IN-HOUSE CORPORATE TRAINING

The Singapore Aviation Academy offers the following courses that can be delivered for your organisation or region. Drop us your enquiry here to find out how we can fulfil your training needs.

No.	Course Title	Duration	Available Modes of delivery
Safety Oversight			
1.	State Safety Programme Implementation*	5 days	In-person
2.	Resolution of Safety Issues*	5 days	In-person
3.	Auditing Techniques and Best Practices	5 days	In-person
4.	Review of Auditing Findings and Corrective Actions#	3 days	Virtual classroom
5.	ICAO Training Package: Oversight of Competency- Based Training	5 days	In-person
6.	ICAO Training Package: Personnel Licensing (PEL) System	8 days	eLearning & In-person
7.	ICAO Training Package: Oversight of Aircraft Leasing Operations	5 days	In-person
Aviation Safety Inspectors			
8.	Personnel Licensing for Regulators	5 days	In-person
9.	Air Operator Certification and Surveillance for Flight Operations Inspectors	5 days	Virtual classroom or in-person
10.	Cabin Safety Oversight	5 days	Virtual classroom or in-person
11.	Dangerous Goods Safety Inspectors	5 days	In-person
12.	ICAO Technical Instructions for the Safe Transport of Dangerous Goods by Air	5 days	In-person
Safety Management			
13.	Safety Management Systems Implementation*	5 days	In-person
14.	ICAO Training Package: Safety Management System Monitoring and Assessment	5 days	In-person

No.	Course	Duration	Mode
15.	Investigation of Cabin Safety Aspects in Accidents and Incidents Workshop	5 days	Virtual classroom or in-person
16.	Human Factors in Aviation Workshop*	5 days	In-person
17.	Aviation Weather Risk Management*	5 days	In-person

Training

No.	Course	Duration	Mode
18.	ICAO Training Package: Training Managers	5 days	In-person

Airport Operations and Airport Emergency Services

No.	Course	Duration	Mode
19.	Aerodrome Safety Operations	**3** days	In-person
20.	Basic Airport Fire-fighters	12 weeks	In-person (SAA, Singapore)
21.	Basic Water Rescue Operations	5 days	In-person (SAA, Singapore)
22.	Confined Space and Structural Rope Rescue	5 days	In-person (SAA, Singapore)
23.	Helicopter Fire-fighting and Rescue Training	2 days	In-person (SAA, Singapore)

Aviation Security & Crisis Management

No.	Course	Duration	Mode
24.	Introduction to Security Management Systems and Security Culture	3 days	In-person
25.	Aviation Crisis Management Programme*	5 days	In-person

Courses marked with asterisk (*) can count towards SAA's Diploma in Civil Airport Management and/or Diploma in Aviation Safety Management. Find out more about SAA's diplomas at https://caas.gov.sg/saa
#Pre-requisite: Only for participants that have attended Auditing techniques and Best Practices.

State Safety Programme Implementation

This course provides you with the knowledge and competency on ICAO Annex 19 Standards and Recommended Practices ICAO Doc guidance material pertaining to State Safety Programme (SSP) implementation and administration. This course is a core module of the [Diploma in Aviation Safety Management](#) and an elective of the [Diploma in Civil Aviation Management](#)

WHAT YOU WILL LEARN

Upon completion of this course, you will be able to:

- Have an appreciation of fundamental safety management principles and concepts
- Understand and apply Annex 19 SARPs and ICAO Doc 9859 relating to SSP implementation and its processes

WHAT IS COVERED

- Safety management fundamentals
- ICAO Annex 19 SARPs
- SSP processes
- Management of change
- Supplementary tools and guidance material

WHO SHOULD ATTEND

Aviation professionals who are responsible for SSP implementation and administration, state safety oversight, acceptance and surveillance of service providers' Safety Management Systems, or aviation accident investigation matters.

Resolution of Safety Issues

The course provides you with the knowledge and best practices in the resolution of safety issues arising from audit findings and violation of safety regulations. You will learn how to apply different actions to resolve various types of safety issues in safety oversight. This course is an elective of the Diploma in Aviation Safety Management and Diploma in Civil Aviation Management.

