

School of Engineering

Undergraduate Degree Programmes

www.cardiff.ac.uk/engineering

Welcome



Accredited courses

All of our degree programmes are accredited by the relevant professional institutions.

"I was so impressed with the facilities. The labs are the most impressive and I loved working in them."

Zuzanna Stone



World-leading research

The School of Engineering is internationally renowned for the impact of its research and was ranked **1st** in the UK for research impact.

Source: REF 2014

Flexible courses

Our degree programmes offer depth, breadth, and flexibility with opportunities to work in industry and study abroad.



High employability

97% of our graduates were in employment and/ or further study, due to start a new job or course, or doing other activities such as traveling, 15 months after the end of their course.



Outstanding facilities

We have invested in our study, support, and social facilities to give you the best environment in which to learn and succeed.





"You will meet regularly with personal tutors in the first year, which is a great academic and social support system."

Nadeem Goussouss

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Choose Cardiff

We are educating the innovators of the future, working with industry, academia, and government to tackle society's challenges and make our world a better place to live.





We are a leading engineering school, conducting internationally renowned research alongside teaching that places students at the centre of the learning experience.

Welcome to the School of Engineering at Cardiff University. We are delighted that you are interested in studying with us.

The world is changing, and engineers are the ones behind so much of this development. By applying the principles of mathematics and science, engineers develop solutions to the world's biggest technical issues and societal problems.

The wide range of disciplines that engineering covers mean that no matter what your interests, there is bound to be an area that you will find enticing and engaging. If you like creating, designing, building and being at the forefront of technology, the engineering sector has a place for you.

If you choose to study at the School of Engineering, we will do everything we can to help you achieve your potential.

We have a vibrant and international community of students and staff, and you will be supported by our enthusiastic lecturers, caring tutors, and a lively group of fellow students.

Our accredited degree programmes offer depth, breadth and flexibility with an industry-informed curriculum that includes hands-on practical sessions and projects to help you develop the skills you need for a successful career and future.

We hope you will be able to join us in Cardiff soon, but for now we wish you every success in your studies.

Professor Jianzhong Wu Head of School



Why the School of Engineering?

If you choose to study with us, you will graduate with much more than a degree. We aim to produce highly skilled engineers who are exceptional leaders, planners, team players and communicators.



We will encourage your technical and professional skills as well as your creativity, so you can achieve great things in your career.

Here are our top five reasons to study at the School of Engineering:

1.

Flexible courses

We offer a wide range of accredited courses, so you have the flexibility to follow your interests and career aspirations.

Our courses cover seven different areas of engineering including architectural, civil, civil and environmental, electrical and electronic, integrated, medical, and mechanical. Within each programme you can choose between an MEng or BEng qualification.

We also offer courses with a Year in Industry which is highly valued by employers, and the opportunity to improve your language skills with a Year in Europe. Our MEng International courses give our students the opportunity to study with one of our many partner universities outside of Europe for one semester.



2,

Links with industry

Our course content has been designed with input from leading local, national, and international organisations to ensure you gain experience using current commercial tools and techniques. Not only will this strengthen your professional skills, making you ready for professional practise, but it will also increase your employability through consistent engagement with practising professionals.

Our connections allow our students to enjoy industry guest lectures from leading companies. These experts give regular talks and share their invaluable advice with our aspiring students. Guest lectures are great opportunities for students to hear experts speak on topics that are relevant to their degrees and give an insight into working in industry.

You may find yourself working with businesses to solve real-life, current problems through projects and work placements. Many of our students have secured jobs with our industrial connections after graduating.

Our business links also support student-led initiatives such as Engineers Without Borders and the Engineering Society.

3.

Practical learning

A key part of our teaching is in providing practical-based course content. The theory you learn during lectures will be backed up by practical application through laboratory and research work, field trips, design classes, and projects designed in consultation with major employers.

Our teaching environment is designed to help develop your engineering mind and

professional skills. You will complete group work and individual assignments to help you build important leadership, organisation, teamwork, and communication skills.

Our teaching areas and laboratories contain the latest equipment and technologies so you can gain the knowledge and practical skills needed for today's job market.

4.

Student support

We offer a caring, well-equipped environment, with dedicated provisions for students who need academic or personal support.

To help you settle into University life, you will be allocated an academic member of staff as a personal tutor. You will also have access to one of our student mentors. Your tutor and mentor will be there to advise you on academic, non-academic, and personal matters in a confidential and informal manner as and when you need some guidance.

The Maths Support Service provides all students with the opportunity to enhance their mathematical and statistical skills. The service offers informal and flexible drop-in sessions, pre-arranged appointments, and access to a range of learning resources.

We also have an accessible curriculum policy that ensures that teaching and learning is available to all students, including those with disabilities.

5.

Strong career prospects

Our graduates are in high demand with 97% of our graduates were in employment and/or further study, due to start a new job or course, or doing other activities such as traveling, 15 months after the end of their course.

Our students go on to work in a range of areas and roles in industry, as well as other sectors that value creative, analytical and problemsolving skills such as the public sector or finance. Some graduate destinations include Arup, BAe Systems, Bosch, BP, Ford, Network Rail, Nokia, Npower and Rolls-Royce. You will also have essential employable skills that sectors like insurance, finance, education, and planning are looking for. Others go on to complete further study at Cardiff University and other leading institutions.

Our facilities



We utilise our state-of-the-art facilities to deliver a modern teaching experience, enabling students to explore engineering and design projects in new and innovative ways.

