

# Safety and Human Factors in Aviation

# MSc/PgDip/PgCert

This course has been designed to provide industry with equipped graduates who can make a real and lasting improvement to performance and safety through the application of skills and knowledge learnt through a mix of lectures and practical exercises.

This course attracts a wide variety of students from aviation professionals in civil and military domains to high-quality graduates in engineering and social science disciplines. Delivered through the specialist Safety and Accident Investigation Centre, operating for over 30 years to support global safety and investigation, this course is unique in that it synthesises the study of human factors with the study of safety and safety assessment, creating a powerful combination to really add-on value in applied aviation and safety critical contexts. It is designed to provide industry with successful and well equipped graduates who can make a real and lasting improvement to performance and safety through the application of skills and knowledge learned on the course.

Demand for human factors and safety expertise continues to be a growing area within aviation as well as other safety critical industries. Safety critical systems require high human performance in addition to engineering excellence to meet the safety and business requirements of the aviation industry.

## Course structure

The MSc in Safety and Human Factors in Aviation consists of taught modules, Elective taught modules and group project modules. Students will also complete an individual research project.

# Individual project

Each MSc student is required to undertake an individual research project. The output of this project is a written report presented in the format of a scientific paper. The project aims to provide students with an opportunity to apply the technical and analytical skills taught during the course, in a practical way.

## Group project

Two group projects are completed by students - please see the website for details.

## Future career

There are strong employment prospects for graduates in safety-related management and operational positions. Course graduates generally find suitable employment in a range of safety and human factors related roles.

# Example modules

The taught propgramme consists of complusory and Elective modules.

## **Compulsory:**

- · Aircraft Accident Investigation and Response,
- · Applied Safety Assessment,
- · Aviation Medicine,
- Aviation Safety Management,
- · Cognitive Ergonomics,
- · Human Performance and Error,
- · Human-Computer Interaction in Aviation,
- · Research Methods,
- · Safety Assessment of Aircraft Systems.

#### **Elective**

- · Flight Data Monitoring,
- · Human Factors in Aviation Maintenance,
- · Training and Simulation.

### **Duration:**

MSc: Full-time - one year, Part-time - up to three years, PgDip: Part-time, two years, PgCert: Full-time - up to one year, Part-time - two years.

## Start date:

October.

## Location:

Cranfield Campus.

## **Entry requirements:**

A first or second class UK Honours degree or equivalent in engineering, aeronautical engineering, mathematics, ergonomics, psychology or other science. Other qualifications (e.g. HND or alternative) may be acceptable, provided that there is evidence of sufficient relevant work experience.

Applicants who do not fulfil the standard entry requirements can apply for the Pre-master's in Engineering programme, successful completion of which will qualify them for entry to this course for a second year of study.

# **ATAS Certificate:**

Students requiring a visa to study in the UK may need to apply for an ATAS certificate to study this course.

# Contact details

T: +44 (0)1234 758083

E: studytransport@cranfield.ac.uk

For further information please visit www.cranfield.ac.uk/sahfia