WHAT YOU WILL LEARN

Upon completion of this course, you will be able to:

- Understand a State's obligation to the resolution of safety issues
- Develop and decide the appropriate procedures and processes to resolve safety issues
- Prepare enforcement manuals and guidance materials
- Adopt best practices in investigations and conducting interviews

WHO SHOULD ATTEND

Aviation safety inspectors and professionals involved in safety policy design, regulation, auditing and compliance function in aviation oversight.

WHAT IS COVERED

- ICAO documentation related to resolution of safety issues
- State's and operator's responsibilities
- Philosophy of enforcement actions
- Inspector responsibility and authority
- Safety and just culture
- Errors and violations
- Types of unsafe behaviour
- The Reason Model
- Format and contents of an Enforcement Manual
- Planning of investigation
- Interpretation of regulations
- Types of evidence
- Preparation and planning of interview
- Interview structure
- Interview tips
- Interview practice
- Auditing process and expectations
- Common enforcement decision tools
- Enforcement Decision Process (EDP)
- Risk assessment

Auditing Techniques and Best Practices

This course provides you with the foundation on the principles and procedures for the conduct of safety audits on an aviation organisation.

WHAT YOU WILL LEARN

Upon completion of this course, you will be able to:

- Write an audit finding accurately
- Assess the root cause (s) of a finding
- Determine acceptance of corrective actions in addressing findings
- Develop audit questionnaires
- Resolve audit findings
- Develop communication skills for auditing

.

WHAT IS COVERED

- Safety oversight and critical elements
- Audit principles and auditor attributes
- Responsibilities of audit team members
- effective communications
- Planning for an audit
- Conduct of an audit
- Post-audit
- Audit follow-up
- Resolution of safety issues
- Organisational Risk Profile (ORP)

WHO SHOULD ATTEND

Aviation professionals involved in the oversight or management of safety audits and assurance

Review of Audit Findings and Corrective Actions

This course provides you with the principles and procedures for the conduct of safety oversight audits.

WHAT YOU WILL LEARN

Upon completion of this course, you will be able to:

- Improve in writing audit findings
- Assess the root cause (s) of a finding
- Determine the adequacy of a Corrective Action Plan in addressing a finding

WHAT IS COVERED

- Principles of auditing
- Audit findings
- Root Cause Analysis (RCA)
- Corrective actions
- Desktop audit
- Audit exercises

WHO SHOULD ATTEND

Aviation professionals or inspectors involved in the oversight or management of safety audits and assurance of flight operations, cabin safety and dangerous goods.

This course also serves as refresher training for auditors.

PREREQUISITE

Participants are required to attend the Auditing Techniques and Best Practices, or equivalent before attending this course.

ICAO Training Package: Oversight of Competency – Based Training

This course provides you with the knowledge, skills and attitudes to conduct effective oversight of Competency-Based Training and Assessment (CBTA) programmes in accordance with ICAO provisions in ICAO Doc 9868 and Doc 9841. You will acquire the skills to evaluate training programmes and identify critical areas for enhancement, to ensure an outcomes-focused training programme that is designed to develop the appropriate competencies for professionals to perform their duties in a safe and efficient manner.

WHAT YOU WILL LEARN

Upon completion of this course, you will be able to:

- Execute the work involved in the pre-application and formal application phases of a proposed CBTA programme
- Review proposed CBTA programme documentation
- Inspect a proposed CBTA programme
- Approve a proposed CBTA programme
- Set up a surveillance programme for an approved CBTA programme

WHAT IS COVERED

- Pre-application phase
- Formal application phase
- Review of proposed CBTA programme documentation phase
- Inspection of proposed CBTA programme phase
- Approval of proposed CBTA programme phase
- Surveillance programme for approved CBTA programme

WHO SHOULD ATTEND

Aviation safety regulatory oversight and safety management professionals who are responsible for the development of CBTA training programmes.

ICAO Training Package: Personnel Licensing (PEL) System

This course provides you an understanding of the fundamental concepts and principles to set-up an effective personnel licensing (PEL) system in a PEL office. It will equip you with the essential know-how and attitudes to manage the PEL system, which should facilitate the answering of the ICAO's Universal Safety Oversight Audit Programme (USOAP) Continuous Monitoring Approach PEL Protocol Questions (PQs).

