The University Of Sheffield.

Interdisciplinary Engineering.

Aerospace Engineering.

Contents.

"Aerospace Engineering really stood out for me when I was applying to come to university. It's got a great reputation and I love the city. I like the fact that I get to study a wide range of subjects, but I also get to specialise later on."

AARON TAYLOR | MENG AEROSPACE ENGINEERING WITH A YEAR IN INDUSTRY

A degree with altitude.

Be inspired by world-leading academic staff on these unique interdisciplinary courses. Our research-led teaching focuses on innovation, efficiency and sustainability. You'll learn all about the research, design, development, construction and flight of aircraft in a dynamic, challenging environment.

93%

in employment within six months

Destinations of Leavers from Higher Education survey, 2017

£27.4k

average starting salary

Sheffield Aerospace Engineering graduates, 2017

Your future career.

"The course is very career focused. There's a real emphasis on preparing us for the world of work."

URH KRZIC | BENG AEROSPACE ENGINEERING (PRIVATE PILOT INSTRUCTION)

We produce highly employable graduates who have the engineering knowledge, practical experience and transferable skills demanded by industry. From the moment you join us until after graduation, you'll benefit from a comprehensive programme of support to help you achieve your career goals.

Where our graduates work.

Our graduates are in demand internationally. They now work in aerospace design, aviation, transport manufacturing, energy and power, the armed forces and finance for companies including:

- BRITISH AIRWAYS
- BAE SYSTEMS
- ROLLS-ROYCE
- AIRBUS
- BOEING
- JAGUAR LAND ROVER
- ATKINS
- GKN AEROSPACE
- ROYAL AIR FORCE
- DYSON
- ERNST & YOUNG
- FRAZER-NASH CONSULTANCY
- ROYAL NAVY
- GKN AEROSPACE
- QINETIQ
- LOCKHEED MARTIN

"Not only did the course give me a strong technical background, it also helped me develop the essential skills required for success as a professional engineer."

LIAM BROOME | MENG AEROSPACE ENGINEERING (PRIVATE PILOT INSTRUCTION) GRADUATE | MAINTENANCE ENGINEER | TATA STEEL

"One of the Aerospace Engineering programme's greatest strengths is its close links with industry. It's fantastic that students have the opportunity to gain genuine work experience before they graduate. Having real-world experience sets Sheffield graduates apart. It gives them an increased breadth of knowledge and an understanding of how to behave in an industrial setting."

KATY GREATBATCH | MENG AEROSPACE ENGINEERING GRADUATE | NEW PRODUCT INTRODUCTION (NPI) LEAD ENGINEER | ROLLS-ROYCE

Our industrial partners.

Our work with some of the world's leading engineering companies is shaping the future of aerospace globally. These partnerships help shape our courses too. From exclusive networking events and student projects to site visits and placement opportunities, you will benefit from our strong relationships with these prestigious companies in a variety of ways.

"Sheffield's Aerospace Engineering course prepares students for a career in industry. They have the technical knowledge and key skills which employers demand."

ADAM MCCLOUGHLIN | ENGINEERING MANAGER AND CHIEF DESIGN ENGINEER | ROLLS-ROYCE

"We're currently working on aerospace and defence-related research projects to the value of £40.4m with companies such as Airbus, Rolls-Royce and BAE Systems."

DR MARTIN JACKSON | DIRECTOR OF AEROSPACE ENGINEERING

Experience world-class aerospace facilities.

The aerospace labs in The Diamond, our new £81million teaching and learning centre, feature state-of-the art, industry-standard equipment which you'll get to use throughout your degree.

- Ten X-Plane flight simulators for flight control and navigation
- Sixteen Wren jet engines to take apart and analyse
- GUNT ET796 jet engine test bench
- Price Induction jet engine simulator bench
- Rolls-Royce heritage jet engine
- Four Armfield C15 bench-top, sub-sonic wind tunnels
- Five Merlin MP500-1 Plus flight simulators for aircraft design

"The facilities at Sheffield are really impressive, such as the flight simulators and the wind tunnels. There are lots of opportunities to use equipment that you wouldn't get to use at other universities."

STEPHANIE MORTON | MENG AEROSPACE ENGINEERING GRADUATE | ENGINEER | FRAZER-NASH CONSULTANCY

Accreditation

Our degrees are accredited by four of the UK's leading professional engineering institutions

28 hours contact time each week

Study with us.

