

EPC Project Management Engineering, Procurement & Construction

AGILE LEADERS
Training Center

AGILE LEADERS
Training Center

EPC Project Management Engineering, Procurement & Construction

Course Overview:

The EPC Project Management Course is a comprehensive and practical program designed to equip professionals with the critical skills required to manage complex engineering, procurement, and construction projects across industries. This EPC project management training integrates globally recognized practices with real-world applications derived from the Project Management Handbook for EPC, ensuring participants gain deep insight into the full EPC lifecycle—from project initiation and bid phase to construction, commissioning, and handover.

Participants will explore engineering procurement construction training principles, including project planning and control in EPC, EPC cost estimation and budgeting, and EPC risk assessment and mitigation. The course emphasizes the importance of aligning scope, time, cost, and stakeholder expectations, reflecting the integrated project management approach highlighted in EPC standards, where engineering, procurement, and construction must operate as a unified system .

This EPC project management professional course also focuses on EPC contract negotiation and claims management, project controls for EPC projects, and stakeholder management in EPC projects. By combining large-scale project management training with practical case scenarios, participants will develop the ability to lead complex infrastructure and construction project planning and execution successfully.

Target Audience:

- EPC Project Managers and Engineers
- Construction Managers and Site Managers
- Procurement and Contract Managers
- Planning and Project Control Engineers
- Cost Engineers and Commercial Managers
- Senior Engineers transitioning into project management roles
- Professionals in engineering project management course tracks

AGILE LEADERS
Training Center

Targeted Organizational Departments:

- Project Management Office PMO
- Engineering and Design Departments
- Procurement and Supply Chain Management
- Construction and Operations
- Contracts and Legal Departments
- Finance and Cost Control Units
- Risk Management and Compliance

These departments benefit directly from EPC project management training, particularly in project planning and control in EPC, EPC cost estimation and budgeting, and EPC contract negotiation and claims management.

Targeted Industries:

- Oil & Gas Upstream, Midstream, Downstream
- Energy and Power Generation
- Infrastructure and Mega Construction Projects
- Petrochemical and Process Industries
- Mining and Industrial Manufacturing
- Government and Public Sector Projects

These industries rely heavily on EPC construction project management and infrastructure project management course practices to manage large-scale, high-risk projects.

Course Offerings:

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

- Apply EPC project management course frameworks across the full project lifecycle
- Develop integrated project planning and control in EPC environments
- Perform EPC cost estimation and budgeting using structured methodologies
- Analyze and implement EPC risk assessment and mitigation strategies
- Execute EPC contract negotiation and claims management effectively
- Design and implement project controls for EPC projects
- Manage stakeholders in EPC projects with structured communication plans
- Lead construction project planning and execution in complex environments
- Integrate engineering, procurement, and construction processes into one execution strategy

- Evaluate project performance using cost, schedule, and risk indicators

Training Methodology:

This EPC project management training adopts a highly interactive and practical methodology designed for professionals managing complex projects. Participants engage in real-life case studies derived from EPC project environments, including scenarios covering project planning and control in EPC, cost overruns, procurement delays, and contract disputes.

The program combines instructor-led sessions, group discussions, and simulation-based exercises to replicate real-world EPC challenges. Participants will work on structured exercises such as developing Work Breakdown Structures WBS, which are essential for defining scope and aligning cost, schedule, and responsibilities . They will also analyze EPC project lifecycle phases, including acquisition, execution, and commissioning.

Interactive workshops focus on EPC cost estimation and budgeting, EPC risk assessment and mitigation, and stakeholder management in EPC projects. Role-playing exercises simulate EPC contract negotiation and claims management, allowing participants to practice decision-making in high-pressure environments.

This blended approach ensures participants not only understand engineering project management concepts but can also apply them directly in large-scale project management training scenarios.