PART ONE (ONLINE)

WHAT YOU WILL LEARN

Upon completion, you will be able to:

- Identify the essential components and processes of a PEL system
- Describe the regulatory system governing PEL and the requirements of a PEL office
- Describe the processing of licences, language proficiency requirements, and the examining principles of PEL

WHAT IS COVERED

- The Action of PEL
- The Licensing Authority
- Principles Governing the Establishment and Implementation of a PEL office
- Regulatory System Governing PEL
- Establishment of a PEL Office
- Record Keeping
- Technical Guidance for Licensing Procedures
- Processing of Personnel Licences and Ratings
- Language Proficiency Requirements
- Delegation and Transfer of Functions and Responsibilities
- Written and Oral Examinations
- Flight Test and Practical Examinations

NOTE

This course is Part One of the ICAO Training Package (ITP): PEL System course.

PREREQUISITE

To qualify for Part Two (Virtual Live Classroom), you must successfully complete Part One (Online) within 60 days before the commencement of Part Two (Virtual Live Classroom).

PART TWO (IN-PERSON)

WHAT YOU WILL LEARN

Upon completion, you will be able to:

- Apply procedures for the issuance of flight crew and non-flight crew licences
- Apply procedures for the validation and conversion of flight crew licences
- Determine criteria for designation of medical examiners and the process of medical assessment
- Determine key elements and processes addressing approval of training organization
- Describe enforcement actions for non-compliance of regulations

WHAT IS COVERED

- Licensing of Flight Crew
- Licensing of Non-Flight Crew
- Conversion and Validation of Foreign Licences
- Medical Assessment
- Approval and Surveillance of Training Organizations
- Enforcement Policy and Procedures

WHO SHOULD ATTEND

Operations inspectors, airworthiness inspectors, ANS inspectors, flight crew licensing inspectors and maintenance licensing inspectors from civil aviation authorities involved in developing or upgrading its own State licensing or PEL system.

ICAO Training Package: Oversight of Aircraft Leasing Operations

This course provides you with the competencies to design and implement operational processes and procedures for acceptance, approval and oversight of aircraft leasing arrangements in accordance with Chicago Convention and its Annexes in particular ICAO Annex 1, Annex 6 Part I, Part II, and Part III and Annex 8; as well as ensure the various leasing arrangements are in compliance with the State's regulatory framework.

WHAT YOU WILL LEARN

Upon completion of this course, you will be able to:

- Develop processes and procedures to recognise, accept, approve and oversee operations with different cases of aircraft leasing arrangements.
- Implement oversight procedures for different cases of aircraft leasing arrangements.
- Identify various categories of aircraft leasing and their implications on States and AOC holders' responsibilities with respect to personnel licensing, aircraft operations and airworthiness.
- Identify necessary regulations and procedures to ensure compliance with Chicago Convention and its Annexes for various cases of aircraft leasing.

WHAT IS COVERED

- Evaluating air operator leasing arrangements application

- Approving proposed air operator leasing arrangements

- Inspection and surveillance of air operator leasing arrangements

WHO SHOULD ATTEND

Professionals who are responsible for the operational control of aircraft leasing operations or managing the legal and safety issues related to aircraft leasing flight operations, airworthiness or personnel licensing.

PREREQUISITES

- Minimum one-year experience as an aviation safety inspector, legal officer, or

- Minimum two years experience in airline operations (e.g. pilot, flight operations officer, maintenance control, flight crew training manager)

Personnel Licensing for Regulators

This course provides you with the fundamental knowledge required of Personnel Licensing (PEL) officers and inspectors.

WHAT YOU WILL LEARN

Upon completion of this course, you will be able to:

- Identify the essential components and processes of a PEL system
- Describe the regulatory system governing PEL and the requirements of a PEL office
- Describe the processing of licences, language proficiency requirements, and the examining principles of PEL

WHO SHOULD ATTEND

PEL officers involved in developing or providing oversight of PEL system, including flight operations inspectors.

WHAT IS COVERED

- Chicago Convention and Articles related to PEL
- ICAO Annex 1 (PEL)
- Safety oversight
- Overview of PEL and delegation of
- functions
- Regulatory system governing PEL
- Licensing authority
- Examining principles
- Medical requirements
- Licence format
- Aircraft leasing, Article 83 *bis* and licensing
- Approved Training Organisation (ATO)
- Competency-based training
- Language proficiency
- Multi-Crew pilot training
- Enforcement
  Universal Safety Oversight Audit Programme
  (USOAP) Continuing Monitoring Approach (CMA)

Air Operator Certification and Surveillance for Flight Operations Inspectors

This course provides you with the foundation on safety regulations, principles and procedures for flight operations safety oversight of an air operator.

