

# **CUSTOMISED COURSES**

The Singapore Aviation Academy offers the following courses that can be delivered overseas or customised<sup>1</sup> for your organisation. Email us at <a href="mailto:saa@caas.gov.sg">saa@caas.gov.sg</a> to find out how we can fulfil your training needs.

Safet	y Oversight		
1.			
	State Safety Programme Implementation*	5 days	Virtual classroom or in-person
2.	Resolution of Safety Issues*	5 days	Virtual classroom or in-person
3.	Auditing Techniques and Best Practices	5 days	In-person
4.	Review of Auditing Findings and Corrective Actions#	3 days	Virtual classroom or in-person
Aviat	ion Safety Inspectors		•
5.	Personnel Licensing for Regulators	5 days	Virtual classroom or in-person
6.	Air Operator Certification and Surveillance for Flight Operations Inspectors	5 days	Virtual classroom or in-person
7.	Cabin Safety Oversight	5 days	Virtual classroom or in-person
8.	Dangerous Goods Safety Inspectors	5 days	In-person
9.	ICAO Technical Instructions for the Safe Transport of Dangerous Goods by Air	5 days	In-person
Safet	y Management		
10.	Safety Management Systems Implementation*	5 days	Virtual classroom or in-person
11.	Investigation of Cabin Safety Aspects in Accidents and Incidents Workshop	5 days	Virtual classroom or in-person
12.	Human Factors in Aviation Workshop*	5 days	Virtual classroom or in-person
13.	Aviation Weather Risk Management*	5 days	Virtual classroom or in-person

<sup>&</sup>lt;sup>1</sup> Modules and duration can be customised according to your training requirements.

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Avi	ation Management		
14.	Civil Aviation Management Programme*  • Module 1: Developing an Air Hub  • Module 2: Regulations and Future of Aviation (Modules can be taken as a stand-alone courses)	3 days 3 days	Virtual classroom
15.	The Geopolitics of Aviation*	5 days	Virtual classroom
16.	Aviation Management in COVID-19 Recovery	3 days	Virtual classroom or in-person
17.	Redefining Aviation of Tomorrow: Data Analytics and Machine Learning*	5 days	Virtual classroom
18.	Redefining Aviation of Tomorrow: Disruptions, Innovations and Opportunities*	5 days	Virtual classroom
Airp	port Operations and Management		
19.	Aerodrome Safety Operations	<b>3</b> days	Virtual classroom
20.	Airport Management in COVID Recovery	5 days	Virtual classroom or in-person
21.	Airport Best Practices:		Virtual classroom or
	<ul> <li>Airport Ramp Operations (Fundamental)</li> </ul>	5 days	in-person
	<ul> <li>Airport Ramp Operations (Intermediate)</li> </ul>	5 days	
	<ul><li>Airport Ramp Operations (Intermediate)</li><li>Airport Ramp Management</li></ul>	5 days 4 days	
		•	
Cris	Airport Ramp Management	•	
<b>Cris</b> 22.	Airport Ramp Management (Modules can be taken as a stand-alone courses)	•	Virtual classroom or
	Airport Ramp Management (Modules can be taken as a stand-alone courses)  is Management	4 days	Virtual classroom or 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 <a href="https://caas.gov.sg/saa">https://caas.gov.sg/saa</a>

<sup>\*</sup>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 <u>Diploma in Aviation Safety Management</u> and an elective of the <u>Diploma in Civil Aviation Management</u>

### 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

### MODE OF DELIVERY

Virtual classroom or in-person available

Details on how to access the online course will be provided to successful applicants.

#### WHAT IS COVERED

- Safety Management Fundamentals
- ICAO Annex 19 SARPs
- SSP processes
- 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 <u>Diploma in Aviation Safety Management</u> and <u>Diploma in Civil Aviation Management</u>.

## 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

### MODE OF DELIVERY

Virtual classroom or in-person available

Details on how to access the online course will be provided to successful applicants.

