

Academic year
2025/26 entry



Postgraduate master's courses in

Aerospace

Cranfield University

Our reputation

We are the UK's only specialist postgraduate university in technology and management, with longstanding relationships with some of the most prestigious global companies. Our close collaboration with industry, and passion for the areas we operate in, will help your career.



**Specialist
postgraduate**

A research-focused
professional community.



We work with over

1,500

businesses and governments
based in over 40 countries.



Over £150m

of investment in new
facilities over the past
five years.



5,000+

postgraduate
students from
100+ countries.



A network of

80,000+
alumni, from
170+ countries.

As we are postgraduate only, we are not listed in many league tables that help compare undergraduate universities.

What our alumni say

"This programme wasn't just an academic chapter; it was the launch pad for my career trajectory. Surrounded by brilliant minds and hands-on experiences, I sculpted my passion into expertise that now propels my professional journey at Airbus. During my year at Cranfield, I learnt not only theoretical but also practical knowledge that I apply every day in my job."

Penelope Asuero Llanes, Stress Repair Engineer, Airbus
(Advanced Lightweight and Composite Structures
MSc 2021)





Reasons to study aerospace with us

1

Aerospace Integration Research Centre

Co-funded by Airbus, Rolls-Royce and the Higher Education Funding Council for England, this £35 million collaboration between industry and academia is developing the breakthrough solutions that will radically change the design of aircraft for the future.

2

Specialist technical facilities

In addition to our runway, global research airport, wind tunnels, flight simulators and air and space propulsion laboratories, our newest research facility, the £67 million Digital Aviation Research and Technology Centre (DARTeC) addresses the challenges and opportunities in the digital aviation technology field.

3

From concept to flight

Our industry-scale production and testing capabilities ensure that our ground-breaking, research-generated design concepts can be taken from the drawing board to the runway.

4

Global contribution

Our work embraces the entire spectrum of aviation, combining academic excellence and strong industry focus. We work with leading businesses, including Airbus, BAE Systems, Boeing, Rolls-Royce and Thales, directly contributing to the economic growth of the global aerospace sector.

5

Centre of aerospace excellence

We are the UK's top destination for aerospace engineering postgraduate students and the largest provider of accredited aerospace degree courses.

6

Career development

Our alumni go on to enjoy successful careers in aerospace, space and associated industries. Many senior employees in global aerospace organisations around the world have a connection to Cranfield, as former students, researchers or through our professional development programmes.

Course structure

Our specialist, sector-focused master's courses are set up and developed in close collaboration with industry partners, ensuring the content of our courses remains industry-relevant and employers are impressed with our graduates' business-readiness.

This diagram illustrates the standard course structure for our master's programmes. Please check your course structure online for more detailed information.



What our alumni say

"I chose Cranfield as it is a prestigious university, and I chose this course as I wanted to study data science. My individual project was an internship at Teads, and focused on distributed training applied to deep learning. During my time at Cranfield, I took advantage of the sport, accommodation and library facilities. It was one of the best things about my time at Cranfield, to have a great room to stay in, a place to study and the facilities to practice sport."

Gerard Hugues, Machine Learning Engineer, Teads,
(Computational and Software Techniques in Engineering
MSc 2022)



Industry links

Cranfield has unrivalled links with industry, and you will benefit from our extensive contacts and track record of close collaboration with decision-makers in your chosen sector.

These benefits range from the high-profile guest speakers we are able to attract, to the ability to network with future employers at our group presentation days and careers fairs held on campus.



Industrial advisory panel

Our courses are reviewed each year by a panel of industry experts to ensure that students graduate from Cranfield with the appropriate knowledge and skills to become future leaders in the industry.

Some of the companies represented on our aerospace courses industrial advisory panel include Airbus, BAE Systems, Boeing and Thales.



Careers

Our alumni can be found around the world in leading roles. Here are a few examples of the roles our alumni have secured in recent years:

Roles:

- Aerodynamics Engineer,
- Aerospace Engineer,
- Computational Fluid Dynamics Engineer,
- Flight Test Engineer,
- Fuel System Engineer,
- Performance Engineer,
- Robotics Engineer,
- Senior Systems Engineer,
- Structural Integrity Engineer,
- Turbine Designer.