WHAT YOU WILL LEARN

Upon completion of this course, you will be able to:

- Carry out flight operations inspections related to the issuance of Airport Operator Certificate (AOC)
- Learn the best practices in safety oversight management with a focus on special operations approval for Transport of Dangerous Goods by Air and Extended Diversion Time Operations (EDTO).

WHO SHOULD ATTEND

New flight operations inspectors and air operators who are responsible for flight operations safety oversight.

This course would also serve as refresher training for current flight operations inspectors.

WHAT IS COVERED

- ICAO Annex 6 and Doc 8335
- Certification Process for the grant of an AOC
- Operator's Operations Manual
- Approval and acceptance
- EDTO
- Master Minimum Equipment List (MEL)
- Dangerous Goods
- Aircraft leasing
- Safety oversight activities
- ICAO Universal Safety Oversight Audit Programme
- (USOAP) audit

Cabin Safety Oversight

This course provides you with the foundation of the processes and practices surrounding the regulation of cabin safety.

WHAT YOU WILL LEARN

Upon completion of this course, you will be able to:

- Understand the cabin safety issues to be addressed for the grant of an Air Operator Certificate (AOC)
- Apply procedures for the conduct of cabin safety inspections
- Apply cabin safety procedures related for aircraft leasing
- Address safety concerns arising from the cabin safety inspections

WHO SHOULD ATTEND

New and current flight operations, cabin safety and dangerous goods inspectors and air operators' professionals responsible for flight operations of aircraft.

WHAT IS COVERED

- Cabin safety issues
- AOC cabin safety certification process
- Conduct of cabin safety inspections
- Minimum cabin crew complement
- Certification of aircraft cabin
- Procedures for partial evacuation demonstration
- Procedures for proving flights
- Portable electronic devices
- Dangerous Goods
- Lithium batteries

Dangerous Goods Safety Inspectors

This course provides you with the foundation on safety regulations, principles and procedures for safety oversight of the transport of Dangerous Goods by air.

WHAT YOU WILL LEARN

Upon completion of this course, you will be able to:

- Establish a State's Dangerous Goods Safety Oversight Programme
- Gain insight on the best practices in safety oversight management

WHO SHOULD ATTEND

New Dangerous Goods inspectors, flight operations inspectors and air operators' flight operations management professionals.

This course may also serve as refresher training for current Dangerous Goods and flight operations inspectors.

WHAT IS COVERED

- ICAO Annex 18
- Dangerous Goods legislative framework
- Dangerous Goods audit and process inspection
- Certification process for granting operations specification for Transport of Dangerous Goods by Air
- Surveillance planning
- Dangerous Goods surveillance procedures
- Granting of approval and exemption
- Dangerous Goods accident and incident

ICAO Technical Instructions for the Safe Transport of Dangerous Goods by Air

This course provides you with an understanding on ICAO Doc 9284 (Technical Instructions for the Safe Transport of Dangerous Goods by Air) to ensure compliance with the Standards and Recommended Practices (SARPs) of ICAO Annex 18 The Safe Transport of Dangerous Goods by Air.

WHAT YOU WILL LEARN

Upon completion of this course, you will be able to:

- Identify, classify, pack, label and document Dangerous Goods in accordance with the Technical Instructions
- Understand the legal obligations related to the transport of Dangerous Goods by air
- Identify whether appropriate emergency response information can be correctly extracted from the Emergency Response
- Guidance for Aircraft Incidents Involving
- Dangerous goods (ICAO Doc 9481)

WHO SHOULD ATTEND

Air operators and freight forwarders responsible for the handling, storage and loading of cargo, mail and baggage.

WHAT IS COVERED

- ICAO Annex 18 and the Technical Instructions
- Content of the Technical Instructions
- Classification
- The Dangerous Goods list
- Dangerous Goods not specifically listed by name
- Packing requirements
- Package performance testing and
- specification markings
- Marking and labelling
- Documentation
- Different Dangerous Goods together in one package and Overpacks
- Dangerous Goods in limited quantities and excepted quantities
- Limitation on Dangerous Goods
- Radioactive materials
- Provisions for passengers and crew members
- Operator's responsibilities

Safety Management Systems Implementation

This course provides you with the knowledge and skills to facilitate the design, implementation an maintenance of an operationally effective Safety Management System (SMS) to meet the standard prescribed in ICAO Annex 19 Safety Management, ICAO Doc 9859 Safety Management Manual (SMM and other related guidance materials.

