

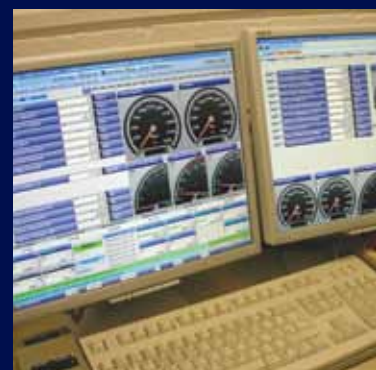
Automotive Engineering PgCert/PgDip/MSc



Faculty of
**Technology, Engineering
and the Environment**

COURSE FACTS

School	Engineering, Design and Manufacturing Systems
Application	For details on how to make an application visit www.bcu.ac.uk/student-info/how-to-apply
Location	City Centre Campus, Millennium Point
Duration	Full-time: 13 months (January start 17 months), part-time: 30 months



KEY FACTS

- You will develop skills in the use of virtual reality as a visualisation and solution tool for the representation and behavioural simulation of components and systems within vehicles. You will be using sophisticated computer tools, such as Adams mechanisms, computational fluid dynamics, finite element analysis and solid modelling to solve real engineering problems.
- This course is accredited by the Institution of Mechanical Engineers (IMechE).

WHY CHOOSE US?

- Our School of Engineering, Design and Manufacturing Systems is a recognised leader in education, training and business solutions, offering a wide range of courses that benefit from active engagement with regional, national and international industry - giving you the best possible introduction to modern engineering.
- Located in the prestigious £114 million City Centre Campus at Millennium Point in the heart of Birmingham, we have fantastic facilities that support students from all levels of study including foundation, professional development short courses and postgraduate research.

COURSE OVERVIEW

This course aims to develop automotive design engineers skilled in the use of advanced computer modelling and simulation techniques. It will enable you to develop the skills required to design and analyse components and systems within the automotive environment.

It will introduce modern computer-based tools used within the industry and give you the opportunity to apply them to realistic problems. You will develop engineering skills including problem-solving abilities, practical competencies, critical appraisal and communication skills.

The programme has two intakes, September and January and may be studied in full or part-time mode. The full-time duration is 13 months (17 months for January start).

SEMESTER 1			
Postgraduate Certificate - 60 Credits			
Dynamics 15 Credits	Digital Design and Analysis 15 Credits	Product Life-Cycle Management 15 Credits	Thermofluids 15 Credits

SEMESTER 2			
Postgraduate Diploma - 120 Credits			
Hybrids and Sustainable Technologies 15 Credits	Powertrain 15 Credits	Vehicle Ride and Refinement 15 Credits	Control 15 Credits

SEMESTER 3			
MSc Award - 180 Credits			
Master's Project 60 Credits			

COURSE STRUCTURE

Our well-equipped workshops and laboratories enhance students' educational experience, providing a bridge between theoretical learning and hands-on teaching to prepare them for a career in industry.

You will be taught by experienced academic staff, many of whom have worked in industry for a number of years and bring with them a wealth of skills and knowledge. You will become skilled in the use of industry standard software such as Matlab/Simulink, CATIA, Ansys and Adams mechanisms.

ASSESSMENT

Effective communication is key in a professional environment. For this reason, we use project reports, record keeping and oral presentations extensively in our assessments, although we may use time-constrained tests where appropriate. Assessment focuses largely on projects and case studies and we make personal development planning an integral part of the learning process.

ENTRY REQUIREMENTS

We would normally expect you to hold at least a Second Class Honours degree or equivalent in an appropriate discipline. However, we can also consider your application without standard entry qualifications if you can provide evidence of the necessary knowledge and skills to successfully complete the course.

EMPLOYABILITY

There are many challenging and rewarding career opportunities for practitioners able to operate at a senior level in the mechanical, automotive, aeronautical and offshore engineering industries. Graduates typically forge rewarding careers in academic research, further study or commercial research and development, powertrain development engineering in the automotive industry, or design and performance engineering.



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