Companies:

- Airbus,
- Alpine F1 Team,
- Alstom,
- Altran,
- BAE Systems,
- Boeing
- Dassault Aviation,
- GKN Aerospace,
- Rolls-Royce,
- Safran,
- Siemens,
- Thales.

Read more on our website: www.cranfield.ac.uk/careers

Courses

Cranfield University is at the forefront of the global aerospace technology industry and has provided world-class postgraduate education and training for over 75 years. With our drive towards net zero, the development of expertise and innovations across multiple fields pertaining to the aviation ecosystem and beyond is critical to success. As the only university in Europe with its own airport, aircraft and air navigation service provider, Cranfield offers a unique opportunity to students to contribute to this globally-relevant mission.

The courses described in this brochure are a perfect illustration of the breadth and depth of our aerospace portfolio, providing you with skills and expertise valued around the world. Within a number of courses there are a range of options to suit individual interests.

Compulsory modules are listed in the order they are delivered. Elective modules are listed alphabetically.

Aerospace Dynamics

www.cranfield.ac.uk/Aerodynamics	Full-time/Part-time	MSc, PgCert
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This course provides both fundamental and applied knowledge to understand airflows, vehicle dynamics and control and methods for computational modelling. It will provide you with practical experience in the measurement, analysis, modelling and simulation of airflows and aerial vehicles. You have the choice of two specialist options which you choose once you commence your studies: **Flight Dynamics** or **Aerodynamics**.

Compulsory modules

- Flight Experimental Methods.
- Fundamentals of Aircraft System Identification,
- Fundamentals of Rotorcraft Performance Stability and Control,
- Introduction to CFD,
- Launch and Re-Entry Aerodynamics,
- Multivariable Control Systems for Aerospace Applications,
- Technology for Sustainable Aviation,
- Transonic Aerodynamic Design,
- Viscous Flow.

Elective modules (choose three)

- Aerospace Navigation and Sensors,
- Air-Vehicle Modelling and Simulation,
- CFD for Aerospace,
- Compressible Flows,
- Control Systems,
- Experimental Aerodynamics,
- Flight Dynamics Principles,
- Flying Qualities and Flight Control,



The compulsory and (where applicable) elective modules offered for the 2024-25 academic year are shown to give you an indication of the current course content. To keep our courses relevant and up-to-date, relevant and for practical purposes, modules may be subject to change from cohort to cohort; please check our website for the latest information.

Advanced Air Mobility Systems

www.cranfield.ac.uk/AdvAirMobility	Full-time/Part-time	MSc
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The Advanced Air Mobility Systems MSc is designed to equip you with the skills required to pursue a successful career in transforming the aviation industry, applying the knowledge learned to introduce new automated and autonomous solutions, to enable a safe, orderly and expeditious integrated airspace, where uncrewed aerial systems operate alongside crewed aircraft.

Compulsory modules

- Introduction to Advanced Air Mobility,
- Statistical Learning Methods,
- Air Traffic Management Systems,
- Communications Systems,
- Uncrewed Traffic Management,
- Data Analytics and Visualisation,
- Artificial Intelligence for Autonomous Systems,
- Guidance and Navigation for Autonomous Systems.

Advanced Lightweight and Composite Structures

www.cranfield.ac.uk/LWCompStructures	Full-time	MSc
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With applications in aerospace, automotive, motorsport, marine and renewable energy industries, the Advanced Lightweight and Composite Structures MSc covers topics in structural design and analysis, impact and crashworthiness, material characterisation and failure analysis, advanced simulation of lightweight metallic and composite structures. Designed to meet the requirement of next generation engineers, you will gain the knowledge and skills to design and develop green and sustainable aircraft, electric vehicles and wind turbine structures.

Compulsory modules

- Introduction to Continuum Mechanics,
- Advanced Composite Analysis and Impact,
- Thin-walled Structures,
- Finite Element Methods,
- Materials Characterisation and Failure Simulations,
- Structural Stability,
- Advanced Simulation for Impact,
- Crashworthiness.

