Motorsport Engineering & Management

MSc, PgDip, PgCert Full and part-time



Motorsport is a demanding world that requires total commitment from its technical managers, designers and engineers. Without their skills and expertise drivers don't even get on the grid. Behind the sport there is a dynamic network of manufacturers, suppliers and consultants.

Cranfield University's Motorsport Engineering and Management MSc has been developed in collaboration with leading motorsport companies, in response to the sector's need for postgraduate level engineers. The programme will hone your skills and expertise in relation to motorsport and provide you with management development tailored towards the discipline.

Focus on your career

Motorsport is a difficult sector to break into. While we cannot guarantee a job, graduates of this programme have joined motorsport companies such as Williams F1, Honda Racing F1, McLaren Racing, Ferrari, Red Bull Racing, Renault F1, Toyota F1, M-Sport, Performance Friction, Prodrive, Xtrac, RML, EM Motorsport and DAMS.

Part-time students are able to deliver significant business benefits to their employer. The skills and knowledge gained will also promote progression to more senior roles in the future.

Benefit from our reputation

Cranfield University has undertaken research, consultancy and testing for the motorsport industry since the 1980s. We have an international reputation for our expertise in aerodynamics, materials technology, fabrication techniques, safety of motorsport vehicle structures, precision engineering, motorsport vehicle manufacture, vehicle dynamics, brakes and braking systems. Cranfield's reputation in this field can improve your career prospects.

Benefit from our expertise

You will be taught by internationally leading academics and practitioners. This will ensure you are aware of cutting-edge tools, techniques and innovations. The course is supported by an industrial advisory committee comprising senior representatives from leading motorsport organisations including Renault F1, Williams F1, Ford Team RS, BRDC, Xtrac, MIA, MSA, Lola, Silverstone Circuits and M-Sport. This means the skills and knowledge you acquire from the programme are relevant to employer requirements.

Benefit from practical experience through your project work

Industrially supported project work undertaken enables you to assimilate the knowledge and skills gained from the taught element of the course and puts these into real-world practise while developing transferable skills in project management, team-work and independent research. Future employers value this experience.

Part-time students benefit from addressing their employer's real-business problems supported by our academic supervision.







www.motorsport.cranfield.ac.uk

Course details

Duration: Full-time: 1 year. Part-time: 2-3 years

Start date: Full-time: October. Part-time: Throughout the year

Funding: The Grand Prix Mechanics Charitable Trust offers funding opportunities subject to availability. Part-time students are usually supported by their employers. For further details on funding opportunities please visit: www.cranfield.ac.uk/sas/funding

Entry requirements: Candidates must possess, or be expected to achieve, a 1st or 2nd class UK honours degree or equivalent in a relevant engineering or science-based discipline. Other relevant qualifications together with considerable industrial experience may be considered.

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Who should apply

- Graduates in engineering, science or related disciplines who wish to gain knowledge of the engineering, management, science and technologies relevant to motorsport
- Graduates currently working in the performance engineering sectors such as aerospace, automotive and motorsport, keen to extend their qualifications
- · Individuals with other qualifications who possess considerable relevant experience within the high performance sectors

Modular postgraduate programme

The MSc course comprises an induction week followed by eight one-week assessed modules. You will develop an understanding of motorsport fundamentals. The taught element progresses alongside the development of a group design project during which you will develop a solution to a real-life problem.

Finally, the individual thesis project is usually industrially supported, and is of relevance to motorsport. Companies such as Renault F1, Prodrive, Honda Racing F1, Williams F1, McLaren Racing and Red Bull Racing have backed projects. This provides you with the opportunity to develop and demonstrate independent research ability, working within agreed objectives, deadlines and budgets.

Alternatively, the Postgraduate Diploma (PgDip), comprising the eight taught modules and the design project, and the Postgraduate Certificate (PgCert), comprising six taught modules, qualifications are available.

Structure	MSc	PgDip	PgCer
 Taught modules 	40%	66.7%	100%
Group design project*	20%	33.3%	
 Individual project 	40%		

- Individual project
- *dissertation for part-time students

Modules

- · Composite Structures for Motorsport
- Metallic Structures for Motorsport
- Motorsport Aerodynamics and Computational Fluid Dynamics (CFD)
- Motorsport Electronics and Data Acquisition
- Motorsport Power Train Design
- Motorsport Vehicle Dynamics
- · Project and Financial Management for Motorsport
- The Business of Motorsport

Prizes

Full-time students compete for prizes and trophies which have been awarded by Sir Jackie Stewart OBE, Professor Adrian Reynard, Prodrive and the BRDC.

Why Cranfield University

Cranfield University is a wholly postgraduate university with an international community and a truly global reputation. With a top five ranking for student employment on graduation, a top two ranking for staff to student ratios in the UK, an excellent rating for teaching, and exceptional facilities, Cranfield makes an ideal destination for advancing careers. All courses are designed to meet the training needs of industry and have a strong input from experts in their sector. Our focus is on applied research and developing industry's future engineers, managers, consultants, and entrepreneurs.

Contact

For further information and an application form please contact:

School of Applied Sciences T: + 44 (0) 1234 754086 E: appliedsciences@cranfield.ac.uk

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