LAPT

LONDON ACADEMY OF PROFESSIONAL TRAINING

CERTIFICATE

Certificate in Ground Handling Operations

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LAPT — London Academy of Professional Training

Address 85 Great Portland Street, W1W 7LT, London, United Kingdom

Email info@lapt.org

Telephone +44 7513 283044

Web lapt.org

Reference AVI-C03 • Aviation Management

UKPRN 10067351 • Registered in England and Wales, company 4984798

4	54	312	400	60%	Lifetime
SUBJECTS	CHAPTERS	CLASSES	TOTAL MARKS	PASS MARK	VALIDITY

AT A GLANCE

REFERENCE	**AVI-C03**
AWARD	**Certificate**
ASSESSMENT	**400 marks — 240 to pass (60%)**
PREREQUISITES	**None**
VALIDITY	**Lifetime**
AWARDING BODY	**LAPT — London Academy of Professional Training**

CURRICULUM

1 Ground Handling and Ramp Operations

9 chapters · 52 classes **100 marks**

- **1 Overview of Airport Ground Handling Operations** — 5 classes
  - 1.1 Understanding the Role of Ground Handling in Airports
  - 1.2 Identifying Key Ground Handling Services and Functions
  - 1.3 Exploring Safety and Security Measures in Ground Handling
  - 1.4 Examining the Equipment Used in Ground Handling Operations
  - 1.5 Analyzing the Impact of Ground Handling on Overall Airport Efficiency
- **2 Aircraft Servicing Procedures** — 5 classes
  - 2.1 Understanding Aircraft Servicing Essentials
  - 2.2 Identifying and Using Servicing Equipment
  - 2.3 Executing Safe Fueling Procedures
  - 2.4 Conducting Routine Maintenance Checks
  - 2.5 Ensuring Compliance with Servicing Protocols
- **3 Baggage and Cargo Handling Systems** — 5 classes
  - 3.1 Understanding Baggage Handling Systems
  - 3.2 Exploring Cargo Handling Operations
  - 3.3 Identifying Equipment in Baggage and Cargo Processing
  - 3.4 Analyzing Baggage and Cargo Flow Procedures
  - 3.5 Applying Safety and Efficiency Best Practices in Handling
- **4 Safety and Regulatory Compliance in Ground Handling** — 5 classes
  - 4.1 Understanding Safety Regulations in Ground Handling
  - 4.2 Identifying Common Safety Hazards in Ground Handling Operations
  - 4.3 Implementing Safety Protocols for Ground Handling Crew
  - 4.4 Navigating Regulatory Compliance in Ground Handling
  - 4.5 Applying Industry Standards to Ensure Safety and Compliance
- **1 Fundamentals of Advanced Ground Operations Protocols** — 6 classes
  - 1.1 Understanding the Role of Ground Station Management
  - 1.2 Analyzing Key Protocols in Ground Operations
  - 1.3 Implementing Safety Measures in Ground Operations
  - 1.4 Optimizing Communication Channels in Complex Systems
  - 1.5 Evaluating Efficiency in Ground Operation Protocols
  - 1.6 Integrating Advanced Technologies into Ground Protocols
- **2 Integration of Safety and Compliance Protocols** — 6 classes
  - 2.1 Understanding Safety Standards and Compliance Frameworks
  - 2.2 Identifying Key Safety Risks in Ground Operations
  - 2.3 Analyzing the Impact of Regulatory Compliance on Operations
  - 2.4 Developing Safety Checklist and Protocols for Ground Staff
  - 2.5 Implementing Compliance Monitoring Systems
  - 2.6 Evaluating and Improving Safety and Compliance Practices
- **3 Advanced Resource Allocation and Management** — 6 classes
  - 3.1 Understanding Resource Allocation Principles
  - 3.2 Analyzing Ground Station Resource Needs
  - 3.3 Efficiently Allocating Equipment and Personnel
  - 3.4 Implementing Resource Management Strategies
  - 3.5 Monitoring and Evaluating Resource Utilization
  - 3.6 Optimizing Resource Allocation for Peak Efficiency
- **4 Coordination with Air Traffic Control and Stakeholders** — 8 classes
  - 4.1 Understanding Air Traffic Control Systems and Their Role
  - 4.2 Identifying Key Stakeholders in Ground Operations
  - 4.3 Analyzing Communication Protocols with Air Traffic Control
  - 4.4 Developing Effective Coordination Strategies
  - 4.5 Implementing Conflict Resolution Techniques with Stakeholders
  - 4.6 Assessing Coordination Outcomes for Continuous Improvement
  - 4.7 Controlling Ground Operations Costs
  - 4.8 Budgeting and Cost Monitoring for Ground Stations
- **5 Crisis Management and Contingency Planning in Ground Operations** — 6 classes
  - 5.1 Understanding Crisis Management in Ground Operations
  - 5.2 Identifying Potential Crises in Ground Operations
  - 5.3 Developing Effective Contingency Plans
  - 5.4 Implementing Crisis Response Protocols
  - 5.5 Evaluating Crisis Management Strategies
  - 5.6 Enhancing Leadership in Crisis Situations

