Advanced Principles of Airports Ground Handling and Logistics Training Course



19 - 23 Oct 2026

Madrid

5900 € (Per Person)

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Course Introduction / Overview:

Airport ground handling and logistics are the heartbeat of modern aviation, ensuring seamless movement of passengers, baggage, and cargo. This training course offers a deep dive into the complex world of ground operations, from the moment an aircraft lands to its departure. We will explore everything from ramp services and baggage handling to cargo logistics and supply chain management. The course is designed to provide participants with the knowledge to improve operational efficiency, safety, and communication within a busy airport environment. We will cover best practices in asset management, resource allocation, and implementing new technologies to streamline operations. The academic field of operations management provides a strong foundation for this course, and we will be referencing the work of authors like Jay Heizer and Barry Render, whose book Operations Management offers a solid framework for optimizing complex logistical processes. Our goal is to equip you with the skills to lead and innovate in this fast-paced sector. At BIG BEN Training Center, we understand that effective ground handling is essential for maintaining on-time performance and a positive passenger experience, and this course provides a comprehensive roadmap for achieving operational excellence. You'll learn how to analyze and improve every step of the ground handling process, ensuring a competitive advantage for your organization.

Target Audience / This training course is suitable for:

- Airport ground managers and supervisors.
- Logistics and supply chain professionals in the aviation sector.
- Airline operations managers.
- Cargo and freight forwarders.
- Ramp agents and baggage handling staff leaders.
- Safety and quality control officers.
- Airport authority personnel responsible for ground operations.

Target Sectors and Industries:

- Airports and aviation authorities.
- Airlines and ground service providers.
- Cargo and logistics companies.
- Aviation security agencies.
- Aircraft maintenance and repair organizations.
- Government agencies and regulatory bodies.
- Consulting firms specializing in airport operations.

Target Organizations Departments:

- Ground Operations Department.
- Logistics and Cargo Department.
- Ramp Services Department.
- Baggage Handling Department.
- Safety and Quality Department.
- Operations Control Center.
- Commercial and Business Development Department.

Course Offerings:

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

- Optimize ground handling processes for efficiency and on-time performance.
- Implement safety protocols and risk management strategies for ramp operations.
- Manage baggage handling systems and resolve common logistical challenges.
- Coordinate effectively with airlines, air traffic control, and other airport stakeholders.
- I have mastered the principles of air cargo logistics and supply chain management.
- Utilize technology and automation to improve ground handling services.
- Develop robust plans for handling irregular operations, such as delays or diversions.
- Enhance communication and teamwork among ground staff.

Course Methodology:

Our training methodology is designed to be highly practical and engaging, blending classroom learning with hands-on exercises and simulations. We will use case studies of real-world ground handling scenarios, from managing a tight aircraft turnaround to responding to a cargo security incident. These case studies will encourage group discussions and problem-solving, allowing participants to apply theoretical concepts to complex situations. We will also incorporate interactive workshops where participants can work together on challenges like optimizing resource allocation during peak hours or designing a new process for baggage delivery. Our instructors are seasoned industry experts who bring years of experience directly from the field. They will share valuable insights and best practices to help you navigate the daily challenges of airport operations. At BIG BEN Training Center, our goal is to create a dynamic learning environment that fosters collaboration and provides you with the practical skills needed to excel. Through this approach, you will not only gain a deep understanding of the material but also develop the confidence to lead and manage ground handling teams effectively.

Course Agenda (Course Units):

Unit One: Fundamentals of Airport Ground Handling Operations.

- Introduction to the ground handling ecosystem.
- Key roles and responsibilities on the ramp.
- Aircraft turnaround process and key performance indicators.
- Effective communication and coordination.
- Safety protocols and risk management.
- Understanding regulations and standards.
- The economic impact of ground handling efficiency.

Unit Two: Passenger and Baggage Handling.

- Passenger boarding and deplaning procedures.
- Baggage sorting and loading systems.
- Managing baggage irregularities and claims.
- Customer service excellence on the ground.
- The use of technology in baggage tracking.
- Reducing turnaround time for passenger flights.
- The impact of a passenger's experience on the airline's reputation.

Unit Three: Air Cargo and Logistics Management.

- The air cargo supply chain from origin to destination.
- Handling and securing special cargo.
- Logistics and documentation for air freight.
- Warehouse management and inventory control.
- Customs procedures and regulatory compliance.
- The role of technology in cargo logistics.
- Case study: Managing perishable goods shipment.

Unit Four: Ramp Operations and Aircraft Servicing.

- Aircraft marshaling and towing.
- Aircraft fueling and de-icing procedures.
- Load control and weight and balance calculations.
- Ground support equipment (GSE) management.
- Maintenance and servicing of aircraft on the ground.
- Safety measures for working on the ramp.
- Emergency response procedures.

Unit Five: Technology, Security, and Future Trends.

- Automation and robotics in ground handling.
- Data analytics for operational improvement.
- Security protocols for ramp and cargo.
- Threat assessment and risk mitigation.
- The role of sustainability in ground operations.
- Emerging technologies like drones and autonomous vehicles.
- Preparing the ground handling workforce for the future.

FAQ:

Qualifications required for registering to this course?

There are no requirements.

How long is each daily session, and what is the total number of training hours for the course?

This training course spans five days, with daily sessions ranging between 4 to 5 hours, including breaks and interactive activities, bringing the total duration to 20 - 25 training hours.

Something to think about:

How can the integration of advanced logistics and supply chain principles, beyond traditional ground handling practices, create a more resilient and competitive airport ecosystem?

What unique qualities does this course offer compared to other courses?

This training course provides a specialized and comprehensive look at airport ground handling and logistics that goes far beyond a basic overview. The curriculum is specifically designed to address the unique operational challenges of a complex airport environment. We place a strong emphasis on the practical application of concepts through case studies, simulations, and interactive exercises, allowing participants to immediately apply their new knowledge. The course is distinguished by its focus on emerging technologies and future trends, such as automation, data analytics, and sustainable practices, which are becoming increasingly important in the industry. We also dedicate significant time to the crucial areas of safety and security, ensuring that participants are not only efficient but also compliant and risk aware. At BIG BEN Training Center, we believe in a holistic approach to training. This course connects the dots between different operational functions, showing how effective ground handling is not an isolated task but a critical component of overall airport success and passenger satisfaction. It offers insights and practical tools that are directly relevant to professionals looking to advance their careers in this vital sector.