



Maintenance Engineering and Asset Management

MSc

There is a growing need for maintenance engineers and asset managers who can plan the care of long life, high value assets for availability and performance. 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 career opportunities for our graduates globally.

Course structure

This course is made up of three components: a formal taught component (40%), Group Project (20%) and Individual Thesis Project (40%).

Individual project

Students select the individual project in consultation with the Course Director. The individual project provides you with the opportunity to demonstrate their ability to carry out independent research, think and work in an original way, contribute to knowledge and overcome genuine problems.

Group project

The group project experience is highly valued by both students and prospective employers where teams of students work to solve an industrial problem. The project applies technical knowledge and provides training in teamwork and the opportunity to develop non-technical aspects of the taught programme. Part-time students can prepare a dissertation on an agreed topic in place of the group project.

Future career

This qualification takes you on to a wide range of careers involving maintenance engineering and asset management, with responsibilities in industries including:

- Aerospace,
- Automotive,
- Chemical and Process,
- Civil Infrastructure,
- Defence,
- Health,
- Logistics
- Manufacturing Textile,
- Nuclear,
- Oil and Gas,
- Power generation and distribution.

The unique feature of this course is its applied and practical nature, aimed at availability of strategic assets. This course will qualify you to transform the current industry culture of OEM's based maintenance routines to strategy based maintenance.

Example modules

Modules form only part of the course, with the project(s) and these making up the balance. Please see the course structure for details.

The list below shows the modules offered in the 2019-20 academic year, to give you an idea of course content. To keep our courses relevant and up-to-date, modules are subject to change – please see the webpage for the latest information.

Compulsory:

- Asset Management,
- Diagnostics and Prognostics,
- Failure Analysis and Condition-based Maintenance,
- Fundamentals of Maintenance,
- Maintenance Planning and Control,
- Reliability, Maintainability and Availability.

Duration:

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

Start date:

October 2020.

Location:

Cranfield Campus.

Entry requirements:

Candidates are expected to have at least two years relevant experience in industry together with a first or second class UK Honours degree in a relevant engineering or technology-based discipline, or the international equivalent of these UK qualifications. Alternative qualifications together with additional industrial experience have also been considered.

Please visit www.cranfield.ac.uk/entryrequirements for more information. Applicants who do not fulfil the standard entry requirements can apply for the Pre-master's in Engineering programme, successful completion of which will qualify you for entry to this course for a second year of study.

ATAS Certificate:

Students requiring a visa to study in the UK may need to apply for an ATAS certificate to study this course.

Contact details

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For further information please visit
www.cranfield.ac.uk/meam