### WHO SHOULD ATTEND

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

- 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

## MODE OF DELIVERY

In-person

Details on how to access the online course will be provided to successful applicants.

## 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

#### MODE OF DELIVERY

Virtual classroom or in-person available

Details on how to access the online course will be provided to successful applicants.

## 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.



# **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

### MODE OF DELIVERY

Virtual classroom or in-person available

Details on how to access the online course will be provided to successful applicants.

#### **DURATION**

5 days

## WHO SHOULD ATTEND

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

- 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).

#### MODE OF DELIVERY

Virtual classroom or in-person available

Details on how to access the online course will be provided to successful applicants.

#### 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

#### WHO SHOULD ATTEND

New flight operations inspectors and air operators' flight operations management professionals.

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



# **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

### MODE OF DELIVERY

Virtual classroom or in-person available

Details on how to access the online course will be provided to successful applicants.

#### 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

## WHO SHOULD ATTEND

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



# **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

# MODE OF DELIVERY

In-person

### 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.

- 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)

### MODE OF DELIVERY

In-person

## WHO SHOULD ATTEND

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

- 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 ar 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 (SMN and other related guidance materials.

This course is a core module of the <u>Diploma in Aviation Safety Management</u> 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

### MODE OF DELIVERY

Virtual classroom or in-person available

Details on how to access the online course will be provided to successful applicants.

### 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.



# Investigation of Cabin Safety Aspects in Accident 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.

### MODE OF DELIVERY

Virtual classroom or in-person available

Details on how to access the online course will be provided to successful applicants.

## 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

### WHO SHOULD ATTEND

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

It is recommended that you have a general understanding of national regulations relating to flight operations and cabin safety.



# **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 <u>Diploma in Aviation Safety Management</u>

### 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

## MODE OF DELIVERY

Virtual classroom or in-person available

Details on how to access the online course will be provided to successful applicants.

#### 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 <a href="Diploma in Aviation Safety Management">Diploma in Aviation Safety Management</a>

### 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

### MODE OF DELIVERY

Virtual classroom or in-person available

Details on how to access the online course will be provided to successful applicants.

### 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.



# **Civil Aviation Management Programme**

This programme provides you with an overview of the civil aviation sector, its major elements, and their interfaces in an integral eco-system. The Civil Aviation Management Programme (CAMP) comprises 2 modules. Either module can be taken as a stand-alone course. This programme is a core module of the Diploma in Civil Aviation Management.

Module 1 (Developing an Air Hub) examines the international context of aviation as well as the economics and strategies for development of a successful air hub.

Module 2 (Regulations and Future of Aviation) examines the role of aviation regulations and air traffic management. This module will also address future developments in aviation as well as recovery of the air transport sector.

### WHAT YOU WILL LEARN

Upon completion of the programme, you will be able to:

- Correlate how each component of the aviation ecosystem interacts with one another for safe and secure air transport operations
- Analyse aviation policies and strategies from the perspective of safety, security, facilitation, and air traffic management
- Examine future developments and recovery of the aviation sector
- Acquire new management perspectives to better develop aviation policies

### WHO SHOULD ATTEND

Aviation professionals who are a line manager in air transport development or department head with at least five years of experience in aviation.

#### MODE OF DELIVERY

Virtual classroom

Details on how to access the online course will be provided to successful applicants.

## WHAT IS COVERED

## Module 1 (Developing an Air Hub)

- International aviation system and policy
- Aviation and economic development
- Air transport development
- Airport development, strategic planning, economics and financing
- Airline economics and strategic planning
- Aviation forecasting and benchmarking
- Sustainable aviation

## Module 2 (Regulations and Future of Aviation)

International aviation safety framework

- State safety programme and safety management systems
- New aircraft technology and implications on safety
- Aviation security and facilitation policy
- Aviation crisis management
- Role of air traffic management (ATM), ATM developments and future of ATM





# The Geopolitics of Aviation

Jointly organised with the Centre for Air Transport Management, Cranfield University

This programme provides you with an understanding of the varied geographical and political landscape of the global aviation industry, as well as contemporary geopolitics, factors and forces which underpin global aviation today and in the future. This course is built on Cranfield University's expertise in air transport management, strategy and international aviation law. This programme is an elective of the <u>Diploma in Civil Aviation Management</u>.