Aerospace Engineering

BEng | H402 | Three years
MEng | H400 | Four years

This is our main degree programme which forms the basis of all our other courses. You'll gain both breadth and depth of knowledge across the full range of aeronautical and aerospace engineering.

Aerospace Engineering (Private Pilot Instruction)

BEng | H460 | Three years
MEng | H490 | Four years

Offering the same level of academic excellence and practical experience as our main Aerospace Engineering degree, this exciting course also gives you the opportunity to learn to fly in your second year and enables you to work towards gaining your National or European Private Pilot's Licence.

Aerospace Engineering with a Year in Industry

BEng | H404 | Four years
MEng H405 | Five years

This degree is all about maximising your employability. You'll follow the same academic programme as our standard Aerospace Engineering course, but you'll also spend a year working in a graduate-level role in an engineering company.

Aerospace Engineering with a Year in North America

MEng | H406 | Four years

Providing you meet the academic requirements, you'll spend your third year at a leading university in North America studying a course which aligns with the programme here at Sheffield. Years one, two and four follow the same programme of academic study as our standard MEng.

Aerospace Engineering with a Foundation Year

BEng | H407 | Four years
MEng | H407 | Five years

If you would like to study Aerospace Engineering but you don't have the correct qualifications, you can apply for our Science and Engineering Foundation Year. Find out more at **www.sheffield.ac.uk/SEFY**

Entry requirements

Visit **www.sheffield.ac.uk/aerospace** for our latest entry requirements.

87% of MEng students achieved a First class or 2:1 degree, 2017

"It's so cool. I can't believe we're just allowed to play around with a jet engine! It's giving us the chance to apply the theory we learnt in the first year and put it into practice."

CHARLOTTE KIELY | BENG AEROSPACE ENGINEERING (PRIVATE PILOT INSTRUCTION)

MEng or BEng?

The first two years of study are the same. Whichever you choose, you'll leave as a highly numerate graduate with a prestigious degree. The MEng has an extra year of in-depth study and project work which can boost your career prospects. It also meets the requirements for Chartered Engineer (CEng) status. Not sure which to apply for? Depending on your results, you may be able to transfer after your second year.

Course structure.

YEAR 1

Your introduction to aerospace engineering and general engineering concepts.

YEAR 2

Alongside a core programme of study, you'll begin to specialise in either:

AVIONICS
Aircraft sensor and actuation systems and flight control systems.

AEROMECHANICS
Combustion, propulsion and materials manufacturing.

YEAR 3

This year is all about consolidating your knowledge and beginning to specialise further:

AVIONICS - AIRCRAFT POWER AND ACTUATION SYSTEMS
How aircraft sensor and actuation systems are powered and controlled, including electromagnetics, signal processing, sensor fusion and the theory of radar systems.

AVIONICS - FLIGHT CONTROL SYSTEMS
Navigation, embedded systems and software, advanced control, hardware and software testing and verification.

AEROMECHANICS - AERODYNAMICS AND PROPULSION
Advanced computational methods for designing aerodynamic components and their interaction with the whole aircraft.

AEROMECHANICS - AEROSPACE MATERIALS, STRUCTURES AND MANUFACTURING
The design, manufacture and analysis of advanced metallic and composite materials for aircraft.

YEAR 4

You'll take your learning to the next level on the final year of the MEng. By continuing to specialise, you'll gain the in-depth knowledge, skills and practical experience needed to excel in the jobs market.

"The aerospace course taught me how to solve complex interdisciplinary engineering problems by using a fundamental approach, both individually and as part of a team. I particularly enjoyed the group design project in my third year where we had to design, build and fly (and crash and repair!) a small unmanned air vehicle."

LEWIS DAWNAY | MENG AEROSPACE ENGINEERING GRADUATE | SENIOR RESEARCH ENGINEER | DYSON

Course highlights.

