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UNIVERSITY OF  
ABERDEEN

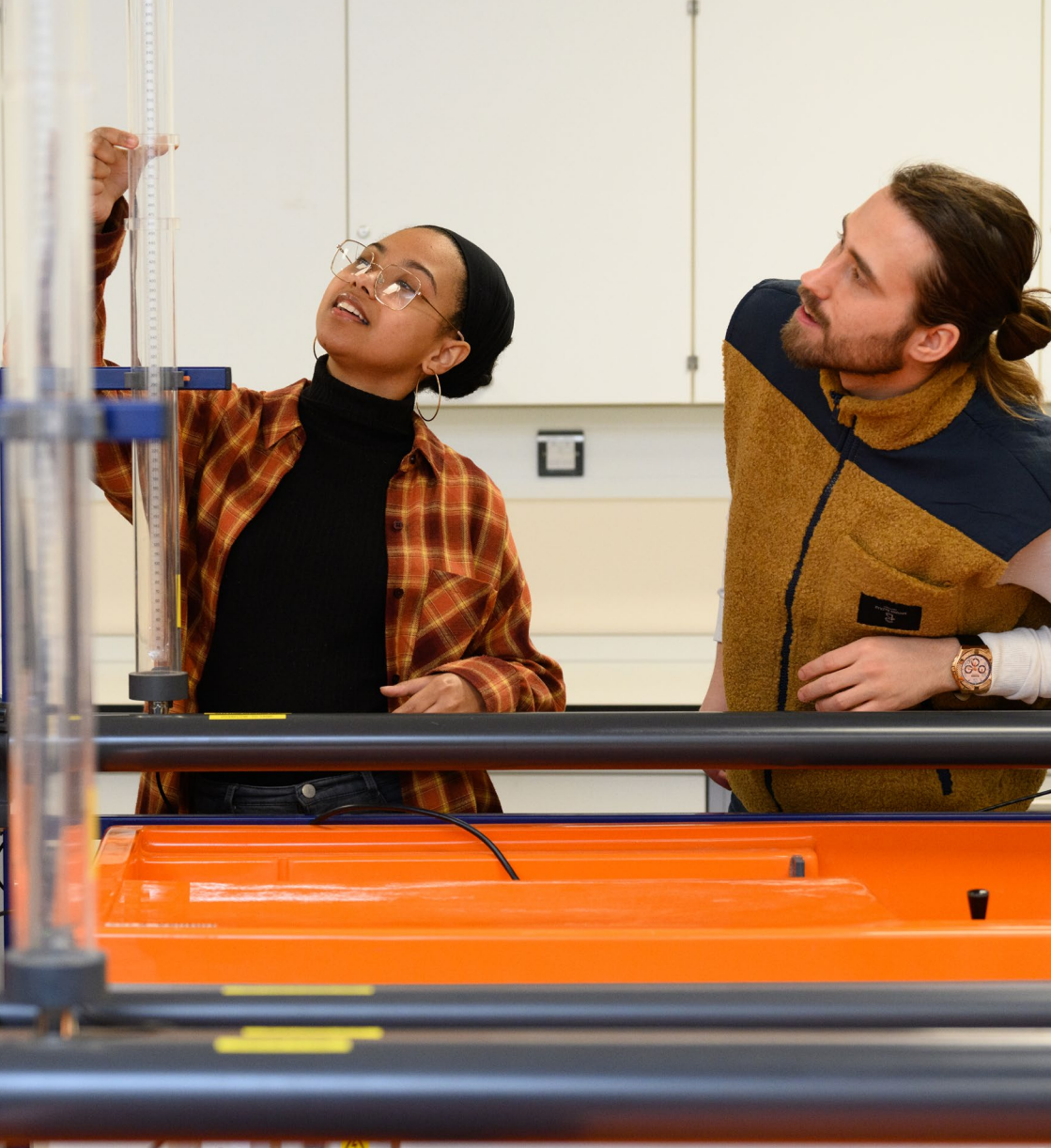
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# School of Engineering Civil Engineering

UNDERGRADUATE GUIDE



→ **1ST IN SCOTLAND  
FOR GENERAL  
ENGINEERING**

Complete University Guide 2024

# Why Study Civil Engineering?

Civil Engineering is all about the environment and infrastructure that makes up the modern world.

Civil Engineers design, build and maintain our roads, railways, airports, dams, industrial facilities, power stations, coastal protection and harbour works, hospitals, sports stadiums and much more.

If you are interested in making lasting, positive improvements to society, in sustainable design for the protection of the natural environment on land or at sea, in improving the quality of life for millions of people using novel building techniques and materials, then civil engineering is an excellent choice.

At Aberdeen, you will be taught by leading Civil Engineering experts whose research covers areas such as environmental and industrial fluid mechanics, soil mechanics, structural mechanics and transport studies. Our teaching is supported by our excellent workshop and laboratories, with state-of-the-art equipment, including some of Scotland's very best hydraulic equipment.