This course is a core module of the Diploma in Aviation Safety Management and an elective of the Diploma in Civil Aviation Management

WHAT YOU WILL LEARN

Upon completion of this course, you will be able to:

- Have an appreciation of fundamental safety management principles and concepts
- Understand and apply Annex 19 SARPs relating to SMS implementation
- Be competent with SMS implementation and its pertinent processes
- Be conversant with ICAO Doc 9859 guidance materials relating to SMS

WHAT IS COVERED

- Safety management fundamentals
- ICAO Annex 19 SARPs
- SMS processes
- Supplementary Tools and Guidance Materials

WHO SHOULD ATTEND

Aviation professionals involved in safety management and SMS oversight.

ICAO Training Package: Safety Management System Assessment and Monitoring

This course provides you with the competencies to perform compliance-based and performance-based safety management oversight to conduct the Safety Management System (SMS) assessment and monitoring, including review for SMS acceptance, assessment of safety performance monitoring and conducting periodic SMS audit/ assessment, in accordance with ICAO Annex 19 (Safety Management) and ICAO Doc 9859 (Safety Management Manual).

WHAT YOU WILL LEARN

Upon completion of this course, you will be able to:

- Perform documentation review of SMS manual
- Perform onsite review for SMS acceptance
- Perform review of Safety Performance Indicators (SPI)
- Perform review of Safety Performance Targets (SPT) setting
- Assess safety performance monitoring
- Conduct periodic audit/ assessment of SMS

WHAT IS COVERED

- Documentation review of SMS manual
- Onsite review for SMS acceptance
- Review of SPIs
- Review of SPTs
- Assessment of Safety Performance Monitoring
- Periodic Audit/ Assessment of SMS

WHO SHOULD ATTEND

This course is recommended for aviation safety inspectors or personnel involved in aviation safety regulatory oversight and safety management.

Investigation of Cabin Safety Aspects in Accidents and Incidents Workshop

This workshop provides you with the knowledge of cabin safety aspects in the conduct of an aircraft accident investigation.

WHAT YOU WILL LEARN

Upon completion of this course, you will be able to:

- Gain a general knowledge on ICAO provisions relevant to cabin safety and security contained in the ICAO Annexes
- Identify the competencies for professionals involved in investigating cabin safety aspects of occurrences
- Apply cabin crew competency-based training concepts, human performance and associated guidance material.

WHO SHOULD ATTEND

Aviation professionals who are responsible for accident and incident investigations, including cabin specialists and airline safety managers.

WHAT IS COVERED

- Overview of ICAO Annex 13, ICAO provisions and cabin safety investigations
- Human performance training and skills development
- Cabin investigator competencies and training
- Cabin safety aspects in accident investigation
- Research on brace positions and crash injury risk
- Conducting interviews
- Documenting the cabin
- Analysis and reporting
- Preparation and presentation of an accident report

Human Factors in Aviation Workshop

This workshop provides you an understanding of human factors concepts and its application in the aviation operation environment. This course is an elective of the **Diploma in Aviation Safety Management**

WHAT YOU WILL LEARN

Upon completion of this workshop, you will be able to:

- Understand the concepts of human factors, human error and error tolerance as applied to the aviation industry
- Identify human factors contributions to aviation safety occurrences
- Apply human factors principles and concepts to manage errors and violations on an individual, organisational and systemic level

WHAT IS COVERED

- Human factors: Past, present and future
- Understanding and managing human error:
- Human performance capabilities and limitations
- Human factors and systems safety:
- Design and automation
- Social and group Influences on performance
- Error management

WHO SHOULD ATTEND

Aviation professionals who are responsible for aviation safety and quality assurance. It is also suitable for designated medical examiners, aircraft accident investigators and aviation psychologists.

