Transport Systems
At a Glance
Welcome to Cranfield University

In an increasingly interconnected world, Cranfield’s award-winning research and teaching is helping to define the future of global transport.

We specialise right across the sector: air, road, rail and marine vehicles, infrastructure, businesses and logistics, as well as the human aspects of operating, managing and using transport.

We provide:

- Transformational research
- Premier learning
- Impact and influence
Premier learning
for professionals

Aerospace, Engineering and Technology postgraduates

Flagship MBA

Ranked 6 in UK, 15 in Europe and 46 in the world

UK No.1

Cranfield is:

- the world's leading provider of accident investigation courses,
- where leading motorsport companies come to test their cars and recruit future engineers,
- the UK's only university with its own aircraft and airport,
- home to the internationally renowned MSc in Air Transport Management and Airport Planning and Management.

Our learners:

Over half our Transport Systems learners come from outside the UK, representing 50+ countries

UK (28%)
EU (41%)
overseas (31%)

full-time (54%)
part-time (46%)

Our Alumni: 60k+

A professional network, including many CEOs of leading airlines, based all over the world.

“Cranfield is where I started my career as an academic in air transport and my supervisor has been my mentor for my career. I will be in a better position to achieve my career goals in the future with my PhD.”

Darshi Piyathilake, current PhD student in Air Transport

“I wouldn’t be here, living my dream in Formula One, without Cranfield University and the support the staff gave me.”

Jessica Harris, Graduate Engineer, Research and Development, MERCEDES AMG PETRONAS Formula One Team, Advanced Motorsport Engineering MSc, 2014
Cranfield:

- is building a unique £19 million test environment for the development of intelligent and autonomous vehicles to open in 2016,
- has won three successive EPSRC platform grants for Engineering Photonics,
- are improving the performance of hybrid electric vehicles in the £16 million Evoque_e industrial consortium, led by Jaguar Land Rover.

Unique facilities include:

**Accident Investigation Laboratory**
We are the only University outside the USA that provides the opportunity to work with wreckages from air, rail and marine accidents.

**Crash Impact Centre**
One of just three FIA (Federation Internationale de L'Automobile) approved test centres in the world; crash testing Formula One cars. It is also used for major aerospace applications.

**Off-Road Dynamics Facility**
The only centre of its type in the UK to study the relationship between vehicles and the soil environment. Driving surfaces from around the world can be simulated under controlled conditions, speeding up development compared to traditional fieldwork trials.

**National Flying Laboratory Centre (NFLC)**
A national facility operating four aircraft in this unique ‘flying classroom’, from our own airport, providing access to unparalleled research and development capabilities.

**Revolutionary electric vehicle batteries**
Cranfield has developed new techniques for modelling and controlling lightweight, next-generation lithium-sulfur batteries, which will improve the energy density, cost, range and safety of electric vehicles putting the UK in a world-leading position.

“Cranfield’s work on this project has enabled the industry to better understand Lithium Sulfur chemistry by providing simplified models to describe its complex physics.”

Tom Cleaver, Senior Project Manager, OXIS Energy

**Enabling safe and smooth driverless operation in passenger cars**
Our research, with Jaguar Land Rover, as part of an £11m UK Government investment in autonomous vehicles, is developing systems for switching from autonomous to human driving.

“These collaborative projects bring some of the UK’s leading academics together with our autonomous driving team to address fundamental real-world challenges.”

Dr Wolfgang Epple, Director of Research and Technology, Jaguar Land Rover
Impact and influence

We work with 1,500+ businesses and governments around the world

**Strategic partnerships:** with companies such as Airbus, AVIC, BAE Systems, Boeing, British Airways, Rolls-Royce plc and Jaguar Land Rover.

**Aviation safety:** recipients of the prestigious Queen's Anniversary Prize in 2011 for world-leading work in aviation safety.

**Unmanned aircraft systems:** our National Flying Laboratory Centre (NFLC) supports the ASTRAEA programme to enable the routine use of Unmanned Aircraft Systems (UAS) in all classes of airspace.

**Intelligent transport systems:** a long term university partner working with Innovate UK Transport Systems Catapult to enable the UK to exploit the future £900bn global market.

**Air Transport Management:** Our Air Transport Management course was the first postgraduate course in the UK and over the past 50 years 1,400 of our alumni have, and still are, influencing the development of the worldwide commercial aviation industry to ensure it is sustainable and financially viable.