

# **Air Transport**

Academic year 2024/25 entry

Airport Planning and Management MSc/PgDip
Air Transport Management MSc/PgDip
Air Transport Management (Executive) MSc/PgDip/PgCert/PgAward
Aviation Digital Technology Management MSc/PgDip/PgCert

# Cranfield University

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 of our research is world-leading Research Excellence or internationally excellent

### Over £150 million of investment in

new facilities over the past five years

**Top 30** in the world for Engineering - Mechanical, Aeronautical and Manufacturing

QS World University Rankings by subject, 2023

A professional network of alumni, from 177 countries

5,000+ postgraduate students from 100+ countries

### Unique aerospace facilities

We have our own runway, our own airport, our own aircraft and our own air navigation service provider.

As we are postgraduate only, we are not listed in league tables that help compare undergraduate universities, such as The Times World Rankings and The Complete University Guide.

"Take every opportunity available to interact with the faculty, your fellow colleagues and guest speakers. These will prove to be lasting conversations that will be useful both for your career and your personal development. Cranfield helped me to secure my first job at ALG. I met the hiring manager at a group project presentation, and our relationship started from there. The teamwork skills developed during the group project are serving me well in the current international environment at work."

Pietro Pontiggia, Lead Cargo Interline and Partnerships Analyst, Qatar Airways, (Air Transport Management MSc 2019)



# Reasons to study air transport with us

**Unique facilities** 

The only UK university campus with a fully-operational airport, the National Flying Laboratory Centre, and a retired Boeing B737-400 aircraft. The Digital Aviation Research and Technology Centre (DARTeC) develops cutting-edge research into the most pressing challenges the industry faces, including pathways towards sustainable aviation, digitalisation. passenger experience and integration into broader mobility models.

**Network opportunities** 

You will have numerous opportunities to meet industry representatives throughout the course. Both students and alumni are provided with access to the exclusive Cranfield University Air Transport LinkedIn group, which offers unrivalled networking and job opportunities.

Access to resources

You will have access to industry-leading resources for data, analytics and business intelligence; including the most relevant commercial databases for airline demand and capacity. networks and fleet; airport, airline and related organisations' profiles. news, operational and financial information; and proprietary reports from analysts, consultancies and industry associations.

**External lecturers** 

We are particularly proud of the wide range of seminars and quest lectures given by global aviation industry leaders, which in the past have included the CEOs of British Airways, London Gatwick Airport, Birmingham International Airport, Avianca Airlines and International Airlines Group, Chief Economist of the International Air Transport Association (IATA), and Boeing Senior Vice-President.

**Relevant projects** You will have the opportunity to work in groups, and individually, on projects to devise solutions that tackle real-world industry challenges.

Strong industry links

Courses are directed by an industrial advisory committee comprising senior representatives from leading airports, international consultancies, academics, and associated sectors. Their input ensures that courses remain up-to-date and equip you with the skills and knowledge required by leading employers.



# Air transport courses

# For nearly 60 years, Cranfield University has delivered world-leading postgraduate courses in Air Transport.

You will benefit from our close industry relationships through guest speakers sharing their knowledge, and visits to major UK airports. Industrial partners such as easyJet, London City Airport and Qatar Airways recruit extensively from our courses.

More than 2,000 Cranfield alumni are in the air transport industry. By becoming one of our alumni, you are joining a professional global network.

Internationally recognised as a leading centre researching and teaching in air transport management, our work draws together airline and airport operations with management, economics, engineering and marketing. Our focus is global. A particular strength is our breadth of expertise across all aspects of air transport management, which we share with you and our industry partners.

## Modules form 50% of the course content, with group and individual projects making up the other 50%.

This brochure shows the compulsory and (where applicable) some elective modules offered in the 2023-2024 academic year, to give you an idea of course content. To keep our courses relevant and up-to-date, modules are subject to change so please check the latest information on our website.

### **Air Transport Management**

www.cranfield.ac.uk/atm

MSc, PgDip (Full-time)

Designed to equip you with the knowledge to pursue a career in the global air transport industry, this course offers you access to unique facilities as well as the option to tailor the course to your own career aspirations.

