

Through-Life System Sustainment MSc

Managing high-value engineering assets for optimised availability and cost.



Cranfield
University



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Deploy superior through-life support capability

The Through-life System Sustainment MSc addresses the knowledge, skills and behaviour requirements of the Through-life Engineering Services Specialist integrated degree apprenticeship standard (Level 7). The programme offers a unique opportunity to sponsor your early and mid-career employees to develop and deliver the support services that keep complex and long-life engineered assets working better, for longer at lower net cost of ownership.



Developing your workforce

Who is it for?

The course is ideally suited for organisations who want to accelerate the development, and improve retention of current engineers and managers by enhancing their postgraduate development and training.

The course is applicable across a broad range of industry sectors, where safe, reliable and affordable long term asset operation is a key business driver, providing an essential foundation for future leaders in organisations who wish to optimise the value of engineering assets.

Benefits to your learners

We aim to address the need for highly trained individuals involved in the support of complex equipment and systems with skills in:

- through-life systems,
- design and planning,
- maintenance assessment and operations management,
- engineering and technology including condition-based maintenance and health management,
- standards and regulation,
- information technology,
- effective asset management,

- business models, contracts and policy,
- risk and uncertainty management,
- life extension and obsolescence management,
- cost modelling and control.

The programme develops both the business skills to define the opportunity and capabilities required to move to a through-life solution, alongside the technical skills required to design and deliver it.

Benefits to your organisation

As an employer you will strengthen your engineering and management capabilities, improve staff retention and empower a network of skilled individuals. The skills gained by your employees on the course are expected to contribute to increased competitive advantage for your organisation and integrated approaches in the development of superior through-life support capability.

Designed with the needs of the employer in mind this course is structured to allow maximum benefit from learning with minimum time away from the working environment.

This course is open to delegates from all organisations typically involved in complex long life assets, where they will be taught by industry-active academics and industry practitioners, who have an established track record in product-service and maintenance systems, asset management and through-life engineering services.

Modules

Managing Assets and Value

Through Life Business Models and Requirements Management

System Effectiveness

Diagnostics and Prognostics

Operational Availability and Risk

Optimising Whole Life Cost and Performance Management

Information Management

Leadership and Change Management

Group project

End Point Assessment

Course details



Start date
October



Cohort information
Typical cohort age 28-50



Duration
Two-three years part-time



Delivery
Typically delivered over two years part-time comprising of eight modules, alongside a group project, and an End Point Assessment



Location
Cranfield campus



Award
MSc Apprenticeship



Fees
£17,000
Eligible for apprenticeship funding

This MSc is accredited by:



Develop superior **through-life** capability



Designed to **meet the** training needs of industry



Course structured to allow **minimum** time away from the working environment



Project conducted in your workplace solving **real-life** challenges

“The course is well structured, intense and enjoyable. Cranfield University academics are supported by industry experts and this mix of teaching styles works for me. In the day job it would take me many years to gain the same depth and reach of topic understanding that we will enjoy after two years of study.”

Johnathan Neal, Capability Development Manager, Engineering for Services, Rolls-Royce plc, (Through-Life Systems Sustainment Executive MSc 2014)



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works with over

1,500 businesses and governments
based in over 40 countries

These organisations include:

AIRBUS

BAE SYSTEMS

BOMBARDIER



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 power, environment and agrifood, manufacturing, transport systems, and water.

Home to many world-class, large-scale facilities which enhance our teaching and research, we graduate 4,500 postgraduate students each year, with over half studying part-time. We have the largest number of engineering and technology postgraduates in the UK and award over five percent of the UK's engineering and technology PhDs each 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 academic staff to every five students).

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Please visit www.cranfield.ac.uk/tss for the latest details.

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