 Accredited by:





Aerospace Computational Engineering

www.cranfield.ac.uk/AeroCompEng	Full-time/Part-time	MSc, PgDip, PgCert
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Within the next five years there will be a demand for engineers and leaders who will be using 100% digital techniques for aerospace applications, design and testing. This specialist course covers a wide range of applications focused on aerospace computational aspects.

Compulsory modules

- Computational Methods (Integrated),
- C++ Programming (Integrated),
- Computational Aerodynamics,
- Validation and Verification for Aerospace Applications,
- Modelling Approaches for Aerospace Applications,
- Numerical Modelling for Compressible Flows,
- Computational Engineering Structures,
- CAD and Airframe Design.

Aerospace Vehicle Design

www.cranfield.ac.uk/AerospaceVehicleDesign	Full-time	MSc
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This MSc aims to build up your knowledge of the design of flying vehicles such as aircraft, missiles, airships and spacecraft. Select from one of three specialist options and excel in a growing aerospace industry:

- **Aircraft Design (AD)** - a comprehensive overview of aircraft performance, structures and systems.
- **Avionics Systems Design (ASD)** - understand the design of avionic systems, analysis, development, test and airframe integration.
- **Structural Design (SD)** (October intake only) - covers aircraft structures, airworthiness requirements, design standards, stress analysis, fatigue and fracture and fundamentals of aerodynamics and loading.



Accredited by:



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Modules

	AD	ASD	SD
Loading Actions	✓		✓
Design of Airframe Systems	✓	✓	AO
Avionics Air Traffic Control		✓	
Detail Stressing	AO		✓
Cockpit Environment		✓	
Modelling of Dynamic Systems		✓	
Aircraft Stability and Control	✓	✓	AO
Design and Analysis of Composite Structures	✓		✓
Control Systems		✓	
Reliability, Safety Assessment and Certification	✓	✓	✓
Fatigue, Fracture Mechanics and Damage Tolerance	AO		✓
Inertial and Satellite Navigation Systems		✓	
Aerospace Software Engineering and ADA		✓	
Aircraft Performance	✓	✓	AO
Design for Manufacture and Operation	✓		✓
Finite Element Analysis	AO		✓
Initial Aircraft Design	✓	AO	✓
Radio Systems		✓	
Aeronautical Communication Systems		✓	
Avionics Data Networking, Hardware Integration and Testing		✓	
Integrated Navigation Systems		✓	
Fault Tolerant Avionics Design		✓	
Structural Stability	AO		✓
Flight Test Experience	✓	✓	AO
Aeroelasticity	AO		AO
Aerospace System Development and Life Cycle Model	AO	AO	AO
Aircraft Aerodynamics	AO	AO	AO
Aircraft Power Plant Installation	AO	AO	AO
Computer Aided Design	AO	AO	AO
Integrated Vehicle Health Management	AO	AO	
Landing Gear Design	AO		AO

✓ = Compulsory modules AO = Attendance only

Notes:

1. To successfully complete the MSc, certain modules are compulsory and hence marked accordingly.
2. You will be required to select some attendance only modules to meet the total number of teaching hours for the course. These will allow you to customise your studies and aid in your group project and individual thesis. They do not count as credits towards your final mark.

Computational and Software Techniques in Engineering

www.cranfield.ac.uk/CompSWTechEng

Full-time/Part-time

MSc

Engineering software development is one of the key areas in the information technology sector. This course with its blend of skills-based and subject-specific material, has the fundamental objective of equipping you with the generic hands-on skills and up-to-date knowledge adaptable to the wide variety of applications that this field addresses. Choose from four specialist options:

- **Computational Intelligence for Data Analytics (CIDA)** - focuses on the fundamentals of computationally intelligent data handling algorithms and their application in disciplines needing fast and automated decision-making.
- **Computer and Machine Vision (CMV)** - focuses on aerial and robotic vision-based systems and the theory and application of signal processing and computer vision algorithms.
- **Digital Engineering Design (DEE)** - provides the skills necessary to develop and use core CAD and CAE solution software in diverse industrial settings.
- **Software Engineering for Technical Computing (SETC)** - provides a unique insight into the development of computer applications across modern computing environments.