Course Toolbox:

- Practical case studies from EPC construction project management environments
- Templates for project planning and control in EPC
- Sample Work Breakdown Structure WBS frameworks
- Cost estimation and budgeting models
- Risk assessment and mitigation matrices
- Contract management and claims analysis frameworks
- Project control dashboards and reporting formats
- Stakeholder communication planning templates

AGILE LEADERS
Training Center

Course Agenda:

Day 1: EPC Project Lifecycle & Strategic Foundations

- **Topic 1:** Introduction to EPC project management course and lifecycle phases engineering, procurement, construction
- **Topic 2:** Project management in the construction industry vs EPC environments
- **Topic 3:** EPC project management professional course frameworks and standards
- **Topic 4:** Project planning and control in EPC: scope, schedule, and integration
- **Topic 5:** Work Breakdown Structures WBS and project structuring in EPC projects
- **Topic 6:** Organizational structures and stakeholder management in EPC projects
- **Reflection & Review:** Reviewing EPC lifecycle and project planning fundamentals

Day 2: Planning, Scheduling & Project Controls

- **Topic 1:** Advanced project planning and control in EPC projects
- **Topic 2:** Scheduling techniques and resource planning in EPC construction project management
- **Topic 3:** Project controls for EPC projects: KPIs, reporting, and monitoring
- **Topic 4:** Integration of engineering, procurement, and construction schedules
- **Topic 5:** Progress measurement and performance tracking in EPC projects
- **Topic 6:** Digital tools and systems for EPC project management training
- **Reflection & Review:** Evaluating project control effectiveness in EPC

Day 3: Cost Management & Financial Control

- **Topic 1:** EPC cost estimation and budgeting methodologies
- **Topic 2:** Cost planning and baseline budgeting in EPC projects
- **Topic 3:** Cash flow management and financial forecasting in EPC
- **Topic 4:** Cost control techniques and variance analysis
- **Topic 5:** Earned Value Management EVM in EPC construction project management
- **Topic 6:** Commercial management and financial risks in EPC projects
- **Reflection & Review:** Applying cost estimation and budgeting strategies

Day 4: Contracts, Procurement & Risk Management

- **Topic 1:** EPC contract negotiation and claims management strategies
- **Topic 2:** Procurement planning and supplier management in EPC
- **Topic 3:** Contract structures and risk allocation in EPC projects
- **Topic 4:** EPC risk assessment and mitigation frameworks
- **Topic 5:** Change management and dispute resolution in EPC projects
- **Topic 6:** Legal and compliance considerations in EPC construction project management
- **Reflection & Review:** Managing contracts and risks in EPC environments

Day 5: Construction, Commissioning & Project Delivery

- **Topic 1:** Construction project planning and execution in EPC
- **Topic 2:** Site management, logistics, and coordination
- **Topic 3:** Commissioning processes and project handover
- **Topic 4:** Quality, safety, and performance management in EPC
- **Topic 5:** Lessons learned and continuous improvement in EPC projects
- **Topic 6:** Leading large-scale project management training initiatives
- **Reflection & Review:** End-to-end EPC project delivery evaluation

FAQ:

What specific qualifications or prerequisites are needed for participants before enrolling in the course?

Participants should have a basic understanding of engineering, construction, or project management concepts. Prior experience in EPC environments, infrastructure projects, or construction project planning and execution is beneficial but not mandatory.

How long is each day's session, and is there a total number of hours required for the entire course?

Each day's session is generally structured to last around 4–5 hours, with breaks and interactive activities included. The total course duration spans one week, approximately 20–25 hours of instruction.

AGILE LEADERS
Training Center

How does EPC differ from traditional project management in construction projects?

EPC project management differs by integrating engineering, procurement, and construction into a single contract and execution model. This requires stronger coordination, advanced project controls for EPC projects, and more complex risk and stakeholder management compared to traditional project management in construction industry models.

How This Course is Different from Other EPC Project Management Courses:

This EPC Project Management Course stands out by combining globally recognized methodologies with deep, real-world EPC execution practices derived from industry-proven frameworks. Unlike generic engineering project management courses, this program focuses specifically on the integration challenges of engineering, procurement, and construction phases, ensuring participants understand how to manage interdependencies across the full EPC lifecycle.

The course emphasizes practical application rather than theory, using structured approaches such as Work Breakdown Structures WBS, cost control systems, and risk management frameworks that directly reflect real EPC project environments . Participants learn how to apply EPC cost estimation and budgeting, EPC contract negotiation and claims management, and EPC risk assessment and mitigation in real scenarios.

Additionally, this program is tailored for large-scale project management training, addressing complexities found in infrastructure, oil & gas, and energy projects. It bridges the gap between planning and execution by integrating project controls for EPC projects with stakeholder management in EPC projects.

This results in a highly practical, results-driven learning experience that prepares professionals to lead complex EPC construction project management initiatives with confidence and measurable impact.

AGILE LEADERS
Training Center

Training Course Categories

- Agile PM and Project Management Training Courses
- Agribusiness & Food Security Training Courses
- Aviation Management and Operations Training Courses
- Certified Courses By International Bodies
- Communication and Public Relations Training Courses
- Crisis Management and Business Continuity Training Courses
- Data Analytics Training and Data Science Courses
- Digital Government & Public Service Training Courses
- Education and Learning Development Training Courses
- Environment & Sustainability Training Courses
- Facilities and Real Estate Training Courses
- Finance and Accounting Training Courses
- Governance, Risk and Compliance Training Courses
- Healthcare Management Training Courses
- Heritage Conservation and Museum Management Training Courses
- Hospitality and Tourism Training Courses
- Human Resources Training and Development Courses
- IT Security Training & IT Training Courses
- Leadership and Management Training Courses
- Legal Training, Procurement and Contracting Courses
- Maintenance Training and Engineering Training Courses
- Marketing, Customer Relations, and Sales Courses
- NGO, Humanitarian and Development Management Training Courses
- Occupational Health, Safety and Security Training Courses
- Oil & Gas Training and Other Technical Courses
- Personal & Self-Development Training Courses

AGILE LEADERS
Training Center

Training Course Categories

- Quality and Operations Management Training Courses
- Secretarial and Administration Training Courses
- Shipping, Maritime and Ports Training Courses

AGILE LEADERS
Training Center

Training Cities

Abu Dhabi UAE	**Accra** Ghana	**Addis Ababa** Ethiopia
Amman Jordan	**Amsterdam** Netherlands	**Athens** Greece
Baku Azerbaijan	**Bali** Indonesia	**Bangkok** Thailand
Barcelona Spain	**Berlin** Germany	**Cairo** Egypt
Cape town South Africa	**Casablanca** Morocco	**Chicago** USA
Doha Qatar	**Dubai** UAE	**Frankfurt** Germany
Geneva Switzerland	**Istanbul** Turkey	**Jakarta** Indonesia
Johannesburg South Africa	**Kuala Lumpur** Malaysia	**Kuwait** Kuwait
Lagos Nigeria	**Langkawi** Malaysia	**Lisbon** Portugal
London UK	**Madrid** Spain	**Manama** Bahrain
Marbella Spain	**Milan** Italy	**Montreux** Switzerland
Munich Germany	**Muscat** Oman	**Nairobi** Kenya

AGILE LEADERS
Training Center

Training Cities

New York USA	**Nice** France	**Paris** France
Phuket Thailand	**Port Louis** Mauritius	**Porto** Portugal
Prague Czech Republic	**Rome** Italy	**San Diego** USA
Seoul South Korea	**Sharm El-Sheikh** Egypt	**Singapore** Singapore
Tashkent Uzbekistan	**Tbilisi** Georgia	**Tokyo** Japan
Toronto Canada	**Trabzon** Turkey	**Vienna** Austria
Zanzibar Tanzania	**Zoom** Online Training	**Zurich** Switzerland