lenders expect early, reliable warning of overruns every month.

Which roles gain most from Capital Project Cost Control and Forecasting training?

Cost controllers, project controls engineers and commercial managers gain most. They reconcile commitments, measure progress, value change and forecast outturn, so they need consistent methods that produce cost reports owners and boards trust.

How does Capital Project Cost Control and Forecasting differ from a general budgeting course?

It differs by controlling cost during execution of contracts rather than setting budgets. A general budgeting course covers annual or departmental plans, while this one tracks commitments, earned value, variations and estimates at completion on live projects.

What do you bring back from Capital Project Cost Control and Forecasting training?

You bring back a monthly cost control report with forecasts built from a case project. It includes commitments, progress and earned value, variance explanations, change status and an estimate at completion ready for a steering board.

Capital Project Cost Control and Forecasting: The Way Forward

The monthly cost control report with forecasts first informs the steering board's decision on whether recovery actions or extra funding are needed. Cost controllers compile it, package managers defend their lines, and owners or lenders rely on its outturn figure. After three cycles, revisit forecast accuracy against actual results to recalibrate estimate at completion methods and variance thresholds.