

Aviation Security Management (IATA/ICAO standards) Training Course

Professional Development Training Course Outline

Category	Defense and Security	Duration	10 Days
Base Fee	\$3,000 USD	Delivery Mode	Online / On-site Hybrid

Course Introduction

Aviation security has become a critical global priority as threats evolve rapidly and air transport systems grow in complexity. With increasing passenger volumes, sophisticated criminal networks, cyber vulnerabilities, and heightened international regulatory expectations, aviation stakeholders must strengthen their capacity to safeguard airports, aircraft, passengers, cargo, and critical aviation infrastructure. Aviation Security Management (IATA/ICAO Standards) Training Course provides comprehensive knowledge on risk-based security frameworks, IATA and ICAO standards, modern surveillance tools, and operational procedures designed to protect civil aviation from unlawful interference.

Participants will gain practical skills in threat assessment, airport screening operations, cargo security, crisis response, intelligence-led decision-making, and compliance monitoring. Through scenario-based training, real aviation case studies, and regulatory alignment exercises, the course prepares aviation, security, and regulatory personnel to build resilient systems, enhance airport preparedness, mitigate vulnerabilities, and ensure secure, efficient air transport operations that meet global aviation safety and security expectations.

Programme Curriculum

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Course Objectives

1. Understand global aviation security frameworks under ICAO Annex 17 and IATA operational standards.
2. Identify emerging aviation threats affecting airports, airlines, and cargo operations.
3. Implement risk-based aviation security management systems across operations.
4. Strengthen airport access control, perimeter protection, and surveillance measures.
5. Apply advanced passenger screening, profiling, and detection techniques.
6. Develop aviation cybersecurity awareness and protective strategies.
7. Implement cargo, mail, and supply chain security protocols.
8. Conduct security assessments, audits, and compliance inspections.
9. Improve crisis preparedness, emergency response, and incident management.
10. Integrate intelligence, reporting, and threat analysis into security decision-making.
11. Enhance cooperation with law enforcement, aviation authorities, and international bodies.
12. Build organizational capacity through staff training and continuous improvement.
13. Strengthen overall airport security culture and operational accountability.

Organizational Benefits

- Strengthened compliance with ICAO and IATA aviation security standards
- Reduced exposure to operational, legal, and safety risks
- Improved terminal, cargo, and airside security processes
- Enhanced response capability during security incidents
- Higher levels of passenger safety and confidence
- More effective coordination with aviation and security stakeholders
- Increased operational efficiency through streamlined security procedures
- Stronger intelligence gathering and threat detection capacity
- Reduced insurance risk and regulatory penalties
- Improved organizational reputation for safety and compliance

Target Audiences

- Airport security managers and aviation operations officers
- Civil aviation authority personnel
- Airline security and safety teams
- Airport police, ground handlers, and access control staff
- National security and border control officers
- Aviation risk management and compliance personnel
- Emergency response and crisis management teams
- Aviation training institutions and regulatory partners

Course Duration: 10 days

Course Modules

Module 1: Global Aviation Security Frameworks (ICAO/IATA)

- Overview of ICAO Annex 17 and IATA security standards
- International obligations for states and aviation operators
- Stakeholder roles in aviation security
- Regulatory compliance requirements and reporting
- Alignment of airport operations with global standards
- Case Study: State compliance audit findings under ICAO USAP

Module 2: Threats to Civil Aviation

- Evolving global terrorism and criminal threats
- Insider threats within aviation environments
- Cybersecurity risks targeting aviation systems
- Smuggling, trafficking, and contraband challenges
- Vulnerability analysis tools for aviation operations
- Case Study: Attempted sabotage of airport equipment

Module 3: Aviation Security Risk Management

- Risk identification and threat assessment processes
- Development of risk-based security plans
- Operational risk mitigation and prioritization
- Integration of intelligence into risk models
- Using risk assessment tools for decision-making
- Case Study: Airport risk profile redesign after threat escalation

Module 4: Access Control & Airport Perimeter Security

- Secure management of restricted areas
- Credentialing and identity verification systems
- Perimeter patrols, fencing, barriers, and intrusion detection
- Access monitoring using CCTV and digital logs
- Handling unauthorized entry incidents
- Case Study: Perimeter breach impacting airport operations

