Water and Wastewater Engineering MSc

www.cranfield.ac.uk/wwe

Help shape a more resilient and sustainable future with an MSc in Water and Wastewater Engineering.

Communities depend on safe and reliable water and wastewater services. There is an urgent need to transform those services to improve protection for public health, provide better care for the water environment, cope with climate change, and become fit for a low-carbon future.

Our MSc in Water and Wastewater Engineering will equip you with an advanced understanding of the technologies at the heart of those services, including conventional ones as well as more radical, innovative systems. You will also gain a real-world perspective on the evolving global sector in which those technologies are utilised.

Our academic staff are world-leading experts in the field, and their cutting-edge research directly informs our teaching to help us go beyond standard textbooks. Throughout the course you will cover theory, application and practice while working in our world-class facilities, including our very own working sewage treatment works.

Who is it for?

The Water and Wastewater Engineering course is ideal for individuals who want to make a real difference to delivering reliable water supplies, or to maintaining and enhancing river and ground water quality.

Well-educated, skilled and experienced graduates are required to design, operate and manage vital water and wastewater treatment services. The demand for such graduates is already high and will only increase over coming years as environmental standards for water quality increase, and pressures on our water supplies continue to grow.

Your career

Our graduates are highly sought after by industry and government, and demand has grown steadily as the education provided has become recognised as excellent. Some graduates progress on to academic research. This course produces graduates able to step into a range of positions and make an immediate and real contribution to the effectiveness of water sector businesses, and organisations such as Severn Trent Water, Anglian Water, Thames Water and DEFRA.

Overview

Start date
Full-time: October, part-time: October

Duration
Full-time: one year, part-time: two-three years

Qualification
MSc, PgDip, PgCert

Study type
Full-time / Part-time

Structure
Taught modules: 40%, group project: 20%, individual project: 40%

Campus
Cranfield campus

Entry requirements
A first or second class UK honours degree in a relevant science, engineering or related discipline, or the international equivalent of these UK qualifications. Other relevant qualifications, together with significant experience, may be considered.

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 comprises a taught programme of three assessed modules, a group project and an individual project

The group project is an applied multidisciplinary team-based activity. It provides students with the opportunity, whilst working in teams under academic supervision, to apply principles taught during modules whilst taking responsibility for project tasks. Success is dependent on the integration of various activities, working within agreed objectives, deadlines and budgets. Students submit project reports and present their findings to representatives from industry. This develops professional practice in communication skills for technical and business areas of process development.

Students select their individual project in consultation with the thesis project coordinators. This provides students with the opportunity to demonstrate independent research ability working within agreed objectives, deadlines and budgets. The project is sponsored by industry and usually includes a four-month placement with the sponsoring company. Placements previously have been offered by all ten of the UK water utilities, the leading two French utilities, as well as multinational companies and SMEs operating in the water sector.

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.

Science and Engineering Principles in Water and Wastewater Treatment

Treatment Processes for Water and Wastewater

Water and Wastewater Assets: Lifecycles, Risks and Futures

"The deep learning I have acquired, especially in the key principle of wastewater treatment systems, the constant opportunity to interact with experienced water professionals during classes and the site visits to UK water company facilities have helped me a lot to deepen the knowledge that I have acquired during classes."

Walter Pillajo Corella
Alumni, Water and Wastewater Engineering MSc

Accreditation

The MSc of this course is accredited by the Chartered Institution of Water and Environmental Management (CIWEM).

CIWEM Chartered Institution of Water and Environmental Management
Accredited Course

Class profile 2021/22

Gender:	
Male 57% - Female 43%	
Age range:	
20 - 59 years	
Nationality:	
UK: 61% - International: 39%	
Class size:	
44	

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

March 2023

The Queen's Anniversary Prizes For Higher and Further Education 2019