2 Ramp Safety, Marshalling and Airside Hazards

24 chapters · 132 classes **100 marks**

- **1 Understanding Ramp Operations and Hazards** — 10 classes
  - 1.1 Exploring the Basics of Ramp Operations
  - 1.2 Identifying Common Hazards on the Ramp
  - 1.3 Analyzing Safety Protocols for Ramp Activities
  - 1.4 Applying Hazard Mitigation Techniques in Ramp Operations
  - 1.5 What Is Foreign Object Debris
  - 1.6 Preventing and Reporting FOD on the Ramp
  - 1.7 Airside Driving Rules and Permits
  - 1.8 Safe Vehicle Operation Around Aircraft
  - 1.9 Personal Protective Equipment for Ramp Work
  - 1.10 Correct Use and Care of PPE
- **2 Safety Protocols and Procedures** — 4 classes
  - 2.1 Understanding Ramp Safety Essentials
  - 2.2 Identifying Common Ramp Hazards
  - 2.3 Implementing Safety Protocols Effectively
  - 2.4 Practicing Procedures in Real Scenarios
- **3 Effective Communication and Marshalling Techniques** — 4 classes
  - 3.1 Mastering Basic Ramp Communication Protocols
  - 3.2 Interpreting and Using Hand Signals Effectively
  - 3.3 Recognizing and Responding to Non-Verbal Cues in Marshalling
  - 3.4 Coordinating with Team Members for Safe Ramp Operations
- **1 Understanding Marshalling Signals and Communication** — 4 classes
  - 1.1 Recognizing Standard Marshalling Signals
  - 1.2 Interpreting Signal Variations in Different Contexts
  - 1.3 Communicating Effectively with Pilots and Ground Crew
  - 1.4 Applying Marshalling Techniques in Simulated Scenarios
- **2 Practical Application of Marshalling Procedures** — 4 classes
  - 2.1 Understanding Basic Hand Signals and Their Importance
  - 2.2 Demonstrating Hand Signal Techniques in Controlled Environments
  - 2.3 Practicing Marshalling Procedures with Realistic Scenarios
  - 2.4 Evaluating and Improving Marshalling Technique Effectiveness
- **3 Addressing Complex Scenarios and Emergency Situations** — 4 classes
  - 3.1 Identifying and Analyzing Complex Marshalling Scenarios
  - 3.2 Implementing Safety Protocols in Emergency Situations
  - 3.3 Adapting Marshalling Techniques for Unique Challenges
  - 3.4 Evaluating Responses to Emergency Situations
- **1 Introduction to Safety Hazards in Aviation Ground Operations** — 4 classes
  - 1.1 Understanding Aviation Ground Operations Hazards
  - 1.2 Identifying Common Safety Hazards on the Ramp
  - 1.3 Analyzing Potential Risks in Ground Operations
  - 1.4 Implementing Safety Practices to Mitigate Hazards
- **2 Risk Assessment and Management Strategies** — 4 classes
  - 2.1 Understanding Risk: Identifying Hazards and Evaluating Their Impact
  - 2.2 Prioritising Hazards: Assessing Severity and Likelihood in Risk Analysis
  - 2.3 Implementing Control Measures: Strategies to Mitigate Identified Risks
  - 2.4 Reviewing and Refining: Continuous Improvement in Risk Management Practices
- **3 Implementing and Monitoring Safety Measures** — 4 classes
  - 3.1 Understanding Safety Measures in Ramp Operations
  - 3.2 Identifying Potential Hazards and Their Impacts
  - 3.3 Implementing Effective Safety Controls
  - 3.4 Monitoring and Evaluating Safety Performance
- **1 Understanding Ramp Operation Hazards and Risks** — 6 classes
  - 1.1 Identifying Common Ramp Hazards