Module 5: Passenger Screening & Detection Technologies

- Passenger profiling and behavioural analysis
- X-ray, millimeter-wave, explosive detection technologies
- Screening procedures for passengers and carry-on items
- Managing special categories of passengers
- Detecting prohibited items using advanced tools
- Case Study: Detection failure leading to security breach

Module 6: Hold Baggage Screening (HBS) Systems

- HBS operational processes and technologies
- Explosive detection and risk-based baggage handling
- Integration of baggage screening with airport systems
- Monitoring flagged or suspicious baggage
- Compliance with baggage screening regulatory standards

- Case Study: Incident involving improperly screened luggage

Module 7: Cargo & Mail Security

- Cargo acceptance, screening, and secure supply chain management
- Known consignor and regulated agent frameworks
- Air cargo safety and tamper-evident procedures
- Screening methods for high-risk cargo
- Compliance with cargo security regulations
- Case Study: Security lapse in air cargo shipment

Module 8: Airport Security Operations Management

- Coordinating security teams and airport units
- Daily airport security operations and SOP development
- Terminal, airside, and landside security oversight
- Monitoring operational compliance
- Security reporting, documentation, and record-keeping
- Case Study: Operational review of airport security failures

Module 9: Aviation Cybersecurity Fundamentals

- Cyber threats targeting airport and airline systems
- Securing airport networks, data, and communication channels
- Cyber incident detection and mitigation
- Integrating cybersecurity into overall aviation security
- Protecting critical operational technologies
- Case Study: Cyber breach affecting flight information systems

Module 10: Screening of Airport Staff & Insider Threat Mitigation

- Background checks and vetting processes
- Monitoring staff behaviour and activities
- Access authorization levels and privilege management
- Insider threat detection techniques
- Mitigation strategies and reporting protocols
- Case Study: Insider involvement in sabotage attempt

Module 11: Security Equipment Handling & Maintenance

- Proper operation of screening machinery
- Maintenance scheduling and equipment life cycle
- Troubleshooting common security equipment issues
- Calibration and testing procedures
- Documentation and performance monitoring
- Case Study: Equipment failure leading to screening delays

Module 12: Emergency & Crisis Response in Aviation Security

- Emergency preparedness planning
- Incident command structures at airports
- Coordination with airport fire, police, and medical units

- Evacuation procedures and communication systems
- Post-incident reporting and recovery
- Case Study: Airport lockdown resulting from security threat

Module 13: Aviation Security Audits & Inspections

- Planning and conducting internal aviation security audits
- ICAO USAP and IATA audit principles
- Identifying compliance gaps and corrective actions
- Reporting and documentation standards
- Monitoring improvement actions
- Case Study: Findings from a major international airport audit

Module 14: Security Culture & Human Factors

- Building a strong aviation security culture
- Human factors affecting screening and security decisions
- Training and awareness programs for airport personnel
- Behavioural performance monitoring
- Encouraging accountability and vigilance
- Case Study: Human error contributing to prohibited item entry

Module 15: Coordinated Security Governance Across Aviation Stakeholders

- Multi-agency coordination and communication
- Information sharing with intelligence and law enforcement bodies
- Harmonizing procedures across airlines, airports, and regulators
- Developing security governance committees
- Long-term strengthening of national aviation security
- Case Study: Multi-stakeholder response to a national aviation threat

Training Methodology

- Instructor-led presentations guided by IATA/ICAO frameworks
- Practical security simulations and operational demonstrations
- Group exercises focused on real-world aviation threat scenarios
- Case study reviews from global aviation incidents
- Tools, templates, and checklists for aviation security operations
- Action planning for improving airport and airline security systems

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
21 Sep 2026	02 Oct 2026	Online	\$2,000
21 Sep 2026	02 Oct 2026	Physical	\$3,000
21 Sep 2026	02 Oct 2026	Physical	\$0
21 Sep 2026	02 Oct 2026	Physical	\$0
21 Sep 2026	02 Oct 2026	Physical	\$0
21 Sep 2026	02 Oct 2026	Physical	\$0
21 Sep 2026	02 Oct 2026	Physical	\$0
21 Sep 2026	02 Oct 2026	Physical	\$0

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