

Student funding available*

Engineering and Management of Manufacturing Systems

MSc, PgDip, PgCert

Full and part-time

Global manufacturing is constantly undergoing dramatic change. UK manufacturing in particular, has transitioned from a traditional labour-intensive to a knowledge-intensive forward thinking industry. As such, high calibre manufacturing engineers with the multidisciplinary skills and business minded vision are highly sought after to address new challenges in this competitive sector.

Cranfield's MSc in Engineering and Management of Manufacturing Systems provides a thorough understanding of the processes, skills and behaviours needed to create and manage competitive manufacturing operations. The course focuses on industrially relevant projects, team working and transferable skills.

Focus on your career

Cranfield manufacturing graduates are highly sought after by industry. Many graduates take on appointments with a wide range of manufacturing enterprises or, increasingly, apply their skills to other sectors from financial services through to health care. This course is well respected and has a growing network of alumni.

"I was seen as a more attractive employee by the industry than before doing my postgraduate course. I also felt more confident. Once I got a good job after the MSc, the course also helped me grow further in my company".

Enrique Miarro Viseras, Director & General Manager Manufacturing, Control Techniques Drives

Benefit from our links with industry

The Engineering and Management of Manufacturing Systems MSc is accredited by the Institution of Engineering and Technology (IET), the Institution of Mechanical Engineers (IMechE), and the Royal Aeronautical Society (RAeS) for meeting the 'further learning requirements' for Chartered Engineer registration.

On completion, graduates have a broader network of global contacts, increased opportunities for individual specialism in industry and/or consultancy, and the capability to make an immediate and real contribution to the competitiveness of business organisations.

Benefit from practical experience in your work-based projects

This course has been developed with a strong emphasis on applying knowledge in the industrial environment. Project work undertaken enables you to put the knowledge and skills gained from the taught element of the course into real-world practice while gaining transferable skills in project management, team-work and independent research. Future employers value this experience. Companies that have recruited and sponsored project work include Ford Motor Company, Airbus, Rolls-Royce, Coca-Cola, Unilever, Motorola, BOC Edwards, Brompton Bikes and Hallmark. Part-time students have the benefit of addressing their employer's real business problems supported by academic supervision.

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 directed by an industrial advisory committee comprising senior representatives from leading manufacturing and business organisations. This means the skills and knowledge you acquire are relevant to employer requirements.



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Accredited by



Course details

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

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

***Funding:** Funding opportunities exist, including industrial sponsorship and School bursaries. For the majority of part-time students sponsorship is organised by their employers. For further information 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 in a relevant discipline, or the international equivalent of these UK qualifications. Other relevant qualifications, together with significant experience, may be considered.

Who should apply?

- Graduates with science, engineering, IT or business related degrees keen to pursue careers in manufacturing or related industries, as well as academia
- Graduates currently working in industry keen to extend their qualifications, or to pursue a career change
- Individuals with other qualifications who possess considerable relevant experience

Course overview

The course comprises eight one-week assessed modules, a group project and an individual project. The modules include lectures and tutorials, and are assessed through written examinations and assignments. These provide the 'tools' required for the group and individual projects.

The industrial group project is an important learning experience for full-time students. This involves working in teams to fulfil demanding objectives within a tight time schedule, applying state-of-the-art technologies and approaches, and delivering results to a high professional standard. Industrially oriented projects have support from industry and other external organisations.

The individual research project is either industrially or academically driven. Students select the subject in consultation with the Course Director. It provides students with the opportunity to demonstrate independent research ability, the ability to think and work in an original way, contribute to knowledge, and overcome genuine problems in manufacturing. The projects are sponsored by industrial organisations.

Structure

The three elements of the course are assessed as follows:

- Taught modules 40%
- Group project* 20%
- Individual project 40%

*work-based assignment or dissertation for part-time students.

Modules

- Enterprise Systems
- General Management
- Manufacturing Strategy
- Manufacturing Systems Engineering
- Management of Technology and Innovation
- Operations Analysis
- Operations Management
- Supply Chain Management

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, 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:

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www.cranfield.ac.uk/sas/emms

This document is available online or as a text file in large font.

Note: Cranfield University reserves the right to change the programme without prior notification. Information correct at time of going to print.