  - 1.2 Analyzing Risk Factors in Ramp Operations
  - 1.3 Exploring Equipment Safety Measures
  - 1.4 Understanding Human Factors and Safety
  - 1.5 Implementing Hazard Mitigation Strategies
  - 1.6 Applying Risk Assessment Techniques
- **2 Personal and Equipment Safety in Ramp Environments** — 6 classes
  - 2.1 Understanding Personal Protective Equipment (PPE) in Ramp
- **4 Emergency Preparedness and Response on the Ramp** — 6 classes
  - 4.1 Understanding Ramp Emergency Protocols
  - 4.2 Identifying Common Ramp Emergencies
  - 4.3 Implementing Emergency Communication Methods
  - 4.4 Coordinating with Emergency Response Teams
  - 4.5 Conducting Ramp Emergency Drills
  - 4.6 Evaluating and Improving Response Effectiveness
- **5 Regulatory Compliance and Safety Auditing in Ramp Operations** — 6 classes
  - 5.1 Understanding Regulatory Frameworks in Ramp Operations
  - 5.2 Identifying Key Safety Standards in Ramp Operations
  - 5.3 Analyzing the Role of Regulatory Bodies in Safety Compliance
  - 5.4 Evaluating Common Compliance Challenges in Ramp Operations
  - 5.5 Conducting Essential Safety Audits on the Ramp
  - 5.6 Implementing Corrective Actions for Enhanced Ramp Safety
- **1 Introduction to Airside Hazards** — 6 classes
  - 1.1 Understanding Airside Operations
  - 1.2 Types of Airside Hazards
  - 1.3 Identifying Potential Risks
  - 1.4 Impact of Hazards on Operations
  - 1.5 Emergency Response Protocols
  - 1.6 Safety Culture in Aviation
- **2 Risk Assessment Techniques** — 6 classes
  - 2.1 Qualitative Risk Assessment
  - 2.2 Quantitative Risk Analysis
  - 2.3 Risk Matrix Development
  - 2.4 Prioritizing Risks Effectively
  - 2.5 Tools for Risk Assessment
  - 2.6 Continuous Risk Monitoring
- **3 Implementing Risk Minimisation Strategies** — 6 classes
  - 3.1 Developing Mitigation Plans
  - 3.2 Training Staff on Safety Protocols
  - 3.3 Utilizing Technology for Safety
  - 3.4 Monitoring Implementation Effectiveness
  - 3.5 Feedback Mechanisms for Improvement
  - 3.6 Crisis Management Strategies
- **4 Safety Compliance Regulations** — 6 classes
  - 4.1 Understanding Regulatory Framework
  - 4.2 Key Safety Regulations Overview
  - 4.3 Compliance Auditing Processes
  - 4.4 Reporting Non-Compliance Issues
  - 4.5 Legal Implications of Non-Compliance
  - 4.6 Staying Updated on Regulations
- **5 Case Studies in Airside Safety** — 6 classes
  - 5.1 Analyzing Past Incidents
  - 5.2 Lessons Learned from Failures
  - 5.3 Successful Safety Implementations
  - 5.4 Comparative Analysis of Cases
  - 5.5 Developing Best Practices
  - 5.6 Future Trends in Airside Safety
- **1 Overview of Safety Systems** — 6 classes
  - 1.1 Introduction to Safety Systems
  - 1.2 Key Components of Safety Systems
  - 1.3 Regulatory Framework Overview
  - 1.4 Safety Culture in Aviation
  - 1.5 Risk Assessment Fundamentals
  - 1.6 Safety Systems Integration
- **2 Developing Safety Procedures** — 6 classes
  - 2.1 Identifying Safety Needs
  - 2.2 Creating Standard Operating Procedures
  - 2.3 Incorporating Feedback Mechanisms
  - 2.4 Training for Safety Procedures
  - 2.5 Documenting Safety Procedures
  - 2.6 Reviewing and Updating Procedures
- **3 Monitoring Compliance** — 6 classes