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The Institution of
Engineering and Technology

Modules

	CIDA	CMV	DEE	SETC
Advanced Java and Advanced Python	✓			
Computational Methods		✓	✓	✓
C++ Programming	AO	AO	AO	AO
Machine Learning and Big Data	✓			
Signal Analysis		✓		
Digital Engineering and Product Design			✓	
Requirements Analysis and System Design				✓
Data Visualisation	✓			
Digital Signal Processing		✓		
Computational Optimisation Design			✓	
Software Testing and Quality Assurance				✓
High Performance Technical Computing	✓			✓
Image Processing and Analysis		✓		
Geometric Modelling and Design			✓	
Small Scale Parallel Programming	✓			✓
Computer Vision		✓		
Computational Engineering Fluids			✓	
Artificial Intelligence	✓			
Management for Technology		✓	✓	
Visualisation				✓
Applications in Computational Intelligence	✓			
Machine Learning for Computer Vision		✓		
Computational Engineering Structures			✓	
Applications in Practical High-End Computing				✓
Cloud Computing	✓			✓
Visualisation		✓	✓	
Applications of Computer Vision		✓		
Applications of Computational Engineering Design			✓	

✓ = Compulsory modules AO = Attendance only

Notes:

1. To successfully complete the MSc, certain modules are compulsory and hence marked accordingly.
2. You will be required to select some attendance only modules to meet the total number of teaching hours for the course. These will allow you to customise your studies and aid in your group project and individual thesis. They do not count as credits towards your final mark.

Aircraft Engineering

www.cranfield.ac.uk/AircraftEng	Part-time	MSc, PgDip, PgCert
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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.

Compulsory modules

- Introduction and Initial Aerospace Vehicle Design,
- Major Component Design and Manufacture, Manufacturing,
- Methodologies for Integrated Product Development,
- Tools for Integrated Product Development.
- 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.

Electives (choose two)

- Aircraft Fatigue and Damage Tolerance,
- Aircraft Loading Actions and Aeroelasticity,
- Aircraft Performance for Aircraft Engineering,



Accredited by:



ROYAL
AERONAUTICAL
SOCIETY

Applied Artificial Intelligence

www.cranfield.ac.uk/AAI	Full-time/Part-time	MSc
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Artificial intelligence technologies are being increasingly adopted across a broad range of industries, creating demand for talented graduates who can help realise the transformative potential of AI. With a fundamental interest in AI, machine vision and computer sciences, you will have the desire to apply this knowledge to solve real world engineering problems.

Taught through a unique combination of theoretical and practical-based sessions you will cover subjects in logic and reasoning, data analytics, deep learning, agent architectures, alongside the broader systems engineering and ethical considerations required for implementation in real-world systems.

Compulsory modules

- Statistical Learning Methods,
- Search and Optimisation,
- Deep Learning for Computer Vision,
- Intelligent Cyber-Physical Systems,
- Data Analytics and Visualisation,
- Deep Learning for Autonomous Decision Making,
- Logic and Automated Reasoning,
- Ethical, Regulatory and Social Aspects of AI.

Astronautics and Space Engineering

www.cranfield.ac.uk/AstroSpaceEng	Full-time/Part-time	MSc
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There is a continuing need for talented employees with a good understanding of spacecraft systems engineering, coupled with a broad range of technical skills. Evolving constantly since 1987, the Astronautics and Space Engineering MSc has consistently prepared graduates for highly successful careers in the space sector, from earth observation to planetary exploration, launch vehicles to spacecraft operations, and much more.

Compulsory modules

- Astrodynamics and Mission Analysis,
- Space Propulsion,
- Space Systems Engineering.

Electives (choose two)

- Advanced Composite Analysis and Impact,
- Aerospace Navigation and Sensors,
- Finite Element Methods,
- Guidance Navigation and Control of Space Systems,
- Mathematics and Programming for Astrodynamics and Trajectory Design,
- Satellite Communications,
- Spacecraft Attitude Dynamics and Control.