School facilities

You will study in the Queen's Buildings at our Cathays Park campus. Thanks to this location, students and staff benefit from easy access to the city centre, main transport hubs, the rest of the University, student halls of residence and the Students' Union.

We have a wide selection of spacious and well-equipped teaching and research laboratories, lecture theatres, computer suites, our own restaurant, coffee shop and award-winning library.

We also have a large, flexible learning space called the Forum, which has spaces for up to 120 students and staff to engage in group learning, single study, or to just to socialise with friends.

All of our lecture theatres, offices and laboratories are wheelchair accessible. Disabled parking and accessible toilets are also available.

Library services

The Trevithick Library provides information resources for engineering, computer science and informatics, and physics and astronomy.

Access to the library and computer facilities is available 8:00 – 17:00 on weekdays and 24/7 at weekends. Facilities include IT suites with printers and group study facilities.

You can borrow up to 35 items at any one time for up to 3 weeks. Many books and journals can also be accessed electronically.

Subject librarians are there to help with all your study and research needs. They also host workshops on information searching and literature research.

Key facilities

Our School boasts state of the art laboratory facilities in civil, structural, environmental, mechanical, medical, electrical and electronic engineering.

Lecture theatres and labs contain the latest teaching equipment and technologies which enable students to obtain the theoretical and practical skills needed for today's job market.

All of the laboratories are staffed by skilled and experienced technical personnel and guided by academic members of staff.

Our major laboratories include:

- Gas turbine testing
- · Additive manufacturing laboratories
- · Lightning laboratory
- Structural performance laboratory
- · Hydroenvironmental research centre
- Musculoskeletal Biomechanics Research Facility
- Building information modelling and virtual reality laboratory

Our other laboratories and facilities include:

- Nanotechnology with integrated clean room facilities
- High frequency
- · Digital signal processing
- · High voltage
- Bulk material and micro/nano scale characterisation
- Motion analysis
- Centrifuge
- Combustion
- · Acoustic emissions
- Digital image correlation and heavy structures.

The School has a suite of 3D printers alongside other facilities in the EVONA Lab, a student workshop facility.

IT facilities

We provide our students with extensive computing facilities, which can be used to access specific reference material and the University network. We also provide for any specialised computing needs that are required to undertake your engineering studies, such as particular software packages.

We deliver a range of materials and learning resources via Learning Central, an internet-based e-learning system which can be accessed by students anywhere, anytime. Wi-Fi is available throughout the whole campus.

Student support

You will be allocated a personal tutor to offer pastoral advice, guidance and support and help you to reflect upon your academic and personal development throughout your studies. Your tutor is there to help you if you have any problems or questions. They can also offer help, encouragement, and feedback on your performance on the course.

We also run a Student Mentoring Scheme where first-year undergraduate students can get pastoral advice and support from established engineering students.

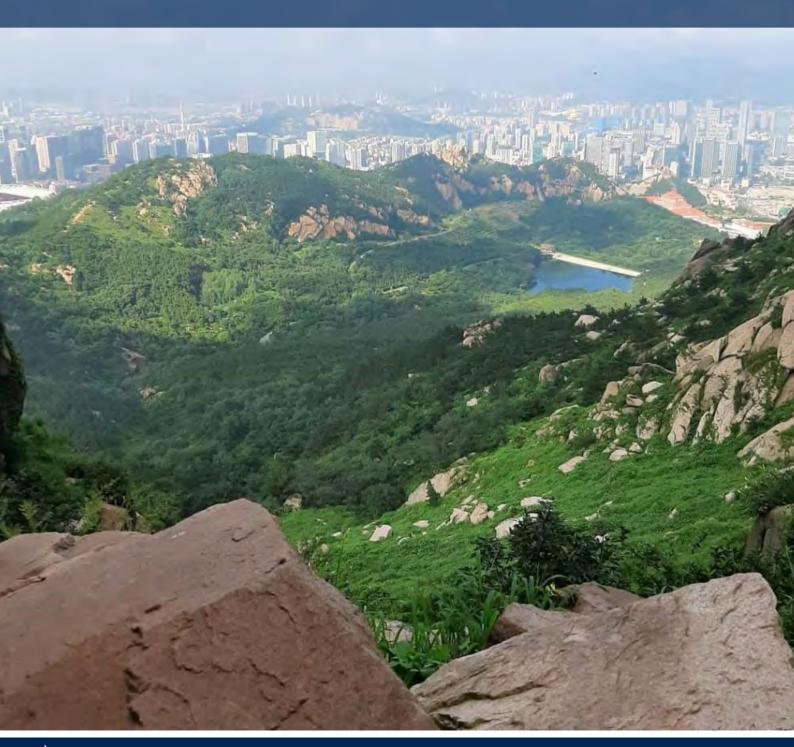
If more specialist assistance is required, the University's Student Support Services has trained counsellors on hand to provide guidance on a range of issues.

Your course lecturers are always on hand to help with subject-specific queries and support your learning.

Cardiff University also offers a drop-in Maths Support Service where students with any mathematical question can get help either one-to-one or in a small group.

Enhancing your experience

We are committed to helping our students gain the most from their University experience, both academically and personally.



Work experience, studying abroad and taking part in extracurricular activities will enrich your overall experience, providing you with an outlet from your studies, new friendships and support networks, and opportunities for self-development.

Studying abroad

Studying abroad can enhance your academic studies and boost your career prospects. It is also an opportunity to experience other cultures and viewpoints and share unforgettable experiences. The opportunities below are available through the School, but there are also many other opportunities organised through the University's Global Opportunities service.

