# Mechanical 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

- This course has been designed to reflect the increasing industrial use of complex analytical tools such as Adams Mechanisms, Finite Element Analysis and Solid Modelling techniques.
- You will become skilled in the use of industry standard software such as Matlab/Simulink, CATIA, Ansys and Adams Mechanisms.
- 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 students 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. More than £750,000 of investment has been made in upgrading our engine emissions test facilities, environmental laboratory and thermodynamics equipment.

### COURSE OVERVIEW

The course aims to develop the skills required to design and analyse components and systems within a general engineering environment, introduce modern computer-based tools used within the industry and give you the opportunity to apply them to realistic problems, and 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).

# www.bcu.ac.uk/tee/edms

SEMESTER 1					
Postgraduate Certificate - 60 Credits					
<b>Dynamics</b> 15 Credits	<b>Digital Design and</b> Analysis 15 Credits	<b>Thermofluids</b> 15 Credits	<b>Product Life-Cycle</b> Management 15 Credits		
SEMESTER 2					
Postgraduate Diploma - 120 Credits					
<b>Control</b> 15 Credits	Manufacturing Processes 15 Credits	<b>Finite Element Analysis</b> 15 Credits	<b>Knowledge Based</b> Engineering 15 Credits		
SEMESTER 3 MSc Award - 180 Credits					
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 be 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. Never has the need been greater for highly skilled, innovative engineers.

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