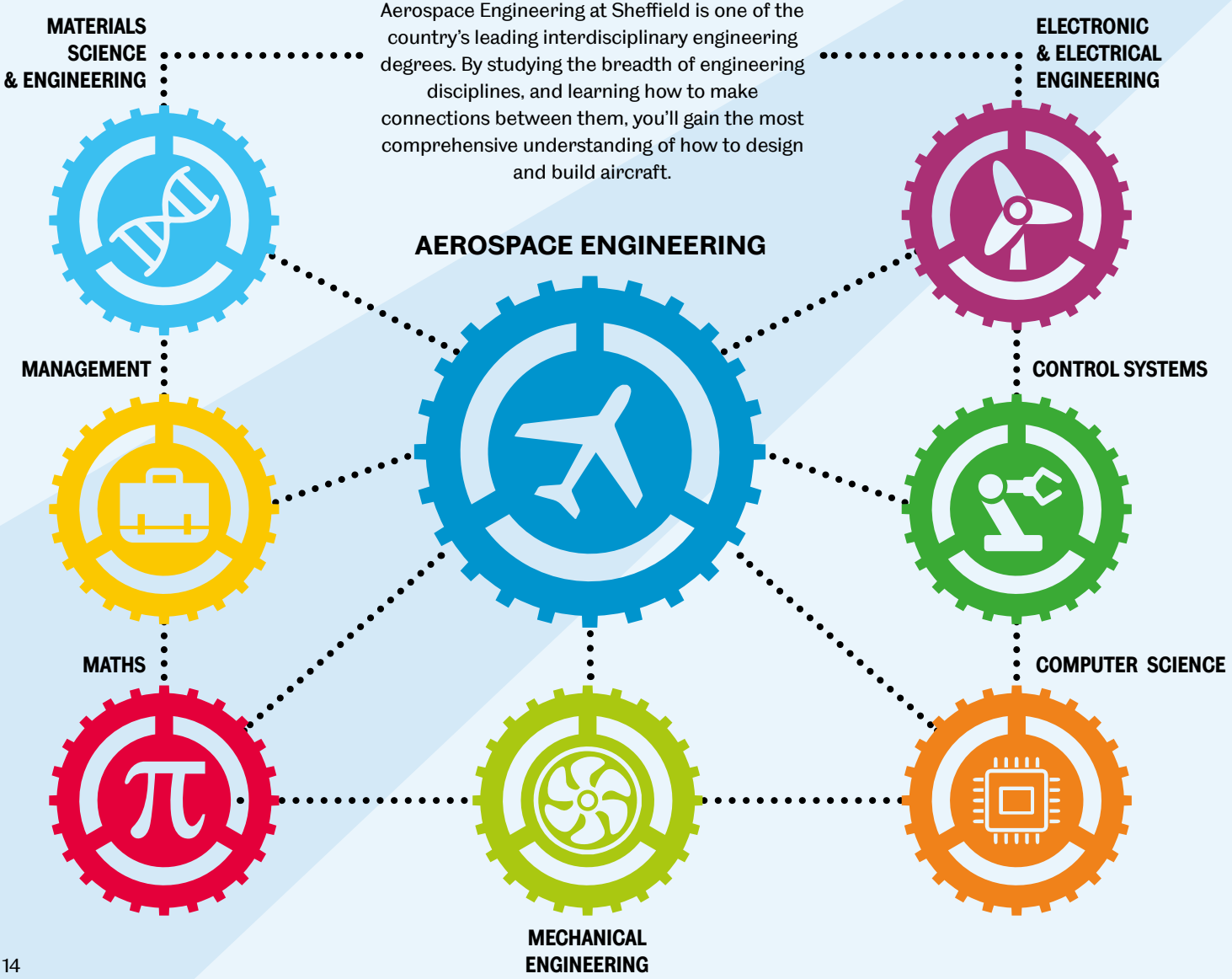
EXPERIENCE A TEST FLIGHT
In year three you'll experience a test flight on board a jet stream aircraft.

INDUSTRIAL TRAINING PROGRAMME
If you study for an MEng, you'll have the opportunity to work on innovative projects with our industry partners Rolls-Royce, Siemens and GE Aviation.

BUILD YOUR OWN UNMANNED AIR VEHICLE (UAV)
You'll work in groups to design, build and fly your own UAV in year three of the MEng.

A unique interdisciplinary approach.

Aerospace Engineering at Sheffield is one of the country's leading interdisciplinary engineering degrees. By studying the breadth of engineering disciplines, and learning how to make connections between them, you'll gain the most comprehensive understanding of how to design and build aircraft.



"The interdisciplinary approach here at Sheffield is incredibly beneficial to students. Not only does it reflect the way we work in industry, the broad-based education and opportunity to specialise gives them the most comprehensive understanding of the engineering environment and prepares them well for the world of work."

STEVEN JEAVONS | ENGINEERING LEAD | UTC AEROSPACE SYSTEMS

Get in touch.

We're here to answer any questions you may have.

Call us: **0114 222 7837**

Email us: **aerospace-admissions@sheffield.ac.uk**

Find out more online: **sheffield.ac.uk/aerospace**