MEng International

This programme involves spending a semester abroad in the third year of the programme at one of the School's partner institutions. There are a range of destination universities to choose from in locations such as Australia, Canada, Hong Kong, New Zealand, and the USA.

Year in Europe

This programme incorporates a year of attending a Higher Education establishment in France, Germany, or Spain. Depending on which Year in Europe destination country you choose, you will learn the language as part of your degree.

Year in Industry

This programme includes one year spent in a professional workplace gaining handson experience. Most placements are paid, providing an excellent opportunity to earn an income to help supplement your studies.

If you are not sure which career path to follow, a year spent working in industry can help you make important decisions about your future. Employers see placements as an opportunity to trial good candidates to recruit for graduate jobs and many of our students are offered a graduate job with their placement employer.

Student societies and outreach opportunities

Get involved with outreach projects and student societies to enhance your engineering and problem-solving skills, contribute to society, boost your career prospects, and have some fun.

Engineering Society

Our student-led society is a great way to meet new people. It can also help you break out of your comfort zone, and in some cases, even improve your future career prospects through involvement in charitable, academic, and industry-led events. The Engineering Society host social events, industry talks and site visits, which gives you an insight into what working as an engineer will be. This is a great chance to network too.

Engineers Without Borders Society

EWB Cardiff is the Cardiff students' branch of the Engineers Without Borders (EWB) global charity. Their mission is to collaborate with disadvantaged communities to improve their quality of life through education and the implementation of sustainable engineering projects. The society offers members social events, meaningful discussions on global sustainability issues, insightful talks from guest speakers, and workshops and projects.

SAWSA - Architecture Society

SAWSA is for those interested in the fields of architecture and design. Members can enjoy guest lectures by architects and other design professionals, creative workshops, sketch crawls across the city of Cardiff, day trips and socials.

Cardiff Racing

The racing team represent Cardiff University in Formula Student, which is a global student competition run by the Institution of Mechanical Engineers (IMechE). Every year, they compete with universities from across the globe to design and build a single seat racing car. Our team is made up of engineering students from all disciplines, from first year undergraduates to PhD students.

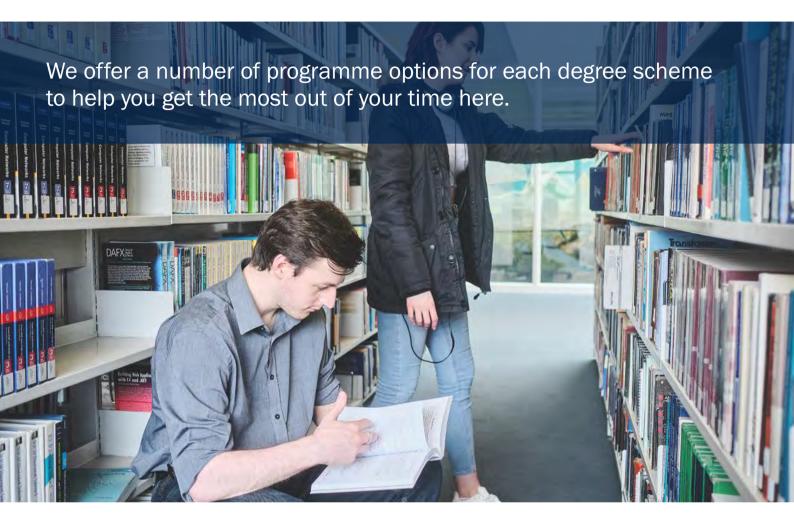
Mothers of Africa

Mothers of Africa is a Medical Educational Charity that trains medical staff in Sub-Saharan Africa to care for mothers during pregnancy and childbirth. Our students support a project at a remote medical outpost in Shiyala Village, situated in the Chongwe District in Zambia. In the past our students have designed and installed a solar classroom, provided lighting and power to the remaining buildings in the medical outpost complex, and installed an energy data logger to gather information on how the solar energy is being used.





Your learning journey



No matter which degree programme you choose, you will be taught the fundamental aspects of engineering through a combination of lectures, tutorials, practical sessions, and projects.

Our teaching is organised into modules and you will take 120 credits per year, balanced between each of the two semesters. Each semester consists of eleven teaching weeks, one revision week and an examination period.

On average, you can have up to 18 hours of timetabled lectures, laboratory classes and tutorials each week and will be expected to supplement this with your own private study.

Assessment is undertaken using a variety of different methods, including formal written examinations, case studies, assignments, and project work.

Types of degree programmes

There are a number of programme options available to you for each of the degree courses:

The MEng (Hons) Programme

The MEng programme is an engineering degree which leads to a higher qualification than the traditional BEng programme, and requires an additional year of study. The programme shares much of the first three years with the relevant BEng programme, while the last two years expand and strengthen your knowledge in your chosen engineering subject. The MEng programme

offers a quicker, more direct route to Chartered Engineer status than the BEng programme.

Continuation on this programme is subject to good performance in your first two years of study.

The BEng (Hons) Programme

This programme is the traditional way of studying engineering and involves three years of study in your chosen subject, or four years if you choose the Year in Industry option.

Not all engineers wish to seek chartered status - for instance, for those opting for certain aspects in research, careers in the

Forces, the financial sector, or some kinds of consultancy work - and in these cases the BEng degree may prove a more appropriate choice than the MEng.

Chartered Engineer status still may be attained with a BEng degree, although the professional institutions require further studies to be undertaken.

The Year in Industry Programme

The sandwich programme is an enhancement of either the MEng or the BEng programme as it incorporates a further year of industrial placement.

