

# Data Science and Artificial Intelligence for Sustainability MSc

www.cranfield.ac.uk/DataScienceandAl



The digital landscape of sustainability is fast changing - apply your digital skill to solve global sustainability issues with the Data Science and Artificial Intelligence for Sustainability MSc

# Who is it for?

This course is suitable for engineering, computer science, mathematics, environmental, energy and information technology graduates wishing to pursue a technical management career in the rapidly-growing area of digital transformation for sustainability. It develops professional engineers, scientists and practitioners with the multidisciplinary skills and ability to analyse current and future sustainability challenges across private and public sectors.

# Your career

The international nature of this growing field allows Cranfield graduates to develop diverse and rewarding global careers in industry, government or research.

Example careers:

- Energy Analyst data science,
- · Offshore Energy Analyst,
- · Energy and Sustainability Analyst,

# Overview

#### Start date

Full-time: October. Part-time: October

#### Duration

One year full-time, two-three years part-time

#### Qualification

MSc, PgDip, PgCert

## Study type

Full-time / Part-time

#### Structure

Taught modules 80 credits/800 hours, Group projects 40 credits/400 hours, Individual project 60 credits/600 hours

## **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 related science or engineering 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 taught programme for the master's is generally delivered from October to February and is comprised of eight modules. Each of the first five modules are delivered over two weeks. Generally the first week involves intensive teaching, while the second week has fewer teaching hours to allow time for more independent learning and completion of the assessment.

Students on the part-time programme will complete all of the modules based on a flexible schedule that will be agreed with the course director.

#### **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.

**GIS and Spatial Data Management** 

**Decision Science** 

Scientific Python

**Data Analytics for Sustainability** 

**Artificial Intelligence for Energy Systems** 

**Sustainability and Environmental Assessment** 

## **Elective modules**

Select one from the list below:
Computational Fluid Dynamics for Renewable Energy
Energy Entrepreneurship

Select one from the list below: Energy Systems Case Studies Short Research Project "My group project was actually with an industry, one of the leading industries in the renewable energy investment sector. So we worked with them as a consultant – so it was like working in industry, not just purely academic."

#### **Toba Awe**

Data Analyst, Dense Air, Advanced Digital Energy Systems (now Data Science and Artificial Intelligence for Sustainability), 2021-22

# Class profile 2023/24

## Gender:

Male: 100%

## Age range:

30 - 49 years

## **Nationality:**

UK: 67% International: 33%

## Class size:

3

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

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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.