



# Military Aerospace and Airworthiness MSc

[www.cranfield.ac.uk/maa](http://www.cranfield.ac.uk/maa)

**This course has been designed to address the needs of employees in the Ministry of Defence (MoD), the armed forces and the international defence industry. It provides practising engineers with the knowledge and skills to enable them to work more effectively in aerospace engineering, airworthiness and safety.**

Today's military aviation platforms are complex systems and it is essential, therefore, that they are deployed and maintained in such a way as to ensure their continued airworthiness and the safety of the crew operating them. Achieving this requires engineers to be cognisant of a broad range of aerospace engineering, airworthiness and safety disciplines.

## Who is it for?

The course draws students from the UK and Western Europe, giving an eclectic mix to the classroom environment. Maximum number of places: 25 per year.

The course structure allows students to continue in full-time employment whilst they are studying.

## Your career

The course creates opportunities to develop your career at a more senior level and in achieving Incorporated or Chartered Engineer status.

## Cranfield Careers and Employability Service

Cranfield's Career Service is dedicated to helping you meet your career aspirations. You will have access to career coaching and advice, CV development, interview practice, access to hundreds of available jobs via our Symplicity platform and opportunities to meet recruiting employers at our careers fairs.

Our strong reputation and links with potential employers provide you with outstanding opportunities to secure interesting jobs and develop successful careers. Support continues after graduation and as a Cranfield alumnus, you have free life-long access to a range of career resources to help you continue your education and enhance your career.



## Overview

### Start date

September

### Duration

MSc: up to three years part-time; PgDip: up to two years part-time; PgCert: up to two years part-time

### Study type

Part-time

### Qualification

MSc, PgDip, PgCert

### Structure

A mixture of lectures, laboratory demonstrations, tutorials, essays, examinations, individual and group design exercises. In addition, for MSc students a written dissertation research project and viva voce examination.

### Campus

Cranfield campus, Cranfield University at Shrivenham

### Entry requirements

We welcome applications from talented individuals of all backgrounds and each application is considered on its individual merit. Usually applicants must hold:

A UK first or second class undergraduate degree with honours, as a minimum, or equivalent international qualification.

- Ideally applicants will have studied in science, engineering or mathematics subjects.

## Fees

Please see [www.cranfield.ac.uk/fees](http://www.cranfield.ac.uk/fees) for detailed information about fee status, full-time and part-time fees as well as deposit requirements and bursary and scholarship information.

## Course details

The course is delivered on a part-time basis and contains six compulsory modules. Students choose a further six modules plus a thesis to complete the MSc.

This provides students with the flexibility to tailor their studies to account for prior educational and work experience and the current and future needs of their employment role. The modules taken in the taught phase of the MSc (the PgDip) provide students with the knowledge and skills necessary to complete a research-based project, which forms the final part of the master's award.

### Modules

Keeping our courses up-to-date and current requires constant innovation and change. The modules we offer reflect the needs of business and industry and the research interests of our staff. As a result, they may change or be withdrawn due to research developments, legislation changes or for a variety of other reasons. Changes may also be designed to improve the student learning experience or to respond to feedback from students, external examiners, accreditation bodies and industrial advisory panels.

To give you a taster, we have listed below the compulsory and elective (where applicable) modules which are currently affiliated with this course. All modules are indicative only, and may be subject to change for your year of entry.

### Compulsory modules

All the modules in the following list need to be taken as part of this course:

- **Airworthiness of Military Aircraft,**
- **Aviation Safety Management,**
- **Fixed-Wing Aeromechanics,**
- **Military Aircraft Systems,**
- **Propulsion Systems,**
- **Safety Assessment of Aircraft Systems,**
- **Study Skills (non-assessed).**

### Elective modules

Select six from the list below:

- **Aircraft Accident Investigation and Response,**
- **Aircraft Fatigue and Damage Tolerance,**
- **Aircraft Survivability,**
- **Aviation Maintenance Operations,**
- **Design Durability and Integrity of Composite Aircraft Structures,**
- **Fundamentals of Aircraft Engine Control,**
- **Guided Weapons,**
- **Human Factors in Aircraft Maintenance,**
- **Introduction to Aircraft Structural Crashworthiness,**
- **Military Avionics -STA Communications and Navigation,**
- **Practical Reliability,**
- **Rotary-Wing Aeromechanics,**
- **Uninhabited Aircraft Systems / Remotely Piloted Aircraft Systems.**

## Accreditation

The MSc of this course has been accredited by the Royal Aeronautical Society under licence from the UK regulator, the Engineering Council as meeting the requirements for Further Learning for registration as a Chartered Engineer. Candidates must hold a CEng accredited BEng/BSc (Hons) undergraduate first degree to comply with full CEng registration requirements.

Accreditation is a mark of assurance that the degree meets the standards set by the Engineering Council in the UK Standard for Professional Engineering Competence (UK-SPEC). An accredited degree will provide you with some or all of the underpinning knowledge, understanding and skills for eventual registration as an Incorporated (IEng) or Chartered Engineer (CEng). Some employers recruit preferentially from accredited degrees and an accredited degree is likely to be recognised by other countries that are signatories to international accords.



## Class profile

Based off  
25/26 cohort

### Gender

Male 28 / female 9 / other 1

### Age

21-59

### Nationality

UK 55 / international 2

### Class size

57

### ATAS clearance

This course requires Academic Technology Approval Scheme (ATAS) clearance.

ATAS is run by the UK Government's Foreign, Commonwealth and Development Office (FCDO) and applies to international students, except exempt nationalities, who need a visa to study in the UK. Further information can be found in our [Application guide](#).

For more information contact Admissions:

T: +01234 758082

[Enquiry form](#).

Visit campus for yourself and meet current students and our academics at our next Open Day:

[www.cranfield.ac.uk/openday](http://www.cranfield.ac.uk/openday)

### March 2026

Every effort is made to ensure that the information provided here is correct at the time it is published. Please check our website for the latest information.