

# Maintenance Engineering and Asset Management MSc

www.cranfield.ac.uk/meam



There is a growing need for maintenance engineers and asset managers who can plan the care of long-life, highvalue assets for availability and performance. To maximise the potential cost-savings and efficiencies, organisations require confident professionals, able to develop customised asset management and maintenance routines that are feasible both in technical and cost terms.

This course will develop the skills required to plan, implement and critically assess strategic maintenance plans through a unique blend of taught content and hands-on implementation exercises. The ability to drive cost-effective maintenance strategies across a range of industry sectors opens up careers opportunities for our graduates globally.

# Who is it for?

This course is suitable for graduates with engineering, maths, sciences or related degrees keen to pursue careers in industrial maintenance management (including planning, scheduling and control) and develop relevant technologies for maintenance engineering. It is relevant to both fresh graduates and graduates currently working in industry keen to extend their qualifications and knowledge in this field alongside individuals with other qualifications who possess considerable relevant industry experience.

For employers interested in Degree Apprenticeships, please explore our Level 7 Apprenticeship in Through-life System Sustainment.

## Your career

This qualification takes you on to a wide range of careers involving maintenance engineering and asset management.

Past graduates of this course have gone into roles including:

- Reliability Engineer
- Asset Engineer
- Senior Consultant
- System Engineer

Companies that have employed our graduates include:

- Boeing
- UK Health Security Agency
- Network Rail
- SNC-Lavalin Atkins Transport Consulting & Advisory

### Overview

#### Start date October

**Duration** 

MSc: Full-time one year; part-time up to three years

Qualification MSc

Study type Full-time / part-time

#### Structure

Taught modules 40%, group project (or dissertation) 20%, individual research project 40%

Campus Cranfield campus

#### **Entry requirements**

We welcome applications from talented individuals of all backgrounds and each application is considered on its individual merit. Usually, applicants must hold:

A UK lower second-class (2:2) undergraduate degree with honours, as a minimum, or equivalent international qualification.

Ideally, applicants will have studied in a relevant science, engineering or related discipline.

Find information about equivalent gualifications in your country on our International entry requirements page.

### Fees

Please see www.cranfield.ac.uk/fees for detailed information about fee status, full-time and part-time fees as well as deposit requirements and bursary and scholarship information.

# Course details

The course will include eight taught compulsory modules, which are generally delivered from October to March.

The modules include lectures, tutorials and lab-based activities. These activities are designed to give you hands-on knowledge and theory so as not to rely on technicians for machinery technical issues and are assessed through practical work, case studies, essays, presentations and tests. These provide the 'tools' required for the group and individual projects.

#### **Modules**

Keeping our courses up-to-date and current requires constant innovation and change. The modules we offer reflect the needs of business and industry and the research interests of our staff. As a result, they may change or be withdrawn due to research developments, legislation changes or for a variety of other reasons. Changes may also be designed to improve the student learning experience or to respond to feedback from students, external examiners, accreditation bodies and industrial advisory panels.

To give you a taster, we have listed below the compulsory and elective (where applicable) modules which are currently affiliated with this course. All modules are indicative only, and may be subject to change for your year of entry

#### **Compulsory modules**

All the modules in the following list need to be taken as part of this course.

**Industrial Maintenance** 

Asset Management

Probability and Statistics in Risk and Reliability Engineering

Failure of Engineered Assets

System Availability and Maintainability

Health Monitoring and Inspection

**Diagnostics and Prognostics** 

Maintenance Planning, Scheduling and Control

"Cranfield University is one of two universities in the world that offer a Maintenance Engineering course. I chose to study at Cranfield University due to its specialities in aviation research and strong relationships with the industry. I also really enjoyed working on the student project, they have given me insight and hands-on experience into how to implement digitalisation in maintenance."

#### Faisal Maulana

current student, Engineering and Asset Management MSc

For more information contact our Admissions Team: T: +44 (0)1234 758082

Visit campus for yourself and meet current students and our academics at our next Open Day: www.cranfield.ac.uk/openday February 2025

Every effort is made to ensure that the information provided here is correct at the time it is published. Please check our website for the latest information.