



IT Infrastructure Cost Estimation and Value Engineering Course

2 – 6 May 2027
Johannesburg

IT Infrastructure Cost Estimation and Value Engineering Course

Ref: 1666_223119 **Date:** 2 – 6 May 2027 **Location:** Johannesburg **Fees:** 4500 Euro

Overview

IT Infrastructure Cost Estimation and Value Engineering Course is a one-week course for infrastructure managers, project managers, cost engineers, procurement teams, finance partners and solution architects, who leave with an IT Infrastructure Cost and Value Plan. The course links scope, estimates, total cost of ownership, budgeting, contingency, vendor bids, value engineering, change control and cost performance reporting. Participants make investment assumptions and lifecycle tradeoffs traceable. Agile Leaders Training Center develops practical IT infrastructure cost planning skills.

Who Should Attend

- Teams responsible for infrastructure scope and investment planning
- Teams responsible for technology budgets and financial control
- Teams responsible for vendor sourcing and bid evaluation
- Teams responsible for solution architecture and lifecycle decisions
- Teams responsible for project cost reporting and change control

The course assumes participants contribute to technology investment decisions and leaves out accounting qualification and vendor certification preparation.

Departments and Industries

The course supports departments and industries that plan, procure and control technology infrastructure investments.

- Information technology and digital operations
- Finance, procurement and project controls
- Banking, healthcare and professional services
- Manufacturing, energy and utilities
- Telecommunications, transport and logistics

Learning Objectives

By the end of this course, participants will be able to:



- Build a scope-based IT infrastructure cost estimate
- Analyze quantity, resource and pricing assumptions
- Apply total cost of ownership and contingency methods
- Compare vendor bids and lifecycle alternatives
- Evaluate value engineering proposals and change impacts
- Use cost performance measures and forecasts

Course Agenda

Day 1: Scope and Estimate Structure

- Infrastructure Scope Statement and Assumption Register
- Work Breakdown Structure and Cost Account Map
- Quantity Takeoff and Resource Estimate Sheet
- Cost Basis and Source Traceability Log
- Estimate Classification and Review Checklist

Day 2: Cost Models and Budgeting

- Parametric Analogous and Bottom-Up Estimate Matrix
- Total Cost of Ownership Lifecycle Model
- Risk Allowance and Contingency Analysis Method
- Budget Baseline and Funding Profile Template
- Estimate Sensitivity and Scenario Comparison Grid

Day 3: Vendors and Value Engineering

- Vendor Bid Normalization and Compliance Matrix
- Commercial Technical Evaluation Scorecard
- Function Analysis and Value Engineering Worksheet
- Lifecycle Alternative and Tradeoff Register
- Value Proposal Decision and Approval Record

Day 4: Cost Control and Forecasting

- Change Request Cost Impact Assessment
- Planned Value Earned Value and Actual Cost Sheet
- Cost Variance and Performance Index Dashboard
- Estimate at Completion Forecast Method
- Management Cost Report and Exception Log



Day 5: Infrastructure Cost Planning Practice

- Exercise: Build an Infrastructure Cost Estimate
- Exercise: Test Contingency and Lifecycle Scenarios
- Exercise: Compare Vendor Bids and Value Options
- Exercise: Forecast Cost Performance and Changes
- Capstone: IT Infrastructure Cost and Value Plan

Practical Exercises

Suggested activities use data center, network, cloud connectivity and workplace technology scenarios.

- Suggested activity: convert an infrastructure scope into quantities, resources, assumptions and cost accounts
- Suggested activity: compare purchase, acquisition, use and end-of-life costs through a total cost of ownership model
- Suggested activity: normalize vendor bids and evaluate value engineering alternatives
- Suggested activity: update a budget forecast after cost variance and approved change events

FAQs

Who should take IT infrastructure cost estimation training, and what does it assume?

IT infrastructure cost estimation training suits teams that contribute to technology scope, budgets, sourcing, architecture or project controls and can interpret basic financial and technical information.

How does IT infrastructure cost estimation differ from general project budgeting training?

IT infrastructure cost estimation applies scope, quantities, lifecycle costs, vendor bids and technology tradeoffs; general project budgeting training covers broader financial planning across project types.

How does total cost of ownership support IT infrastructure budgeting?

Total cost of ownership brings procurement, acquisition, use and end-of-life costs into one lifecycle view so teams can compare alternatives beyond purchase price.

How does value engineering improve IT infrastructure decisions?

Value engineering compares required functions, performance, cost and alternatives so teams can preserve needed outcomes while removing unnecessary lifecycle cost.



Which measures support IT infrastructure cost performance reporting?

Useful measures include planned value, earned value, actual cost, cost variance, cost performance index, estimate at completion and documented forecast assumptions.

Conclusion

Participants take back an IT Infrastructure Cost and Value Plan containing estimate structures, lifecycle models, bid comparisons, value decisions, baselines and forecasts. The plan makes assumptions, contingencies and tradeoffs visible. It helps technology and finance teams align infrastructure scope with budget control and investment value across the asset lifecycle.