



Aviation Digital Technology Management MSc

www.cranfield.ac.uk/ADTM



As more intelligent and conscious aircraft enter service, aircraft and support systems are also becoming more intelligent. The future of aviation increasingly points towards electric and hydrogen-powered technologies, autonomous flying taxis and space commercialisation. These new realities will require leaders with digital skills to innovate solutions towards sustainability and efficiency in aviation.

The Aviation Digital Technology Management MSc develops professionals with the ability to innovate and apply digital technology in the aerospace industry. The course gives graduates from aeronautical and engineering backgrounds the digital skills and capabilities required to develop a career that goes beyond design and manufacture and will open up wider aviation industry opportunities.

Who is it for?

This course is applicable to a broad range of applicants with backgrounds from aerospace, engineering, maths, physics and computing to experienced professionals looking to gain new skills in the area of digital aviation technology.

The course is also a route for non-aerospace engineering and computing graduates who aspire to enter the aviation industry. In addition, the course is a career development path for aerospace industry professionals to boost their digital and innovation skills.

Your career

Industry-led education makes Cranfield graduates some of the most desirable all over the world for recruitment by both global primes to smaller innovative start-ups looking for the brightest talent.

Graduates of the course should find engineering and management opportunities in the aviation ecosystem, including operators, maintenance organisations, financiers, airports and future spaceport operators.

Graduates will be equipped with the advanced skills which could be applied to the aviation, air traffic, air transport, security, defence and aerospace industries. This approach offers you a wide range of career choices in current and emerging roles. Others decide to continue their education through PhD studies available within Cranfield University or elsewhere.

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.

Overview

Start date

October

Duration

Full-time one year; part-time up to three years; PgCert 1 year; PgDip 2 years.

Qualification

MSc, PgDip, PgCert

Study type

Full-time / Part-time

Structure

Taught modules 40%, group project 20% (or dissertation for part-time students), individual research project 40%.

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 engineering, engineering science, physics, applied mathematics, or other appropriate applied science disciplines.

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

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

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 course consists of three weighted components, taught modules an individual research project and a group project.

Between October and January, students study eight taught modules. The content delivery is organised as one week contact time followed by private study time to complete the assessments. Pre-work and post-work are incorporated as appropriate. Private study weeks are spaced through the October to January period.

Students are supported in their learning and personal development through participation in: industry seminars, group poster session, group discussions, group presentations, video demonstrations, case studies, laboratory experiments, coursework and project work. Students will receive hands-on experience accessing equipment and facilities within our Digital Aviation Research and Technology Centre and Aerospace Integration Research Centre.

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.

Aviation Digitalisation

Aviation Applied Computing

Data-centric Aircraft Systems

Predictive Maintenance Technology

Aerospace Inspection and Monitoring Tools

Digital Aviation Operations and Maintenance Management

Digital Aviation Supply Chain Management

Communications and Cybersecurity in Aviation

"Cranfield's new MSc in Aviation Digital Technology Management will provide industry with the skills needed to develop integrated digital systems capability to support aircraft operations. This MSc will help develop people who understand the ecosystem of aviation operations and the systems requirements needed to create innovative solutions for the future."

Dominic Allen

Field Operations, UK & Europe, Boeing

Accreditation

Accredited by BCS, The Chartered Institute for IT for the purposes of partially meeting the academic requirement for registration as a Chartered IT Professional and Accredited by BCS, The Chartered Institute for IT on behalf of the Engineering Council for the purposes of partially meeting the academic requirement for a Chartered Engineer.

This course is accredited with the BCS until August 2028. Candidates must hold a CEng-accredited BEng/BSc (Hons) undergraduate first degree to comply with full CEng registration requirements.



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/openday

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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.