Human Factors and Safety Management Fundamentals

Partner-taught classroom or Self-study course (25-30 hours of study)

This course will provide you with the principles of Human Factors and Safety Management Fundamentals and the necessary knowledge to foster and promote a positive safety culture within your organization. Topics include the four core disciplines of human factors; models that are used to explain the Human Factor; the influence of culture; and human error. ICAO states that the consideration of human factors is an integral part of safety management, necessary to understand, identify and mitigate risks as well as to optimize the human contribution to organizational safety. It is all about the behavior of the human in relation to safety and risk. The safety culture is the natural consequence of having humans in the aviation system.

Objectives

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

Explain Safety Management Fundamentals as described in ICAO Doc 9859, 4th Ed.

Describe why safety management processes must consider Human Factors

Describe the changes of greatest physiological significance in day-to-day flight operations

Explain Social Psychology, Organizational Psychology and Cognitive Psychology

Describe and explain the 4-step procedure of designing safety into the system

Describe and explain the main components of Culture, Positive Culture and Safety Culture

Target audience

- Entry-level aviation employees
- Newly hired staff of Airlines, Airports, Ground Handlers, ANS providers, AMO's

Study with an Instructor

If you would prefer to study this course with the help of a local trainer, you can choose to enrol at an IATA Authorized Training Center near you.

Key topics

- Introduction to human factors and safety management fundamentals
- Human factors and human factors models
- Physiology and physiological work conditions
- Aviation psychology
- System safety
- Culture, positive and safety culture
- Human error

Recommended level

- Entry-level

Course format

- This is a self-study course, which will take you approximately 25-30 hours to complete depending on your previous knowledge and experience.
- The course materials are provided in e-book format.
- You will have 12 months to complete the course and exam (enrollment validity), which starts from the date you purchase the course.
- Your performance will be based on an examination.

Please note:
- Once you have completed the exam you will no longer have access to the course material.
- After the enrollment validity expires you will no longer have access to the course content, nor will you be able to take the exam.

Exam information

- Online exam with remote supervision (OERS)

- You will be given 2.5 hours to complete 60 multiple choice questions. Closed course book.

- Passing grade is 60% correct answers; 85% correct answers are needed for a distinction

- You will be given 2 attempts to successfully complete the final exam.

Certificate Awarded

Upon successful completion of the exam, you will be awarded a Certificate available for you to print for your records.

Associated diplomas

You may also apply this course toward an IATA Diploma in Aviation Safety Fundamentals.

Table of contents

Introduction to Human Factors and Safety Management

- Overview of Human Factors and Human Performance
- Evolution of aviation safety
- Safety Management Systems

Human Factors Models

- Models used to explain the Human Factor

Human Factors

- Four core disciplines of human factors

Ergonomics

Physiology

- Impact of flying on physical and mental health
- Standard atmosphere
- Respiration and circulation system
- Possible problems in day-to-day operations
- The brain, its important parts and functions
- Information processing and the memory system
- The sensory system, the eye and ear

Physiological Work Conditions

- Fatigue, sleep, stress, illumination, noise
- Work and task-load

Aviation Psychology

- Communication process
- Leadership
- Decision making
- Teamwork

System Safety

- The components of system safety

Positive and Safety Culture

- Diverse cultures
- Positive culture
- Safety culture

Human Error

- Reason Model or Swiss Cheese Model
- Modern view on Human Error
- Dirty Dozen
- Error management

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Please contact us www.iata.org/training-contact if you have any questions

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