

ENGINEERING AND CONSTRUCTION PROJECT AUDITING



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TRAINING CENTER



Introduction

Engineering and Construction Project Auditing Training Course prepares auditors and project professionals to examine engineering and construction projects with real commercial bite. Participants work through project governance and controls, contract and procurement auditing, cost and change control, schedule and progress auditing, quality and safety compliance, measurement and certification, and reporting as one connected discipline. The programme links the commercial exposure a project carries with the audit evidence that shows whether it is controlled. As a result, learners gain a repeatable, defensible project audit method. Furthermore, the course strengthens cost judgement, contract literacy, and reporting that protects margin.

Engineering and Construction Project Auditing Course Objectives

- Explain project governance, delivery models, and audit objectives.
- Apply FIDIC and standard contract forms to audit testing.
- Audit procurement, tendering, and contract award processes.
- Audit cost control, commitments, and payment certification.
- Audit change orders, variations, and claims.
- Audit schedule, progress measurement, and earned value.
- Audit quality control, ITPs, and defect management.
- Audit health, safety, and environmental compliance on site.
- Audit subcontractors, suppliers, and site records.
- Apply findings development, reporting, and follow-up on projects.

Course Methodology

- Interactive sessions built on construction project audit cases.

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- Workshops on contract review, cost testing, and measurement checks.
- Group exercises on variations, claims, and productivity analysis.
- Hands-on practice with payment certificates, cost reports, and audit programmes.
- Simulation of a site audit and a variation claim review.
- Facilitator coaching and peer review on personal project audit plans.

Who Should Take This Course

- Internal auditors covering capital projects and construction.
- Project controls, cost, and planning professionals.
- Quantity surveyors and contract administrators.
- Engineering, site, and construction managers.
- Procurement and contract management staff.
- Consultants advising on project audit and cost assurance.

Engineering and Construction Project Auditing Course Outlines

Day 1: Project Governance and Delivery Models

- Project governance structures and accountability.
- Delivery models: design-bid-build, design-build, EPC, and turnkey.
- Project lifecycle stages and audit entry points.
- Project controls framework and reporting lines.
- Risk management and project risk registers.
- Establishing project audit objectives and scope.
- Case discussion: a project that overran without warning.





Day 2: Contract and Procurement Auditing

- FIDIC and standard contract forms and key clauses.
- Tendering, evaluation, and award audit tests.
- Contract terms, bonds, guarantees, and insurance.
- Subcontractor selection and back-to-back terms.
- Variations, extensions of time, and claims provisions.
- Contract administration and notice compliance.
- Workshop: auditing a contract award and variation.

Day 3: Cost, Measurement, and Payment Auditing

- Budgeting, cost commitments, and cost control reports.
- Interim payment applications and certificates.
- Measurement, quantities, and rate build-up checks.
- Material on site, retention, and advance payments.
- Change orders, dayworks, and rate reasonableness.
- Cost-to-complete and forecast validation.
- Exercise: testing an interim payment certificate.

Day 4: Schedule, Quality, and Safety Auditing

- Programme review, critical path, and delay analysis.
- Progress measurement and earned value management.
- Productivity analysis and resource utilisation.
- Quality control, inspection and test plans (ITPs), and defects.
- Non-conformance, rework, and remedial works.

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- Health, safety, and environmental compliance on site.
- Simulation: conducting a site audit and quality review.

Day 5: Reporting, Claims, and Follow-Up

- Documenting findings with quantified impact.
- Reviewing claims for entitlement and substantiation.
- Reporting to project boards and steering committees.
- Remediation planning and control improvements.
- Follow-up, issue tracking, and closure validation.
- Lessons learned and project assurance maturity.
- Capstone: presenting a construction project audit report.

Conclusion

By successfully completing Engineering and Construction Project Auditing, participants will gain a practical command of project governance, contract and procurement auditing, cost and measurement testing, schedule and progress auditing, quality and safety compliance, and claims and reporting practice. They will acquire skills in payment certificate testing, variation review, progress validation, and quantified findings that protect project margin. Gentex Training Center designs the programme to help professionals audit engineering and construction projects with confidence.

FAQs





Q1 What is the "Engineering and Construction Project Auditing" course about?

It prepares auditors and project professionals to examine engineering and construction projects with real commercial bite. The course spans project governance and delivery models, contract and procurement auditing, cost, measurement and payment auditing, schedule, quality and safety auditing, and reporting, claims and follow-up.

Q2 What are the key benefits of the "Engineering and Construction Project Auditing" course?

You gain a repeatable, defensible project audit method that links the commercial exposure a project carries with the evidence that shows whether it is controlled. The course improves contract and procurement testing, strengthens cost and measurement verification, sharpens schedule, quality and safety audit technique, and gives you findings and claims reporting practice that protects margin.

Q3 What skills will I gain from the "Engineering and Construction Project Auditing" course?

You will develop four core skills: project governance and delivery model assessment, contract and procurement auditing with FIDIC literacy, cost, measurement and payment certificate testing, and schedule, quality and safety auditing with claims review and reporting.



Q4 What tools, methods, or standards are covered in the "Engineering and Construction Project Auditing" course?

The course covers project governance structures and accountability, delivery models including design-bid-build, design-build, EPC and turnkey, project lifecycle stages and audit entry points, the project controls framework and reporting lines, project risk registers, project audit objectives and scope, FIDIC and standard contract forms and key clauses, tendering, evaluation and award audit tests, contract terms, bonds, guarantees and insurance, subcontractor selection and back-to-back terms, variations, extensions of time and claims provisions, contract administration and notice compliance, budgeting, cost commitments and cost control reports, interim payment applications and certificates, measurement, quantities and rate build-up checks, material on site, retention and advance payments, change orders, dayworks and rate reasonableness, cost-to-complete and forecast validation, programme review, critical path and delay analysis, progress measurement and earned value management, productivity analysis and resource utilisation, quality control and inspection and test plans (ITPs) and defects, non-conformance, rework and remedial works, health, safety and environmental compliance on site, findings documentation with quantified impact, claims review for entitlement and substantiation, reporting to project boards and steering committees, remediation planning and control improvements, follow-up and issue tracking and closure validation, and lessons learned and project assurance maturity.



Q5 How is the "Engineering and Construction Project Auditing" course applied in real-world practice?

Participants apply it to real work such as auditing a contract award and variation, testing an interim payment certificate for over-measurement, reviewing a cost-to-complete forecast, analysing delay and extensions of time, reviewing quality and test records on site, and drafting quantified findings for a project board. The same methods support claims review and follow-up on remediation.