Autonomous Vehicle Dynamics and Control

www.cranfield.ac.uk/AutonomousVehicleDC	Full-time	MSc
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With a rise in applications for unmanned aerial vehicles (UAV) and uncrewed aircraft systems (UAS), the defence and aerospace industries seek graduates conversant in key aspects of autonomy. Students on this course benefit from a distinct educational experience and unique facilities, including our drone laboratory, allowing you to gain hands-on experience in the development of the autonomous flight systems and technologies of tomorrow.

Compulsory modules

- UAS Dynamics and Control,
- Aerial Communications Systems,
- UAS Modelling and Simulation,
- Sensor Fusion,
- Autonomous Vehicle Control Systems,
- Artificial Intelligence for Autonomous Systems,
- Guidance and Navigation for Autonomous Systems,
- Logic and Automated Reasoning.



Aviation Digital Technology Management

www.cranfield.ac.uk/ADTM	Full-time/Part-time	MSc, PgDip, PgCert
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This course 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. Course content has been developed in consultation with our industrial advisory board, comprising leaders from Boeing, Etihad, easyJet, Saab, STS Aviation, SITA, Thales, TUI, and others across the aviation sector.

Compulsory modules

- 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.

Computational Fluid Dynamics

www.cranfield.ac.uk/CompFluidDynamics	Full-time/Part-time	MSc
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There is an increasing global demand for computational fluid dynamics (CFD) specialists with practical and technical knowledge. This course, designed to reflect the wide applications of computational fluid dynamics, will enable you to gain the knowledge and appreciation necessary for a strong foundation in a career in this exciting engineering discipline.

You will learn to understand, write and apply CFD methods across a broad range of fields, from aerospace, multi-phase flow and heat transfer to microflows, bio-medical flows and fluid-structure interaction problems.

Compulsory modules

- Introduction to Fluid Mechanics and Heat Transfer,
- Numerical Methods and High Performance Computing,
- Grid Generation / CAD,
- Data Analysis and Uncertainty,
- Turbulence Modelling,
- Numerical Modelling for Compressible Flows,
- Numerical Modelling for Incompressible Flows.

 Accredited by:





Pre-master's in Engineering

www.cranfield.ac.uk/Premasters

Full-time

This programme provides an ideal entry route into an engineering MSc and is suited to those looking to change career paths, who need a refresher before getting back into education and for MSc candidates that require additional knowledge and skills before accessing their chosen degree. The course is delivered through a combination of taught modules (lectures, practical laboratory sessions, assignments) and an individual research project covering engineering principles relating to a variety of sectors across aerospace, automotive, offshore and energy. The course will set you up for success in your chosen field of engineering.

Compulsory modules

- Basic Aerodynamics,
- Aeronautical Engineering,
- Computing Course,
- Mathematics 1,
- Mathematics 2,
- Engineering Stress Analysis,
- Thermofluids,
- Computer Aided Design (CATIA),
- Propulsion and Power,
- An Introduction to Engineering Materials and Failure Analysis,
- Mechanical Design.

Robotics

www.cranfield.ac.uk/Robotics

Full-time/Part-time

MSc

Robots are becoming ubiquitous in industrial environments as well as in everyday life. Industries including automotive, oil and gas, aerospace and energy have significant future growth in the service robot domain. This course provides insight into multiple application domains for intelligent and autonomous robot systems including hazardous environments, healthcare, domestic/assistive robotics and autonomous vehicles. Unique in its focus on human aspects and supported by practical applications, this course will enhance your employment prospects by providing you with relevant theoretical knowledge and practical skills to become a robotics engineer and to meet rising global demand for professionals in this field.

Compulsory modules

- Fundamentals of Robotics,
- Robotics Control,
- Artificial Intelligence and Machine Learning for Robotics,
- Programming Methods for Robotics,
- Psychology, Ethics and Standards,
- Human-Robot Interaction,
- Machine Vision for Robotics,
- Autonomy in Robotic Systems.



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Institution of
**MECHANICAL
ENGINEERS**

Thermal Power and Propulsion

www.cranfield.ac.uk/ThermalPower	Full-time	MSc, PgDip
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This course provides both fundamental and applied knowledge applicable to the design, operation and maintenance of thermal power and propulsion systems. You will have the opportunity to pursue specialisms across a range of sector applications, contributing to current and future matters related to sustainable propulsion in aeronautics and space, and power generation on land, off-shore and marine.

