



Engineering Project Audit and Assurance Training Course

18 – 22 April 2027
Cape town

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Ref: 347_128821 **Date:** 18 – 22 April 2027 **Location:** Cape town **Fees:** 4500 Euro

Overview

The Engineering Project Audit and Assurance Training Course is a five-day advanced course for internal auditors, project assurance professionals, engineering managers, project controls specialists, contract administrators, and risk professionals who leave with an Engineering Project Audit Work Program. The course connects governance, stage gates, scope, design, cost, schedule, contracts, change orders, quality and safety interfaces, claims, commissioning, handover, and benefits realization. Agile Leaders Training Center delivers this course on engineering project audit and assurance.

Who Should Attend

- Internal audit functions responsible for capital-project risk assessment, testing, and reporting
- Project assurance functions responsible for independent reviews and stage-gate decisions
- Engineering management functions responsible for design, technical interfaces, and acceptance
- Project controls functions responsible for cost, schedule, progress, and forecasting
- Contract and risk functions responsible for procurement, changes, claims, and mitigation

The course assumes participants review engineering projects or their controls and leaves out engineering design approval, legal opinions, and organization-specific investment authorization.

Departments and Industries

The course supports engineering project assurance across capital-intensive and infrastructure organizations.

- Internal audit, risk, governance, and project assurance departments
- Engineering, project management, project controls, and quality functions
- Energy, utilities, manufacturing, and infrastructure organizations
- Transportation, real estate, telecommunications, and logistics organizations
- Healthcare, education, hospitality, and public service capital programs

Learning Objectives

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



- Analyze project governance, business case, stage gates, and accountability
- Evaluate scope, design, cost, schedule, risk, and progress evidence
- Apply procurement, contract, change-order, and claims audit methods
- Use quality, safety-interface, commissioning, and handover review tools
- Evaluate benefits realization and post-project learning controls
- Build an Engineering Project Audit Work Program

Course Agenda

Day 1: Governance and Stage Gates

- Project Governance Role and Accountability Matrix
- Business Case Assumption and Benefits Test
- Stage-Gate Readiness and Decision Checklist
- Project Risk and Assurance Map
- Engineering Project Audit Scope and Materiality Plan

Day 2: Scope Design and Controls

- Scope Baseline and Requirements Traceability Matrix
- Design Review Approval and Interface Register
- Cost Estimate Basis and Contingency Test
- Schedule Logic Critical Path and Progress Review
- Forecast Variance and Management Reporting Reconciliation

Day 3: Procurement Changes and Claims

- Procurement Strategy and Tender Evaluation Audit Trail
- Contract Obligation and Deliverable Compliance Matrix
- Change-Order Authorization and Impact Assessment
- Payment Certification and Quantity Verification Test
- Claim Entitlement Evidence and Resolution Register

Day 4: Delivery Handover and Benefits

- Quality Plan Inspection and Nonconformity Review
- Health and Safety Interface Assurance Checklist
- Commissioning Test and Acceptance Evidence Pack
- Handover Documentation and Asset Readiness Matrix
- Benefits Realization and Post-Project Evaluation Method



Day 5: Engineering Project Audit Practice

- Suggested Exercise: Governance and Stage-Gate Review
- Suggested Exercise: Design Cost and Schedule Challenge
- Suggested Exercise: Contract Change and Claim Audit
- Suggested Exercise: Commissioning Handover and Benefits Review
- Capstone Exercise: Engineering Project Audit Work Program

Practical Exercises

The course includes suggested activities that turn engineering project evidence into traceable assurance conclusions.

- Suggested activity: assess a business case, governance map, stage-gate pack, and risk register.
- Suggested activity: reconcile scope, design, cost, schedule, and progress evidence for an engineering project.
- Suggested activity: test a procurement decision, change order, payment record, and contractor claim.
- Suggested activity: present an Engineering Project Audit Work Program covering commissioning, handover, and benefits.

FAQs

Who suits the Engineering Project Audit and Assurance Training Course?

Auditors, assurance professionals, engineering managers, project controls specialists, contract administrators, and risk professionals suit the course; it assumes responsibility for reviewing engineering projects or their controls.

How does engineering project audit differ from general project management training?

Engineering project audit independently evaluates governance, evidence, controls, decisions, and reporting, while general project management training focuses on planning and delivering project work.

How are cost and schedule controls audited on engineering projects?

Cost and schedule controls are audited through baseline approval, estimate support, critical-path logic, progress measurement, forecast reconciliation, variance analysis, change impacts, and management reporting tests.



What evidence supports engineering contract and change-order audits?

Relevant evidence includes tender evaluations, contract terms, deliverables, instructions, estimates, approvals, quantity records, payment certificates, schedules, correspondence, claim records, and resolution decisions.

What belongs in an Engineering Project Audit Work Program?

An Engineering Project Audit Work Program links scope, risks, stage gates, controls, procedures, samples, evidence, findings, actions, owners, and follow-up across the project lifecycle.

Conclusion

Participants leave with an Engineering Project Audit Work Program connecting governance, technical controls, commercial evidence, delivery, and benefits. The work product turns lifecycle risks into procedures, evidence requests, tests, and findings. It supports consistent assurance over engineering decisions, cost and schedule reporting, contracts, changes, commissioning, handover, and post-project outcomes.