Aviation Weather Risk Management

This course provides you with the knowledge and skills to determine how hazards and risks from adverse weather conditions impact flight operations, and methods to manage these risks. This course is an elective of the Diploma in Aviation Safety Management

WHAT YOU WILL LEARN

Upon completion of this course, you will be able to:

- Use various weather and climate products and services to facilitate operational decision-making, flight planning, operational control, and air traffic services

- Apply practices, processes and procedures to manage weather-related risks effectively and proactively to enhance operational effectiveness and efficiencies

- Identify methods to enhance safety and performance to reduce passenger and crew injuries, diversions and aircraft damage due to adverse weather

WHAT IS COVERED

- Impact of weather on aviation operations
- Current weather safety nets
- Weather decision-making
- Weather risk management systems
- Climatology and weather patterns
- Investigation of weather occurrences
- Proactive forecasting systems for supporting decision making

WHO SHOULD ATTEND

Aviation professionals who are required to use weather information to facilitate operational control and decision-making, flight planning, or air traffic service.

ICAO Training Packages: Training Managers

This course provides you with the operational aspects of managing an aviation training organisation to meet the required standards of operations, training delivery, and quality management. It will equip you with the competencies to apply the ICAO training organisation assessment guidelines, for training organisation to meet and maintain operational and quality standards for ICAO recognition.

WHAT YOU WILL LEARN

Upon completion of this course, you will be able to:

- Identify requirements for the establishment of an aviation training organisation
- Evaluate the level of compliance of a training organisation with ICAO provisions
- Develop an action plan to ensure compliance of a training organisation with ICAO Annex 1: Personnel Licensing and ICAO Doc 9841(Manual on the Approval of Training Organisations)

WHO SHOULD ATTEND

Aviation professionals who are responsible for establishing, managing, or operating an aviation training organisation. The course will also be beneficial to CAA inspectors involved in regulatory approval of Approved Training Organisations (ATOs).

WHAT IS COVERED

- Training Organisation Set Up
  - Types of training organisations
  - Approval process
  - Documentation
  - Personnel
  - Training and procedures manual
  - TRAINAIR PLUS membership process

- Training Organisation Operations
  - Competency-based training
  - ICAO instructor framework
  - Reference documents
  - Course Development Unit (CDU) requirements
  - Training record keeping system
  - Integration with the operations sector
  - Training Management System (TMS)

- Training Organisation Quality Management System
  - Management responsibility
  - Quality manager
  - Quality manual
  - Quality policy and objectives
  - Quality assurance
  - Strategies for continuous improvement

Aerodrome Safety Operations
Jointly organised with the UK Civil Aviation Authority International

This course provides you with insights into the safety practices and the complexities of aerodro operations.

WHAT YOU WILL LEARN

Upon completion of this course, you will be able to:

- Understand the roles and responsibilities of the Civil Aviation Administration and other stakeholders in aerodrome operations
- Be updated with aerodrome certification, inspection and auditing principles
- Apply the key principles fundamental to the safe running and management of an aerodrome
- Identify safety concerns in aerodrome operations and improve overall airside safety operations

WHO SHOULD ATTEND

Aviation professionals who are involved in the management, inspection, certification, ground operations, safety and maintenance of aerodromes.

WHAT IS COVERED

- Global overview (ICAO, EASA and Department for Transport)
- Development of aerodrome policy, standards and strategy
- Aerodrome compliance auditing and inspections
- Safety management systems and the accountable manager
- Aerodrome manual
- Aerodrome physical characteristics
- Safety surfaces
- Aeronautical ground lighting
- Runway friction surfaces theory
- Aerodrome wildlife risk management
- Low visibility procedures
- Runway incursion/excursion
- Rescue and fire-fighting services
- Emergency planning
- Mandatory occurrence reporting

Basic Airport Fire-fighters

This competency-based course provides you with the fundamentals to perform the duties as an aircraft firefighter and the techniques to deal with aircraft incidents and accidents in accordance with ICAO requirements. It will also cover building and other infrastructure incidents that may occur at airports.

WHAT YOU WILL LEARN

Upon completion of this course, you will be able to:

- Perform aircraft fire fighting, search and rescue operations and procedures in confined spaces.
- Perform technical rescue and mitigation of hazardous materials.
- Demonstrate understanding of Aircraft Rescue Fire-fighting (ARFF) subjects and tactics, as well as rescue and fire-fighting in other aviation related areas.
- Understand the concepts, principles and practical application of structural fire-fighting, pressure fed firefighting, BA control board setup flash over training and bulk fuel storage tanks rescue tactics.