The course is structured to deliver taught modules within your chosen specialisation as well as encouraging you to make use of the 8,000 sqm on-site power and propulsion test area on campus.

The programme gives you the opportunity to pursue your own specific interests and career aspirations through five specialist options:

- **Aerospace Propulsion (AP)** - for those seeking a career in the design, development, operation and maintenance of propulsion systems.
- **Gas Turbine Technology (GTT)** - examines the increasing application in power generation, oil and gas pumping, chemical processing and power plants for ships and other large vehicles.
- **Marine Propulsion Technology (MPT)** - develop skills in the design, development, operation and maintenance of marine propulsion systems.
- **Power, Propulsion and the Environment (PPE)** - prepares you with a thorough knowledge of, and the ability to, assess anthropogenic emissions.
- **Rotating Machinery, Engineering and Management (RMEM)** - provides you with design and operational skills for rotating equipment in aeronautical, marine, oil, power and process industries, and other surface applications.

 Accredited by:

 Institution of MECHANICAL ENGINEERS

 ROYAL AERONAUTICAL SOCIETY

Modules	AP	GTT	MPT	PPE	RMEM
Number of electives to choose:	0	1	0	1	0
Gas Turbine Performance, Simulation and Diagnostics	✓	✓	✓	✓	✓
Turbomachinery and Blade Cooling	✓	✓	✓	✓	✓
Mechanical Design of Turbomachinery	✓	✓	AO	AO	✓
Combustors	✓	✓	✓	✓	✓
Engine Systems	✓	✓	✓	✓	✓
Management for Technology	✓	✓	✓	✓	✓
Gas Turbine Operations and Rotating Machines		AO	✓	✓	✓
Propulsion Electrification	AO	E	AO	✓	AO
Marine Propulsion System Integration		E	✓	AO	AO
Propulsion Systems Performance and Integration	✓	AO		E	
Computational Fluid Dynamics for Gas Turbines	AO	E	AO	E	AO
Jet Engine Control	AO	E		E	
Space Propulsion	AO	E		E	

✓ = Compulsory modules E = Elective AO = Attendance only



Our Saab 340B aircraft supplies real-time data, allowing students to become flight test engineers during the flight.

Student flight experience

Selected aerospace MSc courses offer the opportunity to experience a flight in our National Flying Laboratory Centre's (NFLC) light aircraft.

This flight experience will complement your MSc studies and inspire your aeronautical career. During the flight, in the Slingsby T67 Firefly (pictured below), you will have the opportunity to take control of the aircraft.

Each experience is three hours in duration and includes a pre-flight safety briefing outlining the details of the manoeuvres to be flown, a flight of approximately one hour, and a post-flight debrief to discuss aspects of the flight with the instructor and to provide the opportunity to ask further questions. The following courses offer this experience:

- Aerospace Dynamics MSc,
- Aerospace Vehicle Design MSc,
- Astronautics and Space Engineering MSc,
- Safety, Human Factors and Accident Investigation MSc (see the safety, human factors and accident investigation brochure).

Read more on our website: www.cranfield.ac.uk/nflc



Academic staff

You will be taught by a wide range of subject specialists at Cranfield and from industry, who draw on their research and industrial expertise to provide stimulating and relevant input to your learning experience.

The list of academics below represents a small proportion of our staff; we also have a large number of highly-experienced guest lecturers.

Professor Karl Jenkins,

Head of Centre for Computational Engineering Sciences

www.cranfield.ac.uk/kwjenkins

Karl has previously worked in industry, working on various commercial CFD codes and training engineers in their use. Karl leads research activity in computational engineering with particular expertise in high-fidelity simulations and modelling.

Professor Antonios Tsourdos,

Head of the Centre for Autonomous and Cyber-physical Systems

www.cranfield.ac.uk/atsourdos

Antonios leads the research on autonomous systems and has diverse expertise in both unmanned and autonomous vehicles as well as networked systems and space and astronautics.

Professor Mark Westwood,

Head of Centre of Aeronautics

www.cranfield.ac.uk/mwestwood

Mark joined the Transport Systems Catapult in 2015 to lead projects developing automated and autonomous vehicle technologies, before moving onto the position of Chief Technology Officer where he led the Catapult's activities in drones, advanced air mobility and zero emissions aviation.

Professor Vassilios Pachidis,

Head of Centre for Propulsion and Thermal Power Engineering

www.cranfield.ac.uk/vpachidis

Vassilios is also the Director of the Rolls-Royce University Technology Centre in Aero Systems Design, Integration and Performance, and the Head of the Air and Space Propulsion Institute. Published widely, he holds joint patents filed with Rolls-Royce.

Professor Phil Webb,

Head of Centre for Robotics and Assembly

www.cranfield.ac.uk/pfwebb

Phil's research focuses on the implementation of large-scale advanced robotics in the aerospace manufacturing industry with a particular emphasis on human-in-the-loop applications.

Dr Jennifer Kingston,

Senior Lecturer in Space Systems

www.cranfield.ac.uk/jkingston

Jenny lectures in Space Systems Engineering and Thermal Analysis and Design Software. Jenny also provides technical consultancy to satellite insurance underwriters.

Key facts and statistics

Course information



Full-time

One year.



Part-time

Up to three years. See the individual course webpage for more information about part-time study.



Start date

Various. See individual course webpage for details.



Award

MSc/PgDip/PgCert.
Not all courses offer all awards, see course information for details of awards offered.



Fees

Please see the individual course pages on our website for full fee information and full-time or part-time options. Terms and conditions apply. See www.cranfield.ac.uk/fees

Cohort profile*



Geographic spread

23% UK.
77% International.



Average cohort age

20-29.



Average cohort size

20-40.

*These figures give an indication of the course make-up at registration across our Aerospace courses for the entry 2023-2024.

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“Cranfield University’s connection to industry further rekindled my drive to make an impact as students have numerous opportunities awaiting them even before graduating. The group design project is an important part of the master’s at Cranfield and it positively enhanced my teamwork, time management and presentation skills. Our project - UAV (Unmanned Aerial Vehicle) SWARM Challenge - was sponsored by BAE Systems. Cranfield is a formidable institution contributing to local, national and international development and I am proud to be associated with it.”

Rabiyat Usman, current student,
(Applied Artificial Intelligence MSc)



Useful information



Financing your studies

Whether you are a UK-based or international student, we provide information, advice and a range of online tools to help you put together the funding package you need. Take a look at our funding finder which provides a searchable database of sources of financial support. We also offer bursaries for high quality applicants. Visit our website where we provide a range of additional sources of potential funding and helpful organisations and contacts for information, advice and guidance.

Learn more at www.cranfield.ac.uk/funding

More than a degree with the Cranfield Enhance programme

Cranfield graduates are valued for their distinctive skills and capabilities. We have developed these programmes to complement and enhance what you learn on your chosen qualification. On the Cranfield Enhance programme, you will be able to earn 'digital badges' in areas such as employability and entrepreneurship to showcase your new skills to prospective employers.

Read more at www.cranfield.ac.uk/enhance

“

I chose to study at Cranfield University because of the feedback provided by former students, as well as its ties with industry. The Aerospace Vehicle Design MSc was exactly what I was looking for in terms of the theory covered in the taught modules and being able to apply this to the group and individual projects.”

Tomás Viñas Graf, current student,
(Aerospace Vehicle Design MSc)



Life at Cranfield

A welcoming, professional campus community.



Explore our University

You can personalise your virtual visit to our campus by choosing the subject area you are interested in on our interactive tool:

virtualexperience.cranfield.ac.uk



How to apply

Read more about our entry requirements and how to apply at **www.cranfield.ac.uk/apply**



Our location



Located just over an hour from London in the English countryside, Cranfield's campus environment supports close, working relationships between our multinational postgraduate students and academic and industry experts.

www.cranfield.ac.uk/visit



www.cranfield.ac.uk/aerospace

Our sector study areas:

Aerospace,
Defence and Security,
Energy and Sustainability,
Environment and Agrifood,

School of Management,
Manufacturing and Materials,
Transport Systems,
Water.



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