This placement takes place after you have completed your first two years of engineering study, so the MEng programme takes five years to complete and the BEng programme takes four years. You will be paid a salary during your industrial placement.

The Year in Europe Programme

The Year in Europe programme is also an enhancement of the MEng programmes, but this time, instead of spending a year in industry, you will spend a year attending a Higher Education establishment in France, Germany, or Spain. Your year in Europe is undertaken after completing your first three years of study in Cardiff, so the MEng programme will take five years to complete.

The MEng International Programme and MEng International with a Year in Industry

The MEng International is a degree scheme available in all subject areas which offers students the opportunity to go abroad during their studies. It involves spending a semester in the third year of the programme at one of the School's partner institutions outside

of Europe (for example, in the US, Canada, Australia and other destinations). This programme has been introduced to give students the opportunity to gain international experience, which is becoming increasingly valued by employers.

The MEng with a Year in Industry is also available with an international option. This new programme allows you to spend a year in industry and to spend a semester studying abroad

What are the differences between MEng and BEng degree programmes?

The direct answer would be: one extra year of study. The accredited MEng degree completely fulfils the academic training requirements section required to become a Chartered Engineer. The modules delivered in the final year of the MEng programme are at a higher level than those on the BEng programme, in terms of there being more research-based elements, more management based aspects, a higher level of technical content or a combination of these.

How easy is it to transfer from a BEng to an MEng degree programme?

The transfer is very easy if you perform well: you will need to attain a 60% average mark for your Year One and Two assessments. Every aspect of your education will have been identical to that of MEng students up until this stage, and if you meet the 60% target you will be encouraged to move onto the MEng programme. However, if you find that your career aspirations suggest that a move from an MEng to a BEng programme would be appropriate, this can also easily be arranged.

What A-levels do I need to study engineering?

We require a Mathematics A-Level plus a minimum of two additional A-Levels, or equivalent qualifications. We do not accept General Studies. We have a Foundation Year course for those with A-levels (or equivalent qualifications), but without the necessary level of Mathematics.

Will I be interviewed?

Our general policy is to invite all our applicants who live within a reasonable travelling distance from Cardiff to visit the School, meet staff and students and talk to the relevant admissions tutors. In this way we hope you can then make an informed choice of where you want to study.

Does the University find a suitable placement for my Year in Industry?

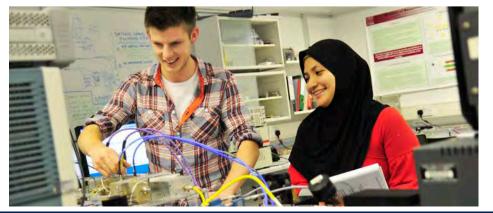
The University will help to provide a range of industrial placements which are applied for competitively. However, you will be also free to seek your own contacts to ensure that the best match is made between your aspirations and the company's business.

How will I be funded during my Year in Industry?

You will be paid directly by the company. The average salary per year for students currently working in industry is £15k, though some companies offer as much as £20k. Sometimes the companies offer students some form of sponsorship on their return to University. During a sandwich year (e.g. year in industry or year abroad) a lower fee will apply. Full details can be found on the Cardiff University website.

What entry qualifications do I need to spend a Year in Europe?

You do not need to be totally fluent in French, German or Spanish to apply to the year in Europe degree. You will have the opportunity to improve your fluency through language modules in the first three years of your degree. You do need a basic knowledge of the appropriate language, for example, a minimum of a grade C or a grade 4 at GCSE in the appropriate language for your chosen country.



The Foundation Year



If you are one of the many people who would like to become an engineer, but you do not have the appropriate mathematical qualifications, we have a programme to suit your needs.

The Foundation Year is specially designed to give you the necessary basic knowledge to enable you to cope with an engineering degree programme.

Although the Foundation Year only lasts for one year, it should be considered as an entry route to one of our degree programmes. It is not a stand-alone year, but the initial part of a programme of study leading to an MEng or BEng degree.

Successful completion of the Foundation Year will allow you to automatically progress to the first year of your chosen degree programme.

If you are a 'home' student on the Foundation Year, you will qualify for mandatory student support (means-tested assistance with tuition fees and Student Loan) to cover all years of study at Cardiff.

What sort of qualifications do I need?

The programme is aimed at a wide range of potential applicants. For instance, if you have a GCSE pass in Mathematics and good A-level passes in non-mathematical subjects, the Foundation Year would be an ideal route for you to enter engineering. Likewise, if you have a BTEC or a similar vocational qualification, an Overseas Baccalaureate or School Leaving Certificate that is not recognised for direct entry to one of our degree programmes, then the Foundation Year could be just what you're looking for.

Special consideration is sometimes afforded to mature students who show the drive, commitment and potential necessary to complete the Foundation Year and continue further to gain a degree. In these cases, formal qualifications may be waived after consideration of vocational experience,

although some evidence of mathematical and scientific potential would need to be shown.

Programme structure

The programme is designed to expose students to a broad spectrum of engineering through modules consisting of lectures, tutorials, and case studies. These include aspects of Mathematics, Physics and Information Technology that are relevant to engineering.

The practical nature of the programme contrasts with the way such subjects may have been presented at school.

Assessment is by project work, continuous assessment, and end of semester examinations.

How to apply

When completing your UCAS application, as well as using the H101 course code, please indicate the engineering degree programme you wish to study following the Foundation Year.

Please note: if you complete the Foundation Year to a satisfactory standard, you are not necessarily obliged to follow your original choice of degree programme.

