Passenger Screening Technologies 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

Passenger Screening Technologies are transforming modern aviation security through intelligent detection systems, biometric verification, artificial intelligence, cybersecurity integration, automated threat recognition, and risk-based screening. Airports, border agencies, and aviation security organizations increasingly rely on advanced screening technologies to improve operational efficiency, regulatory compliance, passenger experience, and threat prevention. Passenger Screening Technologies Training Course equips participants with practical knowledge of the latest screening innovations, international security standards, data-driven decision-making, and emerging technologies that strengthen aviation security while facilitating seamless passenger movement.

The training explores advanced imaging technology, explosive detection systems, biometric identity management, AI-powered screening solutions, cybersecurity in screening environments, behavioral detection, integrated security operations, and future aviation security trends. Participants will gain practical skills in technology evaluation, system operation, risk management, security compliance, and incident response using globally recognized best practices aligned with ICAO, IATA, TSA, ECAC, and international aviation security frameworks.

Programme Curriculum

Passenger Screening Technologies Training Course

Introduction

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Course Objectives

After completing this course, participants will be able to:

1. Understand modern passenger screening technologies and security innovations.
2. Apply AI-powered threat detection techniques in aviation security.
3. Operate advanced imaging and explosive detection systems effectively.
4. Strengthen biometric identity verification processes.
5. Improve aviation cybersecurity within screening environments.
6. Implement international aviation security compliance standards.
7. Analyze passenger risk using intelligence-driven screening methods.
8. Enhance screening efficiency through automation technologies.
9. Manage screening equipment performance and maintenance.
10. Evaluate emerging aviation security technologies.
11. Improve operational resilience during security incidents.
12. Optimize passenger facilitation while maintaining security.
13. Develop future-ready airport screening strategies.

Organizational Benefits

- Improved aviation security effectiveness.
- Faster passenger processing times.
- Enhanced regulatory compliance.
- Reduced operational risks.
- Increased threat detection accuracy.
- Better passenger satisfaction.
- Improved staff competency.
- Stronger cybersecurity resilience.
- Greater operational efficiency.
- Enhanced organizational reputation.

Target Audience

- Airport Security Managers

- Aviation Security Officers
- Passenger Screening Personnel
- Airport Operations Managers
- Border Security Officials
- Aviation Regulators
- Security Technology Specialists
- Airline Security Personnel

Course Duration: 5 days

Course Modules

Module 1: Passenger Screening Technology Fundamentals

- Aviation security principles
- Passenger screening lifecycle
- Screening technology evolution
- Regulatory frameworks
- Risk-based screening concepts
- Global Case Study: Changi Airport smart screening implementation

Module 2: Advanced Screening Equipment

- X-ray imaging systems
- CT scanning technology
- Explosive detection systems
- Millimeter-wave scanners
- Equipment calibration practices
- Global Case Study: Heathrow Airport CT scanner deployment

Module 3: Biometric Screening Technologies

- Facial recognition systems
- Fingerprint verification
- Iris recognition technology
- Digital identity management
- Privacy and data protection
- Global Case Study: Dubai International biometric passenger journey

Module 4: Artificial Intelligence in Passenger Screening

- AI-powered threat detection
- Machine learning applications

- Automated image analysis
- Predictive security analytics
- Human-AI collaboration
- Global Case Study: TSA AI-assisted security screening initiatives

Module 5: Cybersecurity and Integrated Screening Systems

- Airport cybersecurity fundamentals
- Secure data transmission
- Network protection strategies
- System integration challenges
- Incident response planning
- Global Case Study: European airport cybersecurity resilience program

Module 6: Screening Operations and Compliance

- ICAO security requirements
- IATA best practices
- ECAC screening standards
- Quality assurance procedures
- Operational performance monitoring
- Global Case Study: Singapore aviation security compliance model

Module 7: Passenger Experience and Risk Management

- Passenger facilitation strategies
- Behavioral detection techniques
- Queue optimization methods
- Threat risk assessment
- Customer service integration
- Global Case Study: Schiphol Airport passenger experience improvements

Module 8: Emerging Passenger Screening Technologies

- Contactless screening innovations
- Robotics in security
- Remote screening operations
- Future aviation technologies
- Continuous improvement planning
- Global Case Study: Incheon International Airport smart security transformation

Training Methodology

- Interactive expert-led presentations.
- Hands-on demonstrations of screening technologies.
- Global aviation case study analysis.
- Practical simulations and scenario-based exercises.
- Group discussions and collaborative workshops.
- Equipment operation demonstrations.
- Risk assessment exercises.
- Regulatory compliance reviews.
- Technology evaluation activities.
- Action planning and knowledge assessments.

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
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

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