## WHAT YOU WILL LEARN

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

- Explain how international aviation is structured
- Examine the characteristics and factors of air markets around the world
- Analyse air markets from a regional perspective
- Identify geopolitical forces impacting and shaping aviation globally as well as in the various regions
- Discuss the future of geopolitics and impact on aviation and possible solutions to mitigating geopolitical risks
- Conduct a strategic industry level analysis of the global airline industry using key economic, geographical, and political factors

## WHAT IS COVERED

- Structure of international aviation
- Geopolitical forces on aviation markets
- Regional perspectives
- Future of geopolitics and aviation

#### WHO SHOULD ATTEND

Middle-management from aviation authorities, regulatory bodies, airlines, airports, and consultants involved in international relations and government affairs.

#### MODE OF DELIVERY

Virtual classroom

Details on how to access the online course will be provided to successful applicants.



# **Aviation Management in COVID-19 Recovery**

This course provides you with the skills to identify the impacts of COVID-19 on the aviation ecosystem, including the challenges faced by airports and airlines, and possible restarting measures for a successful recovery.

### WHAT YOU WILL LEARN

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

- Understand the aviation ecosystem and requirements for facilitation in accordance with ICAO Annex 9 and IATA Airport Handling Manual
- Identify changes to the industry's landscape and correlate the measures adopted by airports and airlines to address the provisions of the ICAO Council Aviation Recovery Taskforce (CART) Report and the public health requirements of the countries which they operate in
- Develop and review collaborative strategies to support aviation recovery and restart

### WHO SHOULD ATTEND

Aviation professionals who are responsible for facilitation in airports.

## MODE OF DELIVERY

Virtual classroom or in-person available

Details on how to access the online course will be provided to successful applicants.

- Overview of the aviation ecosystem
- Facilitation "modified" processes
- Challenges faced by the Civil Aviation Authorities (CAAs) and airport operators; and possible strategies used to overcome issues caused by the new Border Health Control measures.
- Challenges faced by airlines in fulfilling the new COVID-19 related regulatory requirements and guidelines, possible strategies used to manage resources; and a discussion on how to remain viable
- Factors affecting the decisions made by various countries in the re-opening of their borders and the possible initiatives and arrangements practised so far
- Steps on boosting passengers' confidence on safe travel, use of technological solutions to control contagions and collaborative efforts amongst stakeholders to help their businesses emerge stronger post COVID-19





# Redefining Aviation of Tomorrow: Data Analytics and Machine Learning

Jointly organised with the National University of Singapore School of Continuing and Lifelong Education

This course provides you with the knowledge and skills to harness the power of data and draw useful insights using data analytics and machine learning techniques. You will explore use cases of data analytics in the aviation sector, gain hands-on experience working with aviation datasets, and develop your own data models using an open-source data mining tool (no programming required).

### WHAT YOU WILL LEARN

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

- Explain the principles of machine learning for diagnostic and predictive analytics in the context of aviation
- Examine the functions, user interface, and set-up of data mining tools
- Outline the key steps for data analytics
- Perform data analytics, on a given aviation dataset, using a data mining tool
- Discuss evaluation criteria for good data models

## WHO SHOULD ATTEND

Aviation professionals who use data frequently in day-to-day work and would like to be able to mine insights from big data.

### MODE OF DELIVERY

Virtual classroom

Details on how to access the online course will be provided to successful applicants.