The International Study Centre



Our foundation programme for international students provides an alternative route of entry onto our undergraduate courses.

This one-year academic programme is specially designed to give you the academic and English language skills you need to enter undergraduate study in engineering.

International Study Centre

Run in partnership with Study Group, our International Study Centre offers a range of foundation programmes designed specifically for students looking to progress onto our courses.

The International Study Centre is based in the centre of our campus and will provide you with academic and study skills preparation, as well as access to the wide range of support and academic facilities available to all our students.

Guaranteed entry and on-campus accommodation

If you successfully complete your programme and achieve the required grades, you are guaranteed entry onto a wide range of our programmes.

All students studying at the International Study Centre will also have access to Cardiff University's on-campus accommodation, as long as you apply by the relevant deadlines.

NCUK

The NCUK International Foundation Year can be accepted for entry into our undergraduate courses.

If you successfully complete the NCUK International Foundation Year, you will then have the opportunity to apply to Cardiff University where applications will be assessed on a case by case basis.

As part of the foundation year, you will take language and study skills modules to help you succeed when you come and study with us.

Other partners

We work in partnership with a number of other UK and international organisations who provide pathway programmes which will be considered for entry onto a range of our degree programmes. If you are studying on a foundation or pathway programme and want to know if you would be eligible to apply to Cardiff University, please get in touch.

Improving your English

If you have met the academic requirements for your course but need to improve your English language level, we offer a range of English language courses to help you meet our English requirements.

How to apply

Full information about the programme and an application form can be found at:

cardiff.ac.uk/study/international/ foundation-and-pre-masters-programmes or email international@cardiff.ac.uk or call +44 (0)29 2087 4432

Links with Industry



All our courses are informed by industrial collaboration and designed to provide our graduates with the tools necessary to find and succeed in industrial employment.

We have excellent relationships with a wide range of industrial partners to help provide you with the connections and opportunities you will need to begin your career. Our connections also ensure our degrees remain relevant and our students are equipped with current, industry-relevant skills.

We offer rich and varied options for you to gain industrial experience. You can choose a BEng or MEng with industrial experience as part of your degree or benefit more generally from our industry connections and careers services.

Industrial placements

Our links with local, national, and international employers often lead to employment or industrial placements for many undergraduate students.

A year in industry will enable you to put theory into practice, develop team working and transferable skills sought after by graduate employers, as well as an awareness of the broad range of careers on offer. Industrial experience also provides the chance to make some money to supplement your studies.

Guest lectures

Our connections allow our students to enjoy industry guest lectures from leading companies. These experts give regular talks and share their invaluable advice with our aspiring students. Guest lectures are great opportunities for students to hear experts speak on topics that are relevant to their degrees and give an insight into working in industry.

Industrial input

Even if you choose not to take an industrial placement, you will still benefit from industrial input in modules across all engineering disciplines and through School-wide project modules.

In the architectural, civil and environmental engineering disciplines, leading organisations such as Arup, Atkins, Knights Brown, Jacobs, and Caukin give significant input into teaching.

In the electrical and electronic engineering disciplines, a wide range of companies support our teaching including Keysight, Rohde and Schwarz, IQE, National Instruments, Newport Waferfab, Cree Western Power Distribution, National Grid, Babcock International and Invertek.

Industrial input in the fields of mechanical and medical engineering comes from Arup, Atkins, Babcock International, and more.

Our degree programmes









Professional placement



Degrees

Architectural Engineering (MEng)

Architectural Engineering

UCAS code: **H294** Duration: **4 years**

Architectural Engineering (BEng)

UCAS code: **H292** Duration: **3 years**

Architectural Engineering (International) (MEng) UCAS code: H298

Duration: 4 years

Architectural Engineering (International) with a Year in Industry

(MEng)

UCAS code: **H299** Duration: **5 years**

Architectural Engineering with a Year in Industry (BEng)

UCAS code: **H293**Duration: **4 years**

Architectural Engineering with Year in Europe (France) (MEng)

UCAS code: **H291**Duration: **5 years**

Architectural Engineering with Year in Europe (Germany) (MEng)

UCAS code: **H992** Duration: **5 years**

Architectural Engineering with Year in Europe (Spain) (MEng)

UCAS code: **H990** Duration: **5 years**

Architectural Engineering with Year in Industry (MEng)

UCAS code: **H295** Duration: **5 years**



Architectural engineers combine the creativity of architecture with the science and technology of structural engineering to design and produce buildings that enhance our standard of living and improve our quality of life.

Our architectural engineering degrees provide an in depth understanding of civil engineering with a specific focus on structural engineering and the built environment. You will discover the essential elements of structural engineering and an understanding of the interaction between engineering design, architectural requirements, and environmental factors. You will also learn more about architecture, municipal engineering, building services, construction technology, and management with particular emphasis on studio work, design projects and case studies.

In the latest Government assessment of research Civil Engineering at Cardiff (under which Architectural Engineering lies) was rated 1st in the UK, as well as being 1st in the UK for the impact of its research (REF 2014).

Our MEng degree programmes are accredited by the Institution of Civil Engineers, the Institution of Structural Engineers, the Chartered Institution of Highways and Transportation and the Institute of Highway Engineers on behalf of the Engineering Council for the purposes of fully meeting the academic requirement for registration as a Chartered Engineer.

Our BEng degree programmes are accredited by the Institution of Civil Engineers, the Institution of Structural Engineers, the Chartered Institution of Highways and Transportation, and the Institute of Highway Engineers on behalf of the Engineering Council for the purposes of fully meeting the academic requirement for registration as an Incorporated Engineer and partly meeting the academic requirement for registration as a Chartered Engineer.