#### Compulsory modules

- · Air Transport Economics and Finance,
- · Air Transport Environmental Planning,
- Air Transport Market Analysis and Forecasting,
- · Air Transport Operations,
- · Airline Strategic Management,
- Geopolitics and International Aviation,
- · Introduction to the Air Transport Industry.

#### Elective modules (choose three)

- Air Transport Engineering Maintenance Operations,
- Air Transport Marketing,
- · Airline Fleet Planning,
- · Airport Strategic Planning,
- · Aviation Safety Management,
- · Digital Airline Management,
- · Regional Aviation.

#### **Air Transport Management (Executive)**

www.cranfield.ac.uk/atmexec

MSc, PgDip, PgCert, PgAward (Part-time)

This new executive Air Transport Management MSc offers a flexible learning approach for leaders and future leaders in aviation and associated industries from around the world.

The MSc offers multiple start dates and comprises of face-to-face and online modules. To give more flexibility, participants can either sign up to the MSc (2-3 years), the PgDip (2 years), the PgCert (1 year) or a PgAward (3 months).

#### **Airport Planning and Management**

www.cranfield.ac.uk/apm

MSc, PgDip (Full-time)

Be at the forefront of the sustainable aviation industry by developing the management skills that will allow you to effect change. Our graduates are highly sought after and prepared to meet the industry demand for skills in airport business development, planning, design, operations and environmental management.

#### Compulsory modules

- Air Transport Environmental Planning.
- Air Transport Market Analysis and Forecasting,
- · Airport Design,
- · Airport Finance and Business Management,
- Airport Operations,
- Airport Strategic Planning,
- · Geopolitics and International Aviation,
- Introduction to the Air Transport Industry.

#### Elective modules (choose two)

- · Airline Strategic Management,
- Air Transport Marketing,
- · Aviation Safety Management,
- · Digital Airline Management,
- · Regional Aviation.

### **Aviation Digital Technology Management**

www.cranfield.ac.uk/ADTM · October intake

MSc, PgDip, PgCert (Full- or part-time)

This MSc equips professionals with the capabilities to innovate and apply digital technology in the aviation context. It adds the digital component to aeronautical engineering and expands from the design and manufacture foci of established aeronautical engineering programmes to the wider aviation industry opportunities. It can be joined as a route for non-aerospace engineering and computing graduates who aspire to enter the aviation industry. In addition, this course is a career development path for aerospace industry professionals to boost their digital and innovation skills. Course content has been developed in consultation with our Industrial Advisory Board (IAB), comprising leaders from Boeing, Etihad, easyJet, Saab, STS Aviation, SITA, Thales, TUI, and others across the aviation sector.

#### Compulsory modules

- · Aerospace Inspection and Monitoring Tools,
- Aviation Digitalisation.
- · Communications and Cybersecurity in Aviation,
- · Data-centric Aircraft Systems,
- Digital Aviation Operations and Maintenance Management,
- · Digital Aviation Supply Chain Management,
- · Digital Engineering,
- Predictive Maintenance Technology.

# Course structure

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

This diagram illustrates the course structure of many of our full-time master's courses, it is not indicative of all courses. Please check your course structure online for more detailed information, including the weight of each phase and part-time course structure variations.

An intensive learning experience, providing the knowledge you need to excel in your specialist field.

The ability to understand how your part of a project affects the whole, giving you a head start for the world of work.

An opportunity to think and work in an original way by delving into an area of specific interest.



Full-time and part-time courses



100 credits 1,000 hours



20 credits 200 hours



80 credits 800 hours

Registration ----- 200 credits 2.000 hours ----- Completio

### **Group projects**

Cranfield's group project experience provides you with the opportunity to take responsibility for a consultancy-type project while working under academic supervision. Group presentations are then attended by invited representatives from the air transport industry at the end of the project.

# 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 and the air transport sector. These benefits range from the various high-profile guest speakers we are able to attract, to the ability to network with future employers at our group presentation days.

### 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 industry advisory panel include:











# Careers

Our alumni can be found around the world in leading roles within the air transport industry and beyond.

Here are some examples of the roles our alumni have secured in recent years:

#### **Roles**

- · Airline Operations Controller,
- Airport Capacity and Planning Analyst,
- · Airport Operations Officer,
- · Corporate Airline Strategy Manager,
- · Revenue Management Analyst.
- · Airline Pricing Manager,
- · Schedule Planning Manager,
- · Network and Strategy Analyst,
- · Route Analyst.
- · Senior Aviation Planner,
- · Senior Network Planning Manager,
- · Head of Airport Services Planning,
- · Project Manager and Airport Planning Manager,
- Principal Airport Planner.