3 Aircraft Turnaround and Station Management

12 chapters · 74 classes **100 marks**

- **1 Understanding Turnaround Processes in Aviation** — 8 classes
  - 1.1 Exploring the Basics of Turnaround Processes
  - 1.2 Identifying Key Roles in Turnaround Management
  - 1.3 Analyzing Components of Effective Turnarounds
  - 1.4 Recognizing Safety Protocols in Turnaround Operations
  - 1.5 Evaluating Turnaround Efficiency Metrics
  - 1.6 Implementing Best Practices for Turnaround Optimization
  - 1.7 Supervising Aircraft Loading Operations
  - 1.8 Checking Load Plans and Securing Cargo
- **2 Coordination and Communication in Turnaround Activities** — 6 classes
  - 2.1 Understanding the Role of Communication in Turnaround Management
  - 2.2 Identifying Key Stakeholders and Their Responsibilities
  - 2.3 Coordinating Resources for Effective Turnaround
  - 2.4 Implementing Communication Strategies in Turnaround Activities
  - 2.5 Managing Time Constraints and Prioritizing Tasks
  - 2.6 Applying Best Practices for Efficient Turnaround Coordination
- **3 Safety and Regulatory Compliance in Turnaround Management** — 6 classes
  - 3.1 Understanding Turnaround Safety Protocols
  - 3.2 Identifying Key Regulatory Frameworks
  - 3.3 Evaluating Compliance Requirements
  - 3.4 Implementing Safety Procedures Effectively
  - 3.5 Monitoring Compliance During Turnarounds
  - 3.6 Responding to Safety and Compliance Incidents
- **4 Resource Allocation and Time Management in Turnarounds** — 6 classes
  - 4.1 Understanding Resource Needs and Prioritization
  - 4.2 Identifying Key Personnel for Effective Turnaround
  - 4.3 Implementing a Resource Allocation Plan
  - 4.4 Developing Time Management Strategies for Turnarounds
  - 4.5 Monitoring and Adjusting Resource Utilization
  - 4.6 Evaluating Time Management Success Post-Turnaround
- **5 Advanced Challenges and Problem-Solving in Turnaround Management** — 6 classes
  - 5.1 Recognizing Common Challenges in Turnaround Management
  - 5.2 Analyzing Root Causes of Turnaround Delays
  - 5.3 Developing Strategies for Effective Time Management
  - 5.4 Implementing Collaborative Problem-Solving Techniques
  - 5.5 Utilizing Technology for Turnaround Optimization
  - 5.6 Evaluating Case Studies in Turnaround Management
- **6 Load Control: Weight and Balance and the Load Sheet** — 6 classes
  - 6.1 Fundamentals of Aircraft Weight and Balance
  - 6.2 Calculating Aircraft Weights and Load Distribution
  - 6.3 Understanding the Centre of Gravity Limits
  - 6.4 Preparing and Checking the Load Sheet
  - 6.5 Last-Minute Changes and Load Control Supervision
  - 6.6 Load Control Regulations and Compliance
- **7 Dangerous Goods Loading and the Pilot Notification (NOTOC)** — 6 classes
  - 7.1 Dangerous Goods Loading Principles for Supervisors
  - 7.2 Understanding the Notification to Captain
  - 7.3 Preparing and Checking NOTOC Details
  - 7.4 Loading Dangerous Goods According to the Plan
  - 7.5 Handling NOTOC Discrepancies and Incidents
  - 7.6 Emergency Procedures for Dangerous Goods
- **1 Turnaround Process Overview** — 6 classes
  - 1.1 Understanding Turnaround Fundamentals
  - 1.2 Key Stakeholders in Turnaround
  - 1.3 Turnaround Phases Explained
  - 1.4 Importance of Coordination
  - 1.5 Challenges in Turnaround Operations
  - 1.6 Best Practices for Efficiency
- **2 Timely Departures and Arrivals** — 6 classes
  - 2.1 Strategies for On-Time Performance
  - 2.2 Impact of Delays on Operations
  - 2.3 Effective Scheduling Techniques
  - 2.4 Real-Time Monitoring Systems
  - 2.5 Communication During Departures
  - 2.6 Analyzing Arrival Patterns
- **3 Resource Allocation for Turnaround** — 6 classes
  - 3.1 Identifying Resource Needs
  - 3.2 Optimizing Resource Distribution
  - 3.3 Tools for Resource Management
  - 3.4 Balancing Resources and Demand
  - 3.5 Cost-Effective Resource Planning
  - 3.6 Evaluating Resource Utilization
- **4 Performance Metrics for Turnaround** — 6 classes
  - 4.1 Key Performance Indicators Overview
  - 4.2 Setting Performance Benchmarks
  - 4.3 Data Collection Methods
  - 4.4 Analyzing Performance Data
  - 4.5 Reporting Performance Results
  - 4.6 Continuous Monitoring of Metrics
- **5 Continuous Improvement in Turnaround** — 6 classes
  - 5.1 Principles of Continuous Improvement
  - 5.2 Feedback Loops in Operations
  - 5.3 Implementing Change Initiatives
  - 5.4 Employee Involvement in Improvements
  - 5.5 Measuring Improvement Impact
  - 5.6 Sustaining Continuous Improvement