## Accreditation

According to the Royal Academy of Engineering, Aberdeen is one of 13 engineering hot spots in the UK with over 8,000 engineering businesses across the city and surrounding region.

The School of Engineering has strong links with industry, including local, national and international organisations, who support our teaching through guest lectures and seminars, placement opportunities, site visits and scholarships.

## Civil Engineering Degree Programmes

### BEng Programmes (4 Years)

- BEng Civil Engineering
- BEng Civil and Environmental Engineering
- BEng Civil and Structural Engineering

### MEng Programmes (5 Years)

- MEng Civil Engineering
- MEng Civil and Environmental Engineering
- MEng Civil and Structural Engineering
- MEng Civil Engineering with Management
- MEng Civil Engineering with Subsea Technology

Find out more at [www.abdn.ac.uk/study](http://www.abdn.ac.uk/study)

## Engineering Society

The University of Aberdeen Engineering Society is a student-run group for both professional and social events. They welcome students from all disciplines and have a wide range of activities to suit your interests.

You can learn more about the Engineering Society at [www.facebook.com/AUEngineeringSociety](https://www.facebook.com/AUEngineeringSociety)

## Industry Links and Employability

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# What You'll Study

This is an example course list for the four-year BEng and five-year MEng degrees in Civil Engineering. For full details of our various degree programmes, please refer to the relevant pages on our online prospectus at [www.abdn.ac.uk/study](http://www.abdn.ac.uk/study)

## Year 1

- Principles of Electronics
- CAD and Communication in Engineering Practice
- Circuit Analysis and Design
- Engineering Mathematics 1
- Fundamentals of Engineering Materials
- Fundamental Engineering Mechanics

## Year 2

- Fluid Mechanics and Thermodynamics
- Design and Computing in Engineering Practice
- Process Engineering
- Engineering Mathematics 2
- Electrical and Mechanical Systems
- Electronic Systems
- The Engineer in Society

## Year 3

- Geotechnics 1
- Stress Analysis A
- Fluid Mechanics
- Mechanics of Structures
- Design of Structural Elements
- Structural Dynamics
- Civil Engineering Design and Surveying
- Engineering Analysis and Methods 1A
- Project and Safety Management

## Year 4

- Geotechnics 2
- Civil Engineering Hydraulics
- Advanced Structural Design
- Advanced Structural Analysis
- Environmental Engineering
- Individual Project (MEng/BEng)
- Group Design Project (BEng)

## Year 5 (MEng only)

- Offshore Structural Design
- Structural Vibrations
- MEng Group Design
- Three elective courses



## Our Experts



**Dr Nina Nikora**

Lecturer in Civil Engineering



If you would like to take a fundamental role in creating our future world, make a difference in the world around you and solve great engineering challenges that benefit society, then Engineering is the right field for you.



**Dr Adelaja Israel Osofero**

Senior Lecturer in Civil Engineering



If you like to tackle challenges head on and make a difference in the day-to-day life of people in a safe and sustainable way (in terms of cost, environment, and resources) whilst having loads of fun doing it, then Engineering is definitely for you!

## Our Interdisciplinary Approach

Professional engineers in today's world are required to work with colleagues from a range of engineering disciplines. All engineering students at the University of Aberdeen undertake studies from electrical and electronic, civil, chemical, mechanical and petroleum engineering during their first two years.

This ensures our graduates are experienced and knowledgeable about the various skills and challenges each discipline would face, making them excellent choices for any engineering team.

This approach also gives students flexibility in their degree - rather than being locked into a specific programme when applying, our students can choose the path that they prefer once they have experienced all five disciplines.

# Careers

Civil engineering graduates are sought after in a wide variety of industries and business sectors. Civil engineering graduates work in civil and structural companies, working on site, in design offices, project management, buildings and environmental engineering. Civil engineers function very well in both onshore civil engineering sectors as well as the offshore renewable and oil and gas energy sectors.

Recent graduate job roles have included:

- Graduate Civil and Structural Engineer
- Graduate Design Coordinator
- Structural Engineer

- Bridge Engineer
- Site Engineer
- Graduate Transport Engineer

Recent graduates work at companies such as:

- Arch Henderson
- Atkins
- Fairhurst
- Jacobs
- Mott MacDonald
- Network Rail
- Skanska
- Petrofac
- Kier Group
- VolkerStevin
- Petrofac



**Mateusz Wrobel**

BEng Civil Engineering



Last summer I took part in internship engineering company while making concrete samples in a cement lab and then performing various tests to provide a crucial scientific data in order to work on a new patented technology of a green concrete. It's been an amazing experience and I believe one of the reasons behind the fact to be selected only after finishing my 2nd year, was my reference, during an interview, to the aforementioned "Work Engineering experience" course.



**Wiktor Smoczek**

BEng Civil Engineering





The courses I've taken so far at the university, especially the courses that were directed towards civil engineering, interested me a lot. That has made me more sure about my desired career path. Overall the lecturers are all very nice and it's been great fun meeting and befriending all of these people at university. I can't wait to continue my studies here.



[abdn.ac.uk/engineering](https://abdn.ac.uk/engineering)

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