Career opportunities

Our graduates are employed in the civil and structural engineering fields with major consultancy and contracting firms. They are working in roles such as graduate civil or structural engineer or building design engineer.

Graduates from our architectural engineering courses are employed in major companies such as Arup, Atkins, Capita Symonds and Ramboll. Some have chosen to work in the financial, media and marketing sectors with destinations including Deloitte, PwC, and Virgin.

If you wish to pursue further study after graduating, there are plenty of opportunities at Cardiff University at both Master of Science (MSc) and Doctor of Philosophy (PhD) level in topics such as Sustainable Construction and Building Information Modelling (BIM).

Civil Engineering







Professional placement



Degrees

Civil Engineering (MEng)
UCAS code: H207

Duration: 4 years

Civil Engineering (BEng)

UCAS code: **H200** Duration: **3 years**

Civil Engineering (International)

(MEng)

UCAS code: **H205** Duration: **4 years**

Civil Engineering (International) with a Year in Industry (MEng)

with a Year in Industry (MEng) UCAS code: K3G1

Duration: **5 years**

Civil Engineering with a Year in Industry (BEng)

UCAS code: **H201**Duration: **4 years**

Civil Engineering with Year in Europe (France) (MEng)

UCAS code: **H209** Duration: **5 years**

Civil Engineering with Year in Europe (Germany) (MEng)

UCAS code: **H203**Duration: **5 years**

Civil Engineering with Year in Europe (Spain) (MEng)

UCAS code: **H204**Duration: **5 years**

Civil Engineering with Year in Industry (MEng)

UCAS code: **H208**Duration: **5 years**



Civil engineers plan, design and manage construction projects to create and improve the physical environment around us.

Civil engineers are concerned with the planning, design, construction and maintenance of highways, airports, docks and harbours, coastal defences, irrigation systems, essential municipal services (such as water supply, drainage, and sewage disposal) and structural work including buildings, bridges, dams, reservoirs and power stations.

Our civil engineering degrees provide a thorough understanding of civil engineering theory, backed up by practical application through laboratory and research work, field courses and design classes. Our course content has been designed with input from leading organisations to ensure you gain hands-on experience using current commercial tools and techniques.

Our civil engineering programme offers you a highly regarded degree course at one of the top universities in this field. In the latest Government assessment of universities' research Civil Engineering at Cardiff was rated 1st in the UK, as well as being 1st in the UK for the impact of its research (REF, 2014).

Our MEng degree programmes are accredited by the Institution of Civil Engineers, the Institution of Structural Engineers, the Chartered Institution of Highways and Transportation and the Institute of Highway Engineers on behalf of the Engineering Council for the purposes of fully meeting the academic requirement for registration as a Chartered Engineer.

Our BEng degree programmes are accredited by the Institution of Civil Engineers, the Institution of Structural Engineers, the Chartered Institution of Highways and Transportation and the Institute of Highway Engineers on behalf of the Engineering Council for the purposes of fully meeting the academic requirement for registration as an Incorporated Engineer and partly meeting the academic requirement for registration as a Chartered Engineer.

Career opportunities

Our graduates are employed in design consultancies, construction contractors, utilities, and local and national governments. They are working in roles such as civil engineer, site engineer or design engineer.

Graduates are employed in major consultancy and contracting firms, such as Aecom, Meinhardt Group, Morgan Sindall, and Atkins Group. Some have chosen to work in the financial, media and petrochemical sectors with destinations including Deloitte, PwC, Virgin and Shell.

If you wish to pursue further study after graduating, there are plenty of opportunities at Cardiff University at both Master of Science (MSc) and Doctor of Philosophy (PhD) level in topics such as Sustainable Construction and Building Information Modelling (BIM).







Professional placement



Degrees

Civil and Environmental Engineering (BEng)

UCAS code: **H221**Duration: **3 years**

Civil and Environmental Engineering (MEng)

UCAS code: **H226**Duration: **4** years

Civil and Environmental Engineering (International) (MEng)

UCAS code: **H230**Duration: **4 years**

Civil and Environmental Engineering (International) with a Year in Industry (MEng)

UCAS code: **T1N9**Duration: **5 years**

Civil and Environmental Engineering with a Year in Industry (BEng)

UCAS code: **H222** Duration: **4 years**

Civil and Environmental Engineering with Year in Europe (France) (MEng)

UCAS code: **H225** Duration: **5 years**

Civil and Environmental Engineering with Year in Europe (Germany) (MEng)

UCAS code: **H296** Duration: **5 years**

Civil and Environmental Engineering with Year in Europe (Spain) (MEng)

UCAS code: **H297** Duration: **5 years**

Civil and Environmental Engineering with Year in Industry (MEng)

UCAS code: **H224** Duration: **5 years**



Civil and environmental engineers produce sustainable solutions for society's current and future needs, for example living with the impacts of environmental change, or managing our waste and pollution.

Civil and environmental engineers tackle some of the major risks to societies and economies such as through sustainable waste management or confronting environmental pollution.

Civil and Environmental Engineering

Our civil and environmental engineering degrees provides you with the core engineering skills of design and analysis and a thorough understanding of ways to integrate economic and practical solutions. You will learn about the legal, social, and ethical aspects of engineering, with the emphasis being firmly placed upon environmental responsibility and control.

You will have the opportunity to apply what you learn in lectures in practical design classes, research projects, laboratory classes and field courses. Your learning is also developed through site visits, presentations, and specialist speakers from industry.