4 Ground Equipment and Vehicle Operations

9 chapters · 54 classes **100 marks**

- **1 Understanding Ground Handling Equipment** — 9 classes
  - 1.1 Identifying Key Ground Handling Equipment
  - 1.2 Understanding the Functionality of Loading Equipment
  - 1.3 Exploring Safety Features of Ground Vehicles
  - 1.4 Operating Baggage Conveyors Safely
  - 1.5 Performing Pre-Operation Checks on Aircraft Towing Tractors
  - 1.6 Aircraft Marshalling Hand Signals Explained
  - 1.7 Marshalling Procedures and Safe Positioning
  - 1.8 Stages of an Aircraft Turnaround
  - 1.9 Coordinating Ramp Tasks During Turnaround
- **2 Safety Protocols and Best Practices** — 5 classes
  - 2.1 Understanding Ground Handling Safety Protocols
  - 2.2 Identifying and Mitigating Equipment Hazards
  - 2.3 Implementing Personal Protective Measures
  - 2.4 Conducting Equipment Safety Inspections
  - 2.5 Applying Best Practices in Equipment Operation
- **3 Operational Procedures for Equipment Use** — 5 classes
  - 3.1 Understanding Equipment Checkout Protocols
  - 3.2 Identifying and Inspecting Equipment
  - 3.3 Operating Equipment Safely and Effectively
  - 3.4 Managing Equipment Malfunctions
  - 3.5 Conducting Post-Operation Procedures
- **4 Maintenance and Troubleshooting Techniques** — 5 classes
  - 4.1 Understanding Ground Handling Equipment Systems
  - 4.2 Identifying Common Maintenance Issues
  - 4.3 Performing Routine Equipment Inspections
  - 4.4 Implementing Basic Troubleshooting Steps
  - 4.5 Evaluating and Reporting Maintenance Solutions
- **1 Safe Movement Protocols** — 6 classes
  - 1.1 Understanding Movement Zones
  - 1.2 Vehicle Navigation Techniques
  - 1.3 Personnel Safety Measures
  - 1.4 Ground Markings and Signage
  - 1.5 Communication Signals for Movement
  - 1.6 Monitoring Movement Compliance
- **2 Coordination Techniques for Operations** — 6 classes
  - 2.1 Team Coordination Strategies
  - 2.2 Role Assignment in Operations
  - 2.3 Effective Briefing Practices
  - 2.4 Interdepartmental Collaboration
  - 2.5 Utilizing Technology for Coordination
  - 2.6 Feedback Mechanisms in Coordination
- **3 Incident Prevention Strategies** — 6 classes
  - 3.1 Risk Assessment Techniques
  - 3.2 Identifying Potential Hazards
  - 3.3 Implementing Safety Protocols
  - 3.4 Training for Incident Awareness
  - 3.5 Monitoring and Reporting Incidents
  - 3.6 Continuous Improvement Strategies
- **4 Communication in Ground Operations** — 6 classes
  - 4.1 Effective Communication Skills
  - 4.2 Using Communication Tools
  - 4.3 Crisis Communication Techniques
  - 4.4 Maintaining Clear Channels
  - 4.5 Cultural Sensitivity in Communication
  - 4.6 Feedback and Clarification Processes
- **5 Emergency Response Planning** — 6 classes
  - 5.1 Developing Emergency Plans
  - 5.2 Roles in Emergency Situations
  - 5.3 Conducting Drills and Simulations
  - 5.4 Resource Allocation in Emergencies
  - 5.5 Post-Incident Review Processes
  - 5.6 Coordination with Emergency Services