Airport Engineering Project Management Training Course

Professional Development Training Course Outline

Category	Aviation and Airport Management	**Duration**	5 Days
Base Fee	$1,500 USD	**Delivery Mode**	Online / On-site Hybrid

Course Introduction

Airport Engineering Project Management is a strategic discipline that integrates airport infrastructure planning, aviation engineering, construction management, project governance, sustainability, digital transformation, risk management, stakeholder engagement, and regulatory compliance to deliver safe, resilient, and future-ready airport facilities. As global aviation continues to expand, airport authorities and engineering professionals must successfully manage complex capital projects involving terminals, runways, taxiways, airfield lighting, utilities, cargo facilities, and smart airport technologies while maintaining operational continuity and international aviation standards.

Airport Engineering Project Management Training Course equips participants with advanced knowledge, practical tools, and internationally recognized best practices for planning, executing, monitoring, and closing airport engineering projects. Participants will explore project lifecycle management, contract administration, BIM integration, quality assurance, environmental sustainability, cost control, scheduling techniques, procurement strategies, and innovation-driven infrastructure development through practical exercises and global airport case studies that improve project delivery performance and organizational competitiveness.

Programme Curriculum

Airport Engineering Project Management Training Course

Introduction

Airport Engineering Project Management is a strategic discipline that integrates airport infrastructure planning, aviation engineering, construction management, project governance, sustainability, digital transformation, risk management, stakeholder engagement, and regulatory compliance to deliver safe, resilient, and future-ready airport facilities. As global aviation continues to expand, airport authorities and engineering professionals must

successfully manage complex capital projects involving terminals, runways, taxiways, airfield lighting, utilities, cargo facilities, and smart airport technologies while maintaining operational continuity and international aviation standards.

Airport Engineering Project Management Training Course equips participants with advanced knowledge, practical tools, and internationally recognized best practices for planning, executing, monitoring, and closing airport engineering projects. Participants will explore project lifecycle management, contract administration, BIM integration, quality assurance, environmental sustainability, cost control, scheduling techniques, procurement strategies, and innovation-driven infrastructure development through practical exercises and global airport case studies that improve project delivery performance and organizational competitiveness.

Course Objectives

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

1. Apply modern airport engineering project management methodologies.
2. Develop strategic airport infrastructure project plans.
3. Strengthen project governance and leadership capabilities.
4. Improve cost estimation and financial management.
5. Implement advanced scheduling and resource optimization.
6. Integrate BIM and digital engineering solutions.
7. Manage project risks using proactive mitigation strategies.
8. Enhance quality assurance and construction supervision.
9. Apply international aviation safety and regulatory standards.
10. Strengthen procurement and contract management practices.
11. Promote sustainable and climate-resilient airport development.
12. Improve stakeholder communication and collaboration.
13. Deliver airport projects efficiently within scope, budget, and schedule.

Organizational Benefits

- Improved project planning and execution efficiency.
- Enhanced infrastructure quality and reliability.
- Reduced project delays and cost overruns.
- Stronger regulatory compliance.
- Better stakeholder coordination.
- Increased operational resilience.
- Improved engineering risk management.
- Enhanced sustainability performance.
- Optimized capital investment returns.
- Strengthened organizational project management capability.

Target Audience

- Airport Engineers
- Civil Engineers
- Project Managers

- Airport Authority Officials
- Construction Managers
- Engineering Consultants
- Infrastructure Development Professionals
- Aviation Regulatory Personnel

Course Duration: 5 days

Course Modules

Module 1: Airport Engineering Project Fundamentals

- Airport infrastructure planning principles.
- Project lifecycle management.
- Engineering feasibility studies.
- Airport master planning integration.
- International aviation engineering standards.
- Case Study: Heathrow Airport Terminal 5 Project (United Kingdom).

Module 2: Project Planning and Scheduling

- Project scope definition.
- Work Breakdown Structure (WBS).
- Critical Path Method (CPM).
- Resource allocation strategies.
- Project scheduling software applications.
- Case Study: Istanbul Airport Construction (Türkiye).

Module 3: Cost Estimation and Financial Management

- Engineering cost estimation.
- Budget planning techniques.
- Cost monitoring and reporting.
- Value engineering practices.
- Financial risk management.
- Case Study: Denver International Airport Expansion (USA).

Module 4: Procurement and Contract Management

- Procurement planning.
- Tender evaluation.
- Contract administration.
- Contractor performance management.

- Claims and dispute resolution.
- Case Study: Doha Hamad International Airport Expansion (Qatar).

Module 5: Construction Quality and Risk Management

- Construction quality assurance.
- Engineering inspections.
- Safety management systems.
- Risk identification and mitigation.
- Compliance monitoring.
- Case Study: Changi Airport Terminal 4 Development (Singapore).

Module 6: Sustainable Airport Engineering

- Green airport infrastructure.
- Climate resilience strategies.
- Energy-efficient engineering.
- Environmental impact management.
- Sustainable construction practices.
- Case Study: Oslo Airport Sustainability Program (Norway).

Module 7: Digital Engineering and Smart Airport Technologies

- Building Information Modeling (BIM).
- Digital project management tools.
- Smart airport infrastructure.
- GIS integration.
- Engineering data analytics.
- Case Study: Beijing Daxing International Airport (China).

Module 8: Project Close-Out and Performance Evaluation

- Project commissioning.
- Performance measurement.
- Lessons learned documentation.
- Asset handover procedures.
- Continuous improvement planning.
- Case Study: Hong Kong International Airport Three-Runway System (Hong Kong).

Training Methodology

- Interactive expert-led presentations.
- Practical engineering workshops.
- Airport engineering simulations.
- Group discussions and collaborative learning.
- Global airport case study analysis.
- Project planning exercises.
- Risk assessment activities.
- BIM and digital engineering demonstrations.
- Team assignments and presentations.
- Action planning and performance evaluation.

Register as a group from 3 participants for a Discount

Send us an email: info@fineskilltrainingcenter.org or call *+254769199797*

Certification

Upon successful completion of this training, participants will be issued with a globally- recognized certificate.

Tailor-Made Course

We also offer tailor-made courses based on your needs.

Key Notes

a. The participant must be conversant with English.

b. Upon completion of training the participant will be issued with an Authorized Training Certificate

c. Course duration is flexible and the contents can be modified to fit any number of days.

d. The course fee includes facilitation training materials, 2 coffee breaks, buffet lunch and A Certificate upon successful completion of Training.

e. One-year post-training support Consultation and Coaching provided after the course.
f. Payment should be done at least a week before commence of the training, to Fineskill Training Center account, as indicated in the invoice so as to enable us prepare better for you.

Upcoming Scheduled Sessions

Start Date	End Date	Location	Price
23 Nov 2026	27 Nov 2026	Online	$1,000

Start Date	End Date	Location	Price
23 Nov 2026	27 Nov 2026	Physical	$1,500
23 Nov 2026	27 Nov 2026	Physical	$3,000
23 Nov 2026	27 Nov 2026	Physical	$3,000
23 Nov 2026	27 Nov 2026	Physical	$6,000
23 Nov 2026	27 Nov 2026	Physical	$4,500
23 Nov 2026	27 Nov 2026	Physical	$6,000
23 Nov 2026	27 Nov 2026	Physical	$6,000

Ready to enroll or request a customized program? Book online or contact us:

Register Online Now

Email: info@fineskilltrainingcenter.com | Website: www.fineskilltrainingcenter.com