Our MEng degree programmes are accredited by the Institution of Civil Engineers, the Institution of Structural Engineers, the Chartered Institution of Highways and Transportation and the Institute of Highway Engineers on behalf of the Engineering Council for the purposes of fully meeting the academic requirement for registration as a Chartered Engineer.

Our BEng degree programmes are accredited by the Institution of Civil Engineers, the Institution of Structural Engineers, the Chartered Institution of Highways and Transportation and the Institute of Highway Engineers on behalf of the Engineering Council for the purposes of fully meeting the academic requirement for registration as an Incorporated Engineer and partly meeting the academic requirement for registration as a Chartered Engineer.

Career opportunities

Our graduates are employed in consultancies, construction contractors, utilities, and local and national governments. They are working in roles such as the design, operation and management of water treatment plants; flood defence management; contaminated land remediation and reclamation; integrated transport systems; and general civil engineering consultancy.

You might meet them working in leading companies such as VolkerWessels UK, Mott Macdonald, and Sir Robert McAlpine. Some have chosen to work in the financial, media and petrochemical sectors with destinations including Deloitte, PwC, Virgin and Shell.

If you wish to pursue further study after graduating, there are plenty of opportunities at Cardiff University at both Master of Science (MSc) and Doctor of Philosophy (PhD) level in topics such as Sustainable Construction, Building Information Modelling (BIM), and Civil and Water Engineering.

Electrical and Electronic Engineering







Professional placement



Degrees

Electrical and Electronic Engineering (BEng)

UCAS code: **H605**Duration: **3 years**

Electrical and Electronic Engineering

(MEng)

UCAS code: **H601**Duration: **4 years**

Electrical and Electronic Engineering (International) (MEng)

(International) (MEI UCAS code: **H607** Duration: **4 years**

Electrical and Electronic Engineering (International) with a Year in Industry (MEng)

UCAS code: **A7N3** Duration: **5 years**

Electrical and Electronic Engineering with a Year in Industry (BEng)

UCAS code: **H606** Duration: **4 years**

Electrical and Electronic Engineering with Year in Industry (MEng)

UCAS code: **H600** Duration: **5 years**



Electrical engineers deal with the supply and flow of power. Electronic engineers help to create electronic devices such as computers, mobile phones, and other modern technologies. Both work at the forefront of practical technology, improving the devices and systems we use every day.

Studying electrical and electronic engineering puts you at the centre of a vibrant and fast-moving discipline of relevance to industries such as electronics, information technology, manufacturing, energy generation and supply, transport, and communications.

Our electronic and electrical engineering degrees explore the small- and large-scale science and applications of electricity. You will study information technology and professional engineering studies, which will help you to develop your analytical, computational, and experimental skills, as well as vital oral and written communication skills.

You will be eligible to apply for external scholarships from the UK Power Academy and UK Electronic Skills Foundation UKESF.

Our MEng degree programmes are accredited by the Institution of Engineering and Technology on behalf of the Engineering Council for the purposes of fully meeting the academic requirement for registration as a Chartered Engineer.

Our BEng degree programmes are accredited by the Institution of Engineering and Technology on behalf of the Engineering Council for the purposes of fully meeting the academic requirement for registration as an Incorporated Engineer and partly meeting the academic requirement for registration as a Chartered Engineer.

Career opportunities

Our graduates are employed in the electronics, automotive, IT, telecoms, manufacturing, power, transport, utilities, and construction industries in roles such as lighting engineer, electronics engineer, electrical engineer, network engineer, and systems analyst.

They are employed in organisations such as Tata Steel, Network Rail, Rolls Royce, UK AEA, Saudi Airlines, Collins Aerospace, and the National Grid. Some have chosen to work in the financial, media and marketing sectors with destinations including Chanel, PwC, and Virgin.

If you wish to pursue further study after graduating, there are plenty of opportunities at Cardiff University at both Master of Science (MSc) and Doctor of Philosophy (PhD) level in topics such as Electrical Energy Systems, Sustainable Energy and the Environment, Wireless and Microwave Communication Engineering, and Compound Semiconductor Electronics.







Professional placement



Degrees

Integrated Engineering (MEng)

Integrated Engineering

UCAS code: **H113** Duration: **3 years**

Integrated Engineering (BEng)

UCAS code: **H110**Duration: **4 years**

Integrated Engineering (International)

(MEng)

UCAS code: **H118** Duration: **4 years**

Integrated Engineering (International) with a Year in Industry (MEng)

UCAS code: **5A7D** Duration: **5 years**

Integrated Engineering with a Year in Industry (BEng)

UCAS code: **H111**Duration: **4 years**

Integrated Engineering with Year in

Europe (France) (MEng) UCAS code: **H115** Duration: **5 years**

Integrated Engineering with Year in Europe (Germany) (MEng)

UCAS code: **H116**Duration: **5 years**

Integrated Engineering with Year in Europe (Spain) (MEng)

UCAS code: **H117**Duration: **5 years**

Integrated Engineering with Year in Industry (MEng)

UCAS code: **H114**Duration: **5 years**



Many employers need professional engineers who have a wider understanding of the various engineering disciplines and skills in more than one area.

Integrated engineering is multidisciplinary degree built around electrical, electronic, and mechanical engineering, which aims to produce experts in the areas of manufacturing, mechatronics, computeraided design, and renewable energy. Your broad knowledge of various aspects of engineering will ensure you can interact with engineers from all the traditional engineering disciplines in any multidisciplinary environment.