#### **Organisations**

- ADD.
- · British Airways.
- · Civil Aviation Authority of Thailand,
- easyJet,
- · Etihad Airways,
- Heathrow Airport,
- · Iberia,
- Jacobs,
- · London City Airport,
- · Qatar Airways,
- · SEA Milan Airports,
- United Airlines,
- Virgin Atlantic,
- Wizz Air.

# Academic staff

You will be taught by a wide range of subject specialists from the University and industry professionals who draw on their research and expertise to provide stimulating and informed input to your learning experience. Here are some of the staff you will be taught by:



#### Dr Darren Ellis, Course Director, Air Transport Management

Darren has spent over 10 years in higher education research and teaching, and several years before that in the public service sector. His research has primarily investigated the future of the global airline industry and the ascendancy of the three major Gulf carriers. He specialises in the geopolitics of aviation.



#### Dr Edgar Jimenez Perez, Course Director, Airport Planning and Management

Edgar has experience in the design of public policy for transport systems and sustainability, as well as over 10 years' experience in university lecturing and research in transport systems and higher education. His research interests cover the topics of strategic airport planning, airport competition, urban mobility and integration and sustainability in transport systems.



#### Dr Robert Mayer, Course Director, Air Transport Management (Executive)

Robert is a Senior Lecturer in Air Transport Management at Cranfield University's Centre for Air Transport Management. He has developed and delivered executive education programmes for major airlines, airports and industry associations. In the Centre, he is responsible for the airline economics, finance and strategy modules.



#### **Dr Ip-Shing Fan, Course Director, Aviation Digital Technology Management**

Ip-Shing Fan is a Senior Lecturer in Enterprise Systems, leading digital maintenance, repair and operations (MRO) in DARTeC, supporting aviation transformation in operations and maintenance. He leads the digital MRO and hangar laboratories in DARTeC.

"The renowned reputation of the University and its relevance within the industry were the perfect fit for my future career aspirations. The highlight of my master's degree was the group project, where we had to start up a new airline. I'm really proud to be a part of the Cranfield community - I think it is one of the biggest assets of the University."

**Anamaria Dioane,** Aviation Manager, PwC (Air Transport Management MSc 2020)

# Key facts and statistics

#### **Course information**



# Full-time One year



#### **Part-time**

Two to three years See the course page for more information about part-time study.



#### Start date

Full-time: September.
Part-time (Exec):
March/June/November.



### MSc/PgDip/PgCert/PgA

Not all courses offer all awards, see course information pages for details of awards offered.



#### Fees

Please see the individual course pages on our website for fee information and full-time or part-time options. Terms and conditions apply.

See www.cranfield.ac.uk/fees

### **Cohort profile**



### **Geographic spread**

21% UK 79% Rest of world



**Cohort age range** 20-59



#### Average cohort size

Full-time:

Air Transport Management: 50 Airport Planning and

Airport Planning and Management: 15

Part-time:

Air Transport Management: 10

\*These figures give an indication of the course make-up at registration across our air transport courses for the entry 2022-2023.

"I chose Cranfield because it has a great reputation and it's clear when you look at the Cranfield alumni community that students are very satisfied by their experience at the University. The MSc course itself was very interesting. I learned so much from a practical point of view and you obtain knowledge in all areas of the airline business."

**Arseni Souryal,** Aviation Business Development Analyst at SEA Milan Airports (Air Transport Management MSc 2020)

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# 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, Entrepreneurship, Sustainability and Outreach to showcase your new skills to prospective employers.

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

## Financing your studies

If you need advice on funding your course or living costs, we can provide information and a range of online tools to help you put together the funding package you need.

There is more information on our website:

www.cranfield.ac.uk/funding

# How to apply

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



# Life at Cranfield

A welcoming, professional campus community.

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.





### **Cranfield University works with over**

# 1,500 businesses and governments based in over 40 countries

These organisations include:

**AIRBUS** 

Heathrow



For a full list of Cranfield courses, please see our prospectus and website.

### www.cranfield.ac.uk/transportsystems

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