WHAT IS COVERED

Module 1 - Firemanship Fundamentals

- Introduction to Aviation fire-fighting
- Fire physics and chemistry
- Fire-fighter safety
- Delivery and suction hoses
- Fire-fighting and rescue
- Ground ladders
- Fire extinguishers
- Rope and knots
- Fire pumps and primers
- Casualty management & stretchers
- Communications and hand signals
- Extinguishing medias
- Self-contained breathing apparatus
- Fire vehicle operating system
- Fire ground hydraulics
- Firefighters duties and responsibilities
- Fire hydrant operations

Module 2 – Structural, Breathing Apparatus Operations and Hazardous Material Operations

- BA operations and entry control board
- Working in confined spaces
- Structural fire-fighting strategy and tactics
- Working in heat and humidity
- Smoke hazards
- Liquefied petroleum gas fires
- Basic vehicle extrication
- Dangerous Goods and approach to hazardous materials incident
- Large storage tank fire-fighting strategy
- Basic fire prevention
- Introduction to Workplace Safety and Health
- Thermal imaging camera
- Flash over training
- Specialised rescue equipment and forcible entry
- Swimming techniques

Module 3 - Aircraft Rescue and Firefighting

- Aircraft construction
- Aircraft electrical and emergency power systems
- Aircraft fuel systems
- Aircraft evacuation systems
- Aircraft fire extinguishing systems
- Aircraft lighting systems
- Aircraft emergency shutdown procedures
- Aircraft oxygen systems
- Freighter aircraft and dangerous goods
- Aircraft engine fires
- Aircraft landing gear fires
- Aircraft internal fires
- Helicopter fire-fighting
- Military aircraft fire-fighting
- Full scale aircraft fire-fighting strategy and tactics
- Night aircraft fire-fighting

WHO SHOULD ATTEND

This course is beneficial for those aspiring to be an airport fire-fighter.

DURATION

12 weeks

PRE-REQUISITES

- Be physically fit and capable of performing strenuous work during the performance of the practical training sessions;
- Be proficient in English; and
- Supported / recommended by his/her organisation that he/she is suitable for the course.

Module 3 - Aircraft Rescue and Firefighting (cont'd)

- Aircraft black boxes
- Aircraft incident/accident at remote areas
- Causality handling
- Communication and coordination at crash site
- Occupational first aid training

ASSESSMENT AND CERTIFICATION

You must achieve at least 80% attendance to be eligible for the theory and practical assessments. A certificate of successful completion will be awarded if you passed the assessments with a minimum score of 70%.

Basic Water Rescue Operations

The course provides you the skills and knowledge in fundamental concepts, principles and techniques of watermanship, surface rescue and lifesaving, personal survival, fire-prevention, fire-fighting, elementary first aid, personal safety and social responsibilities on board fire-fighting vessels.

WHAT YOU WILL LEARN
Upon completion of this course, you will be able to:
- Achieve competency as a crew or junior member of a fire-fighting vessel
- Acquire and apply fundamental knowledge and skills in watermanship, surface rescue and lifesaving, personal survival, fire-prevention, fire-fighting, elementary first aid, personal safety and social responsibilities

WHAT IS COVERED
- Basic watermanship
- Basic occupational safety and security
- Basic surface rescue and lifesaving

PREREQUISITES
- Have basic swimming skills; and
- Be physically and medically fit for strenuous training activity, including entry into water from a height.

WHO SHOULD ATTEND
Personnel who are directly involved in the mitigation of water rescue incidents from civil aviation administrations, airports, civil defence organisations, municipal fire brigades as well as emergency and rescue services.

Confined Space and Structural Rope Rescue

This course provides you with the knowledge and skills to perform rescue work safely in confined space situations.

WHAT YOU WILL LEARN

Upon completion of this course, you will be able to:

- Understand the standards and requirements for confined space and structural rope rescue
- Execute various knots tying and anchoring (rigging), manoeuvring and rope rescue techniques
- Familiarise with various equipment to execute rope rescue operations
- Use recommended steps to conduct confined space and rope rescue operations
- Plan, deploy and manage rope rescue teams

WHAT IS COVERED

- Overview of confined space and structural rope rescue
- Confined space and structural rope rescue equipment
- Pre-planning of rescue in a highly hazardous confined space environment
- Establishment of anchor point: rigging
- Rope manoeuvre skills
- Rope rescue
- Rescue team organisation and management

WHO SHOULD ATTEND

Emergency personnel who may be required to attend to confined space and/or elevated structural emergencies from civil aviation administrations, airport authorities, civil defence organisations, municipal fire brigades, oil refining, petrochemical and manufacturing industries.