Students are eligible to apply for external scholarships from the UK Power Academy and UK Electronic Skills Foundation UKESF (Cardiff University is a member of both schemes).

Our MEng degree programmes are accredited by the Institution of Engineering and Technology and the Institution of Mechanical Engineers on behalf of the Engineering Council for the purposes of fully meeting the academic requirement for registration as a Chartered Engineer.

Our BEng degree programmes are accredited by the Institution of Engineering and Technology and the Institution of Mechanical Engineers on behalf of the Engineering Council for the purposes of fully meeting the academic requirement for registration as an Incorporated Engineer and partly meeting the academic requirement for registration as a Chartered Engineer.

Career opportunities

Graduates are employed within organisations such as Babcock International, BAE Systems, Eon Energy, AmSafe Bridport and Arup.

If you wish to pursue further study after graduating, there are plenty of opportunities at Cardiff University at both Master of Science (MSc) and Doctor of Philosophy (PhD) level in topics such as Electrical Energy Systems, Sustainable Energy and the Environment, Wireless and Microwave Communication Engineering, and Compound Semiconductor Electronics.











Degrees

Mechanical Engineering (MEng)

Mechanical Engineering

UCAS code: **H302** Duration: **3 years**

Mechanical Engineering (BEng)

UCAS code: **H300** Duration: **4 years**

Mechanical Engineering (International)

(MEng)

UCAS code: **H309** Duration: **4 years**

Mechanical Engineering (International) with a Year in Industry (MEng)

UCAS code: **U8A6** Duration: **5 years**

Mechanical Engineering with a Year in Industry (BEng)

UCAS code: **H301**Duration: **4 years**

Mechanical Engineering with Year in

Europe (France) (MEng)UCAS code: **H308**Duration: **5 years**

Mechanical Engineering with Year in Europe (Germany) (MEng)

UCAS code: **H303** Duration: **5 years**

Mechanical Engineering with Year in Europe (Spain) (MEng)

UCAS code: **H305**Duration: **5 years**

Mechanical Engineering with Year in Industry (MEng)

UCAS code: **H307** Duration: **5 years**



Mechanical engineers design, develop, build, test, install and maintain all kinds of mechanical devices, tools, engines, and machines.

Mechanical engineering is a wide-ranging discipline which involves the design, construction and operation of a huge array of products and processes. Mechanical Engineers combine imagination with modern technology to offer innovative solutions to meet the complex requirements of society and industry.

Our mechanical engineering degrees explore areas such as thermodynamics, engineering dynamics, fluid mechanics, solid mechanics, and business management. You will also gain transferable skills in areas such as communication, experimentation, computing, laboratory work and design.

You will have the opportunity to join Cardiff Racing and participate in the design, development, construction, and testing of our Formula Student racing car.

Our MEng degree programmes are accredited by the Institution of Mechanical Engineers and the Energy Institute on behalf of the Engineering Council for the purposes of fully meeting the academic requirement for registration as a Chartered Engineer.

Our BEng degree programmes are accredited by Institution of Mechanical Engineers and the Energy Institute on behalf of the Engineering Council for the purposes of fully meeting the academic requirement for registration as an Incorporated Engineer and partly meeting the academic requirement for registration as a Chartered Engineer.

Career opportunities

A substantial number of mechanical engineering graduates work in product design for the automotive, aeronautical, communications and energy industries. Some are employed in medical engineering, others are travelling the world for the petrochemical industry, whilst some are involved in development, production, and general management.

If you wish to pursue further study after graduating, there are plenty of opportunities at Cardiff University at both Master of Science (MSc) and Doctor of Philosophy (PhD) level in topics such as Advanced Mechanical Engineering, Communication Technology and Entrepreneurship, and Manufacturing Engineering, Innovation and Management.

Graduates are employed within organisations such as Vantage Power, General Electric, BP, Ricardo, and Triumph Motorcycles.

A few choose to use their degrees as a qualification to enable them to work in other disciplines. Those who have followed this route typically work in the Forces, the financial sector, the legal profession, chartered accountancy, or computing.

Professionally accredited







Professional placement



Degrees

Medical Engineering (MEng)

UCAS code: **H1BV** Duration: **4 years**

Medical Engineering (BEng)

UCAS code: **H1B8**Duration: **3 years**

Medical Engineering (International)

Medical Engineering

(MEng)

UCAS code: **H2BV** Duration: **4 years**

Medical Engineering (International) with a Year in Industry (MEng)

UCAS code: **P2R4** Duration: **5 years**

Medical Engineering with a Year in Industry (BEng)

UCAS code: BH99
Duration: 4 years

Medical Engineering with Year in

Industry (MEng) UCAS code: HB99 Duration: 5 years



Our medical engineering degrees are designed to appeal to students who wish to combine classical engineering training with a medical application.

We aim to produce a highly competent engineer who could pursue a career either in clinical/bioengineering or engineering fields outside medicine.

You will acquire fundamentals in a broad range of engineering disciplines, including mechanical, electrical, and electronic engineering, and anatomy and physiology. You will be introduced to modules designed to apply engineering principles to the medical field, such as biomechanics, materials, and manufacture. You will study clinical engineering and biomechanics and will use fundamental engineering skills to solve medical engineering problems, especially in your project.

Teaching is delivered by a dedicated team of research-active academic staff, and some lectures will also be delivered by colleagues from Cardiff University's School of Biosciences and the School of Medicine, as well as the Cardiff & Vale NHS Trust.

You will have the opportunity to engage with professionals from healthcare providers such as the Cardiff and Vale Orthopaedic Centre, Cardiff and Vale University Health Board, