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COURSE BROCHURE

Concrete Repair Cost Estimating and Budgeting Training Course

22 – 26 February 2027
Singapore

Concrete Repair Cost Estimating and Budgeting Training Course

Ref: 2222_82259 **Date:** 22 – 26 February 2027 **Location:** Singapore **Fees:** 6900 GBP

Concrete Repair Cost Estimating and Budgeting is a 1-week training course for facility, maintenance and asset engineers and the cost controllers who fund their work, ending with a priced concrete repair budget and scope. Ageing car parks, plant plinths and buildings are pushing repair spending up, so owners need estimates that link defects to quantities, rates and timing. Jupiter Prime Training offers this course on concrete repair cost estimating and budgeting.

Why Concrete Repair Cost Estimating and Budgeting Matters Now

Three pressures shape the subject today. Asset owners face a backlog of chloride and carbonation damage that grows costlier each year it waits. Finance teams ask engineers to justify repair funding against other capital calls with clear quantities and contingencies. Contractors price repair works with wide uncertainty. An owner that estimates well spends on the right elements at the right time; one that estimates badly faces overruns, emergency closures and disputed variations. The course rests on condition grading, bill of quantities measurement and whole-life costing.

Who Gains Most from Concrete Repair Cost Estimating and Budgeting

- Staff who commission condition surveys and read their defect findings
- Staff who measure repair quantities from survey drawings and photographs
- Staff who prepare repair estimates, rates and contingency allowances
- Staff who rank repair needs across a portfolio of concrete assets
- Staff who control repair budgets, variations and contractor payments

A maintenance engineer and a cost controller responsible for the same estate gain most attending together, pairing defect knowledge with budget control.

Concrete Repair Cost Estimating and Budgeting Capabilities

Participants move from spalling, cracking and rust staining on site to a costed, ranked list of repair works that a budget holder can approve.

- Assess deterioration causes and condition grades from survey findings — for the asset owner
- Specify the testing needed to firm up hidden damage quantities — for the survey commission
- Calculate repair quantities and unit rates for patching, injection and coatings — for the estimate
- Weigh repair against strengthening and replacement on whole-life cost — for the capital committee
- Build a risk-ranked repair priority list with contingency allowances — for the budget holder

- Design a repair scope and payment schedule that limits variation claims — for procurement

Key Concrete Repair Cost Estimating and Budgeting Terms

- Carbonation — the reaction of air with concrete that lowers alkalinity and lets embedded steel corrode.
- Chloride-induced corrosion — rusting of reinforcement triggered by salts reaching the steel, causing cracking and spalling.
- Condition grade — a rating of how badly an element has deteriorated, used to rank repair urgency.
- Breakout quantity — the volume of damaged concrete removed before repair, often larger than visible on survey.
- Contingency allowance — an amount added to an estimate for damage that cannot be measured before work starts.
- Whole-life cost — the total cost of an option over its service life, including future maintenance and disruption.

Concrete Repair Cost Estimating and Budgeting Day by Day

Day 1: Why Concrete Deteriorates and What It Costs

- Carbonation and Chloride Mechanisms — Linking Exposure to Future Repair Spend
- Cracking, Spalling and Rust Staining — Reading Defects as Cost Signals
- Condition Grading Scales — Ranking Elements for Funding Urgency
- Cost of Deferral Curves — Showing How Waiting Raises Repair Bills
- Asset Register Linkage — Tying Defects to Locations and Owners

Day 2: Surveys and Testing That Firm Up Quantities

- Visual and Hammer Surveys — Scoping Areas Before Detailed Testing
- Cover Meter and Half-Cell Readings — Estimating Hidden Corrosion Extent
- Core and Chloride Profile Sampling — Fixing Depth of Breakout
- Survey Budget Sizing — Balancing Testing Cost Against Estimate Certainty
- Defect Schedule Preparation — Turning Findings Into Measurable Items

Day 3: Repair and Strengthening Options Priced

- Patch Repair and Resin Injection — Building Unit Rates per Square Metre
- Protective Coatings and Sealers — Costing Prevention Against Later Repair
- Cathodic Protection Options — Weighing Upfront Cost Against Service Life
- Fibre-Reinforced Polymer Strengthening — Pricing Load Upgrades Versus Rebuild
- Access, Propping and Traffic Management — Capturing Indirect Costs

Day 4: Budgets, Priorities and Contracts

- Bill of Quantities Measurement — Structuring Repair Items for Tender
- Risk-Ranked Priority Matrix — Ordering Repairs by Safety and Cost
- Contingency and Provisional Sums — Covering Damage Found During Breakout
- Whole-Life Cost Comparison — Selecting Options for the Capital Committee
- Remeasurement and Variation Control — Limiting Overruns on Site

Day 5: Practising the Concrete Repair Budget and Scope

- Multi-Storey Car Park and Industrial Plinth Cases — Applying Condition Grading in Two Sectors
- Quantity Take-Off Exercise — Applying Testing Results to Breakout Volumes
- Option Pricing Comparison — Applying Unit Rates and Whole-Life Cost
- Funding Committee Presentation — Defending Priorities and Contingency Levels
- Concrete Repair Budget and Scope — Completing Quantities, Rates and Phasing

Applying Concrete Repair Cost Estimating and Budgeting After the Course

- Rebuild the next concrete repair estimate as a bill of quantities with explicit breakout contingency and provisional sums.
- Grade one asset group by condition and present a risk-ranked repair priority list to the budget holder.

Concrete Repair Cost Estimating and Budgeting Questions FAQ

What is concrete repair cost estimating and budgeting, and why does it matter now?

It is turning concrete defects into measured quantities, priced options and a funded repair plan. It matters now because ageing assets are deteriorating faster than budgets grow, and deferred repairs cost more each year.

Which roles gain most from concrete repair cost estimating and budgeting training?

Facility, maintenance and asset engineers gain most, together with cost controllers who approve and track repair spending.

How does concrete repair cost estimating and budgeting differ from a concrete repair materials course?

It treats repair choices through quantities, rates, contingency and priorities, rather than through detailed material science or structural design calculations.

What do you bring back from concrete repair cost estimating and budgeting training?

You bring back a concrete repair budget and scope drafted during the course, with graded defects, priced options and a phased priority list.

Concrete Repair Cost Estimating and Budgeting: The Way Forward

The concrete repair budget and scope becomes the basis for the next funding round. Its first use is deciding which elements are repaired this year and which are monitored, and engineers, cost controllers and procurement staff all work from it. After the first contract closes, revisit how far actual breakout quantities differed from the estimate and adjust contingency levels.