# Post Graduate Engineer Apprenticeship

Nurtures the emergence of future leaders and proficient managers through engineering and business management specialism.


## Postgraduate Diploma and Level 7 apprenticeships

**www.cranfield.ac.uk/engineerapprenticeship**

**The Post Graduate Engineer Apprenticeship offers industry the opportunity to develop their employees on a rigorous postgraduate programme, to develop their engineering competence and actively take forward their organisation's capabilities. The PgDip Engineering Competence course represents the educational component of the esteemed Post Graduate Engineer Apprenticeship programme.**

This course is strategically designed to nurture the emergence of future managers/leaders and future manufacturing engineers to be able to develop solutions to engineering problems, using new or existing technologies, through innovation, creativity and change. This course has been developed specifically to meet the high demand for engineering and management capabilities, combined with commercial and problem-solving skills applicable to a wide range of engineering disciplines, such as software, integrated systems, mechanical, electrical, electronic, electromechanical, or fluid power components/systems.

## Developing your workforce

The programme is ideally suited for companies who want to accelerate the development and improve retention of early career engineering management staff through the Apprenticeship Levy.

Developed in collaboration with industry, trade bodies, associations and the Institute of Apprenticeships, the programme has been mapped against the Post Graduate Engineer Standard and meets the Level 7 Post Graduate Engineer standard.

### Benefits to your employers

- Earn a postgraduate qualification with the UK's leading postgraduate university.
- Develop practical skills through personalised learning.

Learn to:

- analyse business processes,
- identify innovation opportunities,
- manage projects effectively,
- develop new products,
- refine operations,
- deliver improved results.

### Benefits to your organisation

- Strengthen your engineering and manufacturing capabilities.
- Improve staff retention with a valuable development programme.
- Gain a competitive advantage with a highly skilled workforce.

Designed to meet the **training needs** of organisations and industry.

Provide capstone experience to synthesise and **apply the knowledge** in a real workplace situation.

Develop **improved process capability** and business metrics.

## Modules

The PgDip Engineering Competence course is comprised of eight modules, and culminates in a group project to apply the module content to a real workplace situation.

### Postgraduate Diploma (PgDip)

- Project and Programme Management
- Lean Product Development
- Optimising Whole Life Cost and Performance Management
- General Management
- Operations Management
- Business Process Analysis and Engineering
- Design Driven Innovation Processes
- Manufacturing Systems Engineering
- Group Project

### MSc (optional route to top up PgDip)

- Individual Research Project

## Course details

**Start date**
October.

**Cohort age range**
24–60.

**Duration**
Two years part-time, plus one year for MSc.

**Delivery**
Online, onsite or hybrid.

**Location**
Dependent on delivery mode.

**Fees**
£27,000
This includes tuition fees and endpoint assessment. Additional fees of £5,000 for MSc top-up.

**Award**
PgDip, MSc.

### The MSc is accredited by:

This MSc is accredited by the Institution of Mechanical Engineers (IMechE), by the Institution of Engineering and Technology (IET) and the Royal Aeronautical Society (RAeS) on behalf of the Engineering Council as meeting the requirements for Further Learning for registration as a Chartered Engineer (CEng). Candidates must hold a CEng accredited BEng/BSc (Hons) undergraduate first degree to comply with full CEng registration requirements.

"Throughout the programme, I found a perfect blend of management-focused curriculum, outstanding tutors with industry experience, and engaging guest speakers. What truly stood out was the unwavering support provided by the tutors. Their prompt feedback on assignments was instrumental in my learning journey, ensuring that I stayed on track and continuously improved.

Thanks to this course, I not only gained valuable management skills but also developed a deeper understanding of industry practices. I am grateful for the opportunity to have been a part of such a dynamic and enriching learning experience."

**Muhammad Rehman Qureshi,**
Systems Engineer at AtkinsRéalis (Engineering Competence MSc, 2023)

## Cranfield University works with over

# 1,500 businesses and governments based in over 40 countries

### These organisations include:

BAE Systems,
GSK (GlaxoSmithKline),
Lloyds Banking Group,
Lockheed Martin,
Network Rail,
Rolls-Royce,
Thales.

"The MSc in Engineering Competence masterfully blends technical expertise with managerial acumen, accelerating the academic and professional development of the next generation of engineers like myself. This programme equips us with the essential skills to excel in engineering management roles within the industry. The research project provides a unique opportunity to pioneer cutting-edge technologies under the mentorship of leading experts in the field, yielding tangible commercial benefits and advancing knowledge in the field."

**Marcus Mascarenhas,**
Airworthiness Engineer, Thales UK
(Engineering Competence MSc, 2023)

## Cranfield University

Cranfield is a specialist postgraduate university that is a global leader for education and transformational research in technology and management. We are focused on the themes of aerospace, defence and security, energy and sustainability, environment and agrifood, manufacturing and materials, transport systems, and water.

Around 5,800 people come to Cranfield each year to benefit from our executive and professional development programmes. We have the largest number of taught postgraduate engineering students in the UK and award more PhDs in production and manufacturing engineering than any other UK university every year.

We employ over 1,500 staff, making our staff-to-student ratio one of the best for any university in the UK and the world (one member of teaching staff to every eight students).

## Contact

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