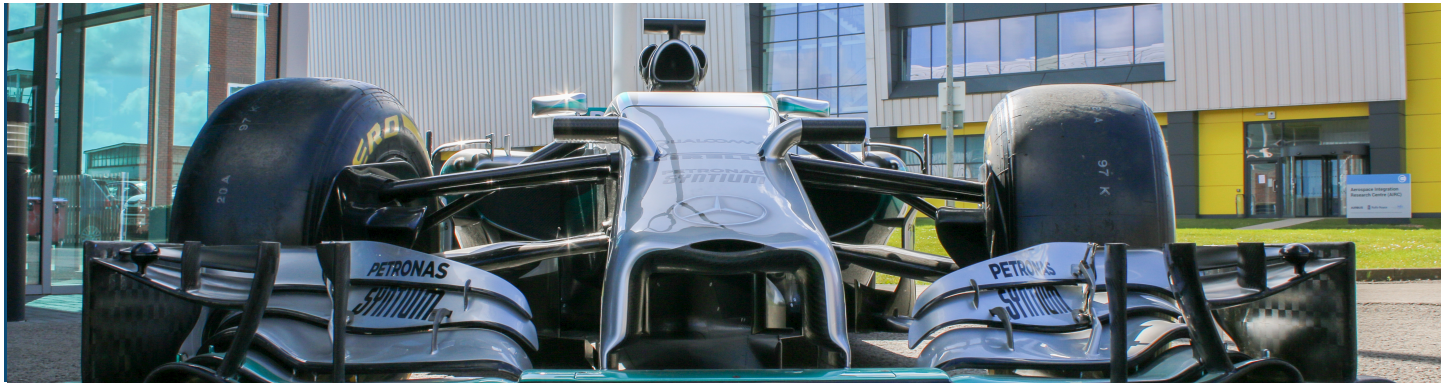




Advanced Motorsport Engineering MSc

www.cranfield.ac.uk/motorsport



The world of motorsports is a hotbed of innovation, with engineers and designers pushing the boundaries of what's possible on the track. Each race presents new challenges, new problems to solve and new opportunities to develop cutting-edge technology. As an engineer in the motorsport sector, you'll be at the forefront of advancements in materials science, aerodynamics, engine development and data analysis.

This world-class Advanced Motorsport Engineering MSc will hone your skills and expertise in relation to motorsport and high-performance engineering through a rigorous combination of teaching and motorsport-related project work. It is an immersive experience that puts you at the heart of the motorsport world, preparing you for a successful career in the sector.

Who is it for?

Developed in collaboration with leading motorsport companies, the course is suitable for graduates in engineering, mathematics, physics or an applied science and able to demonstrate motivation and commitment to being actively involved in motorsport.

For those students wishing to apply with a pure science or pure mathematics background or those with limited motorsport experience, we strongly recommend our Introduction to Motorsport Engineering short course as a primer for the MSc programme.

Your career

Motorsport is a highly-competitive sector. Studying at Cranfield will immerse you in a highly-focused motorsport engineering learning experience, providing you with access to motorsport companies and practitioners. Successful students go on to be part of a network of engineers where you will find Cranfield alumni working across a range of roles within the motorsport and high-performance engineering sector.

Roles that our alumni have gone into include:

- F1 Performance Simulation Engineer,
- Vehicle Test Engineer,
- Engineering Team Lead,
- Powertrain Calibration Engineer,
- Senior Performance Simulation Engineer,
- F1 Tyre Engineer,
- Advanced Manufacturing Engineer,
- Structural Analysis Engineer,
- Aerodynamicist.

Overview

Start date

September

Duration

One year full-time

Qualification

MSc

Study type

Full-time

Structure

Taught modules 40%, Group project 20%, Individual 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, mathematics, physics or applied science subjects, and have a demonstrable motivation and commitment to being actively involved in motorsport.

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

Interviews

Selected applicants may be expected to attend a formal interview. If you are based in the UK, this will likely be at Cranfield. If you are based outside of the UK, interviews will be held by video call or over the phone.

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 nine one-week assessed modules, of which eight are assessed, which take place during October to February, a group design project and an individual research project.

Students who excel on the master's course have their performance recognised through prizes from our partners and associates presented either on the day of the Motorsport Group Design Presentations or at the Motorsport MSc 'Parc Ferme' Graduation event in the June of the following year.

These are awarded for:

- Sir Jackie Stewart OBE Prize - Best overall student performance
- Visiting Professor Adrian Reynard Prize - Best thesis
- British Racing Drivers' Club (BRDC) Prize - Best student ambassador
- Best overall Group Design Project
- MSA (Motor Sports Association) Prize - Best Group design project presentation
- Racecar Engineering Magazine Prize - Best Group design project poster.

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.

Motorsport Introduction

Motorsport Powertrains

Motorsport Electronics and Data Acquisition

Motorsport Vehicle Dynamics

The Business of Motorsport

Motorsport Aerodynamics

Motorsport Structural Analysis

Computational Fluid Dynamics for Motorsport

Composite Structures for Motorsport

"I feel that the MSc in Advanced Motorsport Engineering at Cranfield was an incredible experience I would not have been able to have anywhere else. I completed my thesis project with Mercedes AMG F1 which has further progressed into a full time job as a Test and Development Engineer."

Jessica Harris

Structural System Engineer, Mercedes-AMG PETRONAS F1 Team, Advanced Motorsport Engineering MSc (2014)

Accreditation

The Advanced Motorsport Engineering MSc is accredited by: The Institution of Mechanical Engineers (IMechE), Institution of Engineering and Technology (IET) and Royal Aeronautical Society (RAeS) on behalf of the Engineering Council as meeting the requirements for further learning for registration as a Chartered Engineer (CEng).

Please note, accreditation applies to the MSc award, PgDip and PgCert (if offered) do not meet in full the further learning requirements for registration as a Chartered Engineer.



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

November 2024

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.