PREREQUISITES

- Have completed basic fire-fighting training or equivalent

Helicopter Fire-fighting and Rescue Training

This course provides you with knowledge and training in helicopter fire-fighting, identification of common helicopter hazards, as well as casualty rescue.

WHAT YOU WILL LEARN

Upon completion of this course, you will be able to:

- Organise an emergency response team for helicopter fire-fighting and rescue

WHAT IS COVERED

- General description and construction of helicopter
- Helicopter hazards
- Engine and undercarriage assemblies
- Fire-fighting access and rescue
- Hand signals
- Fire-fighting and damage control on board vessels
- Physiology of breathing
- Breathing Apparatus (BA) donning and doffing procedures
- Hose evolution
- Foam branch handling
- BA operations
- Running fuel fire-fighting with extinguishers
- Spill fire-fighting with foam
- Approach and incident assessment
- Helicopter fire-fighting and rescue
- Command and control procedures

WHO SHOULD ATTEND

Operational personnel involved in helicopter operations on elevated platforms or flight decks from civil aviation administrations, militaries, airport authorities, civil defence organisations, industrial and oil refining industries.

PREREQUISITES

- Have completed initial first aid fire-fighting appliance training or equivalent;
- Have completed initial responder training or equivalent

Introduction to Security Management Systems and Security Culture

Jointly organised with the UK Civil Aviation Authority International

This course provides you with the fundamentals of an effective Security Management System (SeMS). This course is developed in accordance with ICAO Annex 17 (Security) and ICAO Document 8973 (Security Manual) and is aligned with the ICAO Global Aviation Security Plan (GASeP) and United Nations Security Council Resolutions 2309 (2016) developments.

WHAT YOU WILL LEARN

Upon completion of this course, you will be able to:

- Apply SeMS framework in the work environment
- Evaluate potential security risks and threats
- Assess security culture in your organisation
- Adapt best practices, tools and techniques that can foster a positive security culture

WHO SHOULD ATTEND

Aviation personnel responsible for the oversight, development or operations of aviation security regimes or agencies managing aviation security programmes.

WHAT IS COVERED

- Security Management Systems (SeMS)
    - SeMS concept, tools and techniques
    - Advantages of SeMS
    - The SeMS framework
    - Management Commitment, Accountability and Responsibility
    - Communication
    - Third Party Oversight
    - Threat and Risk Management
    - Performance Monitoring, Assessment and Reporting
    - Management of Change
    - Incident Response
    - Resource and Continuous Improvement
    - SeMS Education and Security Culture
    - SeMS implementation

- Security Culture
    - Components of a security culture
    - Tools and Techniques

Aviation Crisis Management Programme

This course provides you with the knowledge and skills to manage responses for effective crisis management in the new normal. This course is designed in accordance with ICAO Standards and Recommended Practices and with reference to the ICAO Council Aviation Recovery Taskforce (CART) report. This programme is an elective module offered under the Diploma in Civil Aviation Management.

WHAT YOU WILL LEARN

Upon completion of this course, you will be able to:

- Recognise crisis readiness roles of various stakeholders in the aviation industry
- Identify cyber-incidents and appropriate response
- Integrate the challenges faced by government, airport and airlines in navigating health control measures during the COVID-19 pandemic
- Apply airport emergency responses best practices during an air crash accident
- Acquire the knowledge of basic crisis intervention, the conduct of effective briefings to next-of-kin and breaking bad news
- Explain the types of swift decisions required by Crisis Managers to limit damage caused by crises. Implement an emergency/business continuity plan for aviation crises

WHAT IS COVERED

- Crisis readiness of the aviation industry today
- Overview of aviation crisis management
- Emergency plan (EP) and business continuity plan (BCP)
- Responding to cyber-attacks and incident responses
- Public health crisis and aviation
- Air crash crisis
- Crisis communications and reputation management in a digital age
- Crisis communications for new media
- Best practices in aviation crisis management

WHO SHOULD ATTEND

Aviation professionals in middle or senior management, or those with at least 5 years of experience who are responsible for planning and managing aviation crisis events