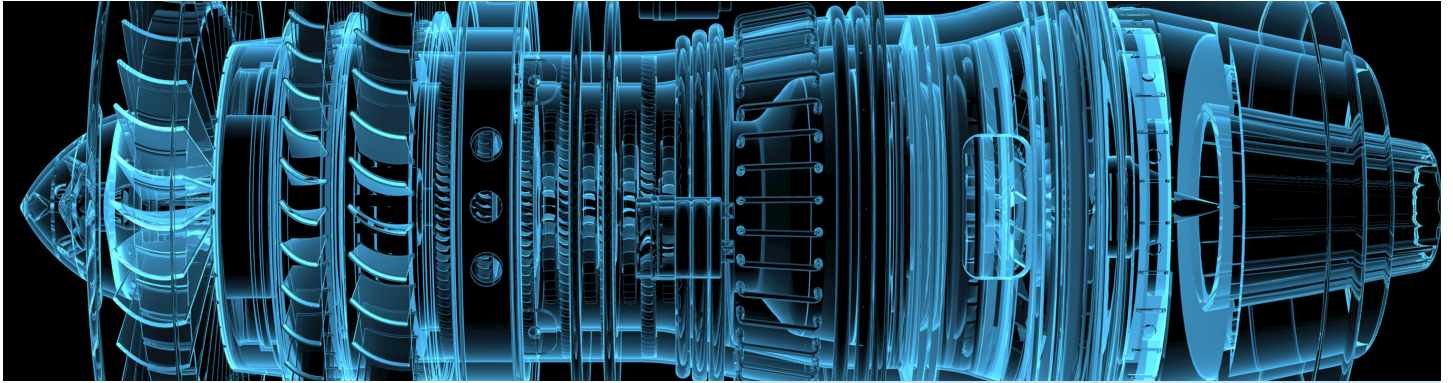




Aircraft Engineering MSc

www.cranfield.ac.uk/AircraftEng



With a projected demand for 27,000 new civil airliners by 2030, the industry faces a shortfall in postgraduate-level engineers to meet future industry needs. Aircraft engineers need a combination of technical and business skills for today's aerospace engineering projects.

This course will broaden your understanding of aircraft engineering and design subjects and provide you with a strong foundation for career development in technical, integration and leadership roles.

Who is it for?

We recognise the challenge of undertaking part-time study while you are working. This course is specifically designed for people working in engineering or technical management positions in the aerospace industry who wish to study for an accredited master's degree while they are in employment.

You are required to attend a total of nine weeks of lectures over three years on a modular basis. The first-year attendance includes one week in February, followed by one week in June and one week in November. As well as six compulsory modules, you will choose three optional modules in order to tailor the course to your particular interests and requirements.

Why this course?

This course provides accelerated development of engineering staff whilst delivering the right mix of technical and business skills for careers in the aerospace industry. The course will broaden your understanding of aircraft engineering and design subjects and provide a strong foundation for career development in technical, integration and leadership roles. This accredited master's course supports your career development by meeting the further learning requirements for Chartered Engineer status. The group project allows you to gain experience of overall aircraft early stage design, and the individual project allows you to investigate a topic that is of interest to your employer, with supervision from experienced staff.

Your career

This course will provide you with the tools and experience to help enhance your career opportunities in the aerospace industry, enabling you to progress further in your present discipline, or move into other specialist or integration roles. Networking with students from different backgrounds is valuable to gain an appreciation of how other companies work.

This course can be used for Chartered Engineer status, which can result in new career opportunities for the future.

Overview

Start date
February

Duration
MSc: three or two years part-time; PgDip: two years part-time; PgCert: one or two years part-time

Qualification
MSc, PgDip, PgCert

Study type
Part-time

Structure
Taught modules 50% (including group project 10%), individual research project 50%

Campus
Cranfield campus

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 lower second-class (2:2) undergraduate degree with honours, as a minimum, or equivalent international qualification.

Ideally, applicants will have studied in an engineering discipline.

Find information about equivalent qualifications in your country on our International entry requirements page.

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.

Fees

Please see 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 MSc in Aircraft Engineering consists of two elements: taught modules (including a group design project) and an individual research project.

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.

Initial Aerospace Vehicle Design

Major Component Design and Manufacture

Manufacturing

Methodologies for Integrated Product Development

Tools for Integrated Product Development

Elective modules

Select two from the list below

Aircraft Fatigue and Damage Tolerance

Aircraft Loading Actions and Aeroelasticity

Aircraft Performance for Aircraft Engineering

Design and Development of Airframe Systems

Design, Durability and Integrity of Composite Aircraft Structures

Detail Stressing

Finite Element Analysis

Flight Dynamics Principles for Aircraft Engineering

Introduction to Aircraft Structural Crashworthiness

Introduction to Autonomous Systems

Introduction to Avionics

"I studied Aircraft Engineering part-time at Cranfield. I am currently working for Martial Aerospace in Cambridge as a design engineer. I think Cranfield is a reputable University, world renowned. So to get a university degree from here is an absolute honour."

Taiyib Hussain

Design Engineer, Martial Aerospace, Aircraft Engineering MSc (2016)

Accreditation

The Aircraft Engineering MSc is accredited by Mechanical Engineers (IMechE) and the Royal Aeronautical Society (RAeS) on behalf of the Engineering Council as meeting the requirements for further learning for registration as a Chartered Engineer (CEng). Candidates must hold a CEng accredited BEng/BSc (Hons) undergraduate first degree to show that they have satisfied the educational base for CEng registration.



For more information contact our Admissions Team:
T: +44 (0)1234 758082

Visit campus for yourself and meet current students and our academics at our next Open Day:
www.cranfield.ac.uk/opensday

February 2025

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.