- Introduction to data analytics and use cases
- Self-assessment and strategy development for Advancing data analytics in organisations
- Defining big data vision, scope of initiative, and blockchain
- Introduction to AI and machine learning
- Data visualisation, machine learning, Customer analytics
- Customer analytics: Data strategy and blockchain
- Data analytics strategy for airports
- Project pitching





# Redefining Aviation of Tomorrow: Disruptions, Innovations and Opportunities

Jointly organised with the National University of Singapore School of Continuing and Lifelong Education

This course provides you with a comprehensive understanding of how the aviation industry can leverage technology, capitalise on growth opportunities, and foster innovation to stay ahead of the competition. You will be versed in the range of Industry 4.0 technologies and analyse how they can be adapted and adopted by different segments of the aviation industry.

### WHAT YOU WILL LEARN

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

- Examine the impact of Industry 4.0 and its associated technologies
- Explain the connections between technology, innovation, business operations, and aviation
- Discover how new technology can shape the future of air travel
- Gain insights into how aviation organisations are integrating technology and innovation into their operations

#### WHO SHOULD ATTEND

Aviation professionals who use data frequently in day-to-day work and would like to be able to mine insights from big data.

### MODE OF DELIVERY

Virtual classroom

Details on how to access the online course will be provided to successful applicants.

- Introduction to data analytics and use cases
- Self-assessment and strategy development for Advancing data analytics in organisations
- Defining big data vision, scope of initiative, and blockchain
- Introduction to AI and machine learning
- Data visualisation, machine learning, Customer analytics
- Customer analytics: Data strategy and blockchain
- Data analytics strategy for airports
- Project pitching





# **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 aerodrome operations.

### WHAT YOU WILL LEARN

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

- Understand aerodrome certification, inspection and auditing principles
- Understand key principles fundamental to the safe running and management of an aerodrome
- Understand safety concerns in aerodrome operations

### WHO SHOULD ATTEND

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

### MODE OF DELIVERY

Virtual classroom

Details on how to access the online course will be provided to successful applicants.

- 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



## AIRPORT MANAGEMENT IN COVID RECOVERY

This course provides you with the knowledge and skills to examine the strategies adopted and challenges faced to develop a concerted response to COVID recovery in the aviation ecosystem.

### WHAT YOU WILL LEARN

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

- Analyse COVID's impact on the aviation ecosystem and analyse international recovery strategies
- Understand the global cooperation on aviation restart/recovery, challenges, and opportunities
- Evaluate the challenges in airport management, and crisis management and planning to evolve/adapt to the new operating environment

### MODE OF DELIVERY

Virtual classroom or in-person available

Details on how to access the online course will be provided to successful applicants.

### WHAT IS COVERED

- Regulatory and airport operators' framework, visà-vis Public-Private Partnership (PPP) models
- Evaluate Facilitation's impact on airlines and ground operations' modus operandi
- Managing international borders and health control
- Airport's challenges on terminal planning, rightsizing of handling capacity and changes in FAL matters

#### WHO SHOULD ATTEND

Aviation professionals with at least 5-10 years' experience who are involved in airport COVID recovery efforts and/or crisis management and planning.



# Airport Best Practices: Airport Ramp Operations and Management

This programme provides you with competencies to carry out airside operations smoothly and safely, by applying appropriate strategies to resolve common operational challenges in an airside environment. Each module can be taken as a stand-alone course.

Airport Best Practices: Airport Ramp Operations (Fundamental) is pre-requisite to the Airport Best Practices: Airport Ramp Operations (Intermediate) course.

**Airport Best Practices: Airport Ramp Management** will provide you with the knowledge on the intricacies and complexities of the airside environment, and enable you to better manage diverse issues faced in an airside environment.

