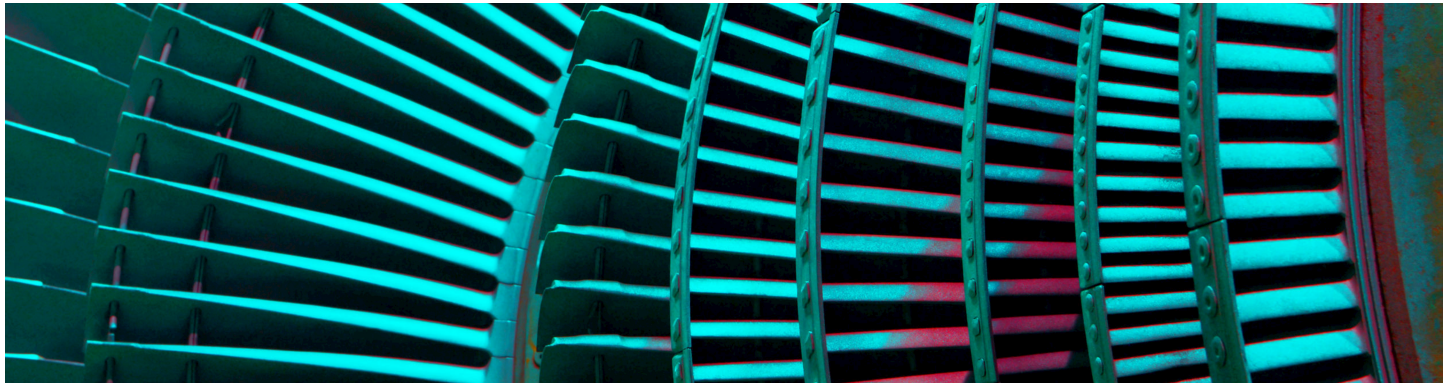




Power, Propulsion and the Environment option - MSc in Thermal Power and Propulsion

www.cranfield.ac.uk/PropulsionAndEnvironment



This course covers key aspects of the gas turbine and prime movers for air, land and sea. It aims to provide you with a thorough knowledge of, and the ability to assess, anthropogenic emissions and abatement technologies.

Power, Propulsion and the Environment is a specialist option of the MSc in Thermal Power and Propulsion.

Who is it for?

This course is suitable for graduates seeking a challenging and rewarding career in an growing international industry. Graduates are provided with the skills that allow them to deliver immediate benefits in a very demanding and rewarding workplace and therefore are in great demand.

Your career

Over 90% of the graduates of the course have found employment within the first year of completion. Many of our graduates are employed in the following industries and positions:

- Gas turbine engine manufacturers,
- Airframe manufacturers,
- Airline operators,
- Regulatory bodies,
- Aerospace/Energy consultancies,
- Power production industries,
- Academia: doctoral studies.

Cranfield's Career Service is dedicated to helping you meet your career aspirations. You will have access to career coaching and advice, CV development, interview practice, access to hundreds of available jobs via our Symplicity platform and opportunities to meet recruiting employers at our careers fairs. Our strong reputation and links with potential employers provide you with outstanding opportunities to secure interesting jobs and develop successful careers. Support continues after graduation and as a Cranfield alumnus, you have free life-long access to a range of career resources to help you continue your education and enhance your career.

Overview

Start date

March or October

Duration

Full-time MSc: one year; PgDip: up to one year

Qualification

MSc, PgDip

Study type

Full-time

Structure

Taught modules 50%, individual research project 50%

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 engineering, mathematics, physics or an applied science discipline.

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

Applicants who do not fulfil the standard entry requirements can apply for the pre-master's course, successful completion of which will qualify them for entry to this course for a second year of study.

ATAS clearance

This course requires Academic Technology Approval Scheme (ATAS) clearance.

ATAS is run by the UK Government's Foreign, Commonwealth and Development Office (FCDO) and applies to international students, except exempt nationalities, who need a visa to study in the UK. Further information can be found in our Application guide.

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 is comprised of up to 12 taught modules, depending on the course option chosen. Modules for each option vary; please see individual descriptions for compulsory modules which must be undertaken. There is also an opportunity to choose from an extensive choice of optional modules to match specific interests.

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.

Gas Turbine Performance, Simulation and Diagnostics
Turbomachinery and Blade Cooling
Combustors
Engine Systems

Management for Technology

Propulsion Electrification

Gas Turbine Operations and Rotating Machines

Elective modules

Select one from the list below

Computational Fluid Dynamics for Gas Turbines

Jet Engine Control

Marine Propulsion System Integration

Propulsion Electrification

Propulsion Systems Performance and Integration

Space Propulsion

"Many Cranfield graduates move into specialised roles in industries like aerospace, aviation, marine energy, and oil and gas—areas that all share a common need for decarbonisation and sustainable energy solutions."

Dr Uyioghosa Igie

Programme Director, Thermal Power and Propulsion MSc

Accreditation

The Thermal Power and Propulsion MSc is accredited by Royal Aeronautical Society (RAeS) and the Institute of Mechanical Engineers (IMechE) 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 show that they have satisfied the educational base for CEng registration. Please note accreditation applies to the MSc award and PgDip do not meet in full the further learning requirements for registration as a Chartered Engineer.



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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/penday

January 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.