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COURSE BROCHURE

# Design Alternative Appraisal and Value Proposals Training Course

22 – 26 August 2027
Cairo

# Design Alternative Appraisal and Value Proposals Training Course

**Ref:** 2510_95208 **Date:** 22 – 26 August 2027 **Location:** Cairo **Fees:** 3500 GBP

Design Alternative Appraisal and Value Proposals is a 1-week training course for engineers, estimators and project cost managers who must show which design option gives the required performance at the lowest whole-life cost, and it ends with a costed value proposal dossier ready for a design review. Clients now expect savings to be proven, not asserted. The course is offered by Jupiter Prime Training.

## Why Design Alternative Appraisal and Value Proposals Matter Now

Two pressures meet on every capital scheme today: clients demand evidence that each design choice earns its cost, and finance teams judge assets on operating and renewal spend rather than purchase price. An organisation that appraises options with discipline releases savings before drawings are frozen; late cuts trade away durability. The course rests on the structured value study sequence and on whole-life costing discounted to present value, both described in general terms.

## Who Gains Most from Design Alternative Appraisal and Value Proposals

- Design engineers responsible for selecting systems, materials and layouts against performance briefs
- Estimators who price competing schemes and defend the basis of each figure
- Project cost managers accountable for budget, contingency and savings registers
- Asset owners' technical leads who weigh capital spend against operating and renewal spend
- Commercial staff who turn accepted ideas into contract variations

A mixed design and cost group from one scheme gains most because the people who sign off test ideas and prices together.

## Design Alternative Appraisal and Value Proposals Capabilities

Participants turn a sketched idea into a priced, risk-checked option a client panel can judge on evidence.

- Define the functions a component must perform using verb-noun pairs — scope agreement with the client
- Generate and screen alternatives against must-have performance criteria — design team shortlisting
- Calculate whole-life cost of each option at present value — capital approval boards
- Weigh non-cost attributes with a weighted scoring matrix — technical acceptance panels
- Test option rankings against discount rate and lifespan sensitivity — finance reviewers
- Write a value proposal with savings, risks and implementation steps — client decision makers

## Key Design Alternative Appraisal and Value Proposals Terms

- Function — what a component or system must do, stated as an active verb and a measurable noun, independent of the chosen solution.
- Whole-life cost — total of acquisition, operating, maintenance, renewal and disposal costs over an asset's service life.
- Present value — the value today of future costs after discounting at a chosen rate, allowing fair comparison of options.
- Weighted scoring matrix — a table ranking options against criteria multiplied by agreed importance weights.
- Value proposal — a written recommendation setting out an alternative design, its saving, its risks and the steps to adopt it.
- Cost worth ratio — the cost of a function divided by the lowest cost that could deliver it, flagging targets for redesign.

## Design Alternative Appraisal and Value Proposals Day by Day

### Day 1: Value Study Context and Function Definition

- Value Study Sequence Phases — Where Option Appraisal Sits in Design Stages
- Information Gathering on Cost Drivers — Selecting Elements Worth Studying
- Verb-Noun Function Statements — Agreeing What Each Element Must Do
- Basic and Secondary Function Split — Separating Essential Duty From Add-Ons
- Cost Worth Ratio Calculation — Ranking Elements for Redesign Effort

### Day 2: Generating and Screening Alternatives

- Structured Idea Generation Sessions — Widening the Range of Design Options
- Must-Have Criteria Filters — Removing Options That Fail Performance Briefs
- Advantages and Disadvantages Listing — Shortlisting Ideas for Development
- Option Sketch Sheets — Describing Alternatives Clearly for Estimators
- Constructability and Maintainability Checks — Avoiding Savings That Shift Cost Later

### Day 3: Whole-Life Costing of Options

- Capital Cost Build-Up per Option — Comparing First Cost on a Common Basis
- Operating and Maintenance Cost Profiles — Projecting Annual Spend Over Service Life
- Renewal and Disposal Timing — Placing Replacement Cycles in the Cash Flow
- Discounting to Present Value — Choosing Rate and Horizon for Comparison
- Sensitivity and Break-Even Tests — Checking Whether Rankings Hold Under Change

### Day 4: Weighing Options and Building the Case

- Weighted Scoring Matrix Design — Balancing Cost Against Quality and Safety
- Paired Comparison of Criteria Weights — Reaching Stakeholder Agreement on Priorities
- Risk Register per Alternative — Pricing Uncertainty Into Option Choice
- Savings Quantification and Redesign Fees — Stating Net Benefit Honestly
- Implementation Plan and Contract Route — Turning Accepted Ideas Into Variations

## Day 5: Practising the Value Proposal Dossier

- Function Statements for a Case Element — Applying Day One Definitions
- Shortlist and Whole-Life Cost Model — Applying Screening and Present Value Methods
- Scoring and Sensitivity Results — Confirming the Preferred Option
- Presentation to a Mock Client Panel — Handling Challenge on Savings and Risk
- Value Proposal Dossier Completion — Packaging Evidence for Design Review Sign-Off

## Applying Design Alternative Appraisal and Value Proposals After the Course

- Lead a half-day option appraisal on one high-cost element of a live scheme, choosing it by cost worth ratio.
- Rebuild the comparison of two shortlisted designs as a present value whole-life cost model with sensitivity tests.

## Design Alternative Appraisal and Value Proposals Questions FAQ

### What is Design Alternative Appraisal and Value Proposals and why does it matter now?

It is the disciplined comparison of design options on function, whole-life cost and risk, ending in a written proposal. It matters now because clients expect proven savings early.

### Which roles gain most from Design Alternative Appraisal and Value Proposals?

Design engineers, estimators and project cost managers gain most. Asset owners' technical leads and commercial staff also benefit.

### How does Design Alternative Appraisal and Value Proposals differ from a general cost control course?

It works before the design is fixed rather than after the budget is set. Cost control tracks spend; this course proves cheaper ways to meet the same function.

### What do you bring back from Design Alternative Appraisal and Value Proposals?

You bring back a value proposal dossier for a case element, with a whole-life cost model, scoring matrix and implementation plan reusable on live schemes.

## Design Alternative Appraisal and Value Proposals: The Way Forward

The value proposal dossier first informs whether a design review accepts an alternative before drawings are frozen. Design leads, estimators and client panels use it to agree savings, risks and contract steps. After its first use, revisit the discount rate, service life and criteria weights, which most often decide the winning option.