### WHAT YOU WILL LEARN

Upon completion of Airport Ramp Operations (Fundamentals), you will be able to:

- Develop key performance indicators for a more efficient and safer airside operations environment
- Apply knowledge to mitigate common operational challenges at the airside
- Understand standard ramp operations terminologies

### WHAT IS COVERED

- Overview of airside operations
- Airside infrastructure and systems Airside operations' requirements
- Airside operations and management Roles and responsibilities
- Passenger and baggage handling services
- Ramp handling service
- Line maintenance and support
- Estate management (Airside)
- Apron and aircraft stand planning
- Safety clearances and ramp markings
- Aircraft stands and gate assignments
- Pest control and purpose
- Standard operating procedures
- Overview of airside safety
- Foreign Object Damage (FOD) management
- Managing Airside works

#### WHAT YOU WILL LEARN

Upon completion of **Airport Ramp Operations** (Intermediate), you will be able to:

- Develop key performance indicators for a more efficient and safer Airside Operations environment
- Understand standard ramp operations terminologies
- Apply knowledge to mitigate common operational challenges at the airside

- Airfield lighting systems
- Wildlife control
- Pest control and purpose
- Airside rules and regulations
- Airside accident investigation vehicles/equipment
- Aircraft accident investigation
- Contingency planning/pre-emptive alert culture
- Performance indicators and standards
- Airside fire safety requirements
- Aircraft recovery and equipment
- Oil farm and hydrant systems
- Airside operations/safety committee
- Overview of aerodrome control
- Airport security
- Airport operator organisation and safety management system



#### WHAT YOU WILL LEARN

Upon completion of **Airport Ramp Management**, you will be able to:

- Apply best practices to better manage the diverse issues in an airside working environment
- Gain practical knowledge on airside planning principles, considerations and concepts
- Understand collaborative decision-making processes involving the various industry players and agencies

### WHAT IS COVERED

- Overview of airside/ramp management
- Airside planning/development
- Airport security
- Working with government agencies and collaborating with airport partners
- Working with airline operators, low cost carriers, ground handling agents, and maintenance/cleaning contractors
- Airside policies and handling agreements
- Aerodrome certification impact on airside operations
- Air cargo management
- Crisis management and crisis management centre set-up
- Airport emergency plan
- Operations readiness and transfer
- Strategies in managing airside
- Airline operators committee
- Human factors

### MODE OF DELIVERY

Virtual classroom

Details on how to access the online course will be provided to successful applicants.

### WHO SHOULD ATTEND

Aviation professionals who are involved in airside operations and management, or supporting airport ground operations or airside safety.



# **Introduction to Crisis Management**

This course provides you with the knowledge to identify the different types of crisis and examine the best practices and appropriate applications of regulatory requirements in crisis management. This course is designed in accordance with ICAO Standards and Recommended Practices [Doc 9859, 9973 and 9998] and incorporates ICAO CART Guidance for COVID-19.

### WHAT YOU WILL LEARN

Upon completion of this course, you will be able to

- Identify the types and magnitude of aviation events and its impact on all affected parties
- Define the key elements of Crisis Management Plans
- Identify the regulatory requirements on immediate responses to an aircraft disaster
- Explain the effort required to support the mental resilience of affected passengers, crew and their families
- Articulate the key information needed and communicated during crises events
- Analyse the threat of UAVs (drones) intrusions at the airport and mitigating measures needed.
- Describe the impact of COVID-19 and the applications of various ICAO, IATA, ACI measures and initiatives by stakeholders.

### MODE OF DELIVERY

Virtual classroom or in-person

Details on how to access the online course will be provided to successful applicants.

### WHAT IS COVERED

- Key crises in the aviation industry
- Natural disasters and impact on aviation
- Air crash crisis
- Crisis Management
- Drone threats and mitigation
- Public health crisis for aviation

## WHO SHOULD ATTEND

Aviation professionals with responsibilities in crisis management and business continuity planning or those with about 2 to 5 years of experience in the aviation industry but are new to crisis management



# **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 <u>Diploma in Civil Aviation Management</u>

## 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

## 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

## MODE OF DELIVERY

Virtual classroom or in-person available

Details on how to access the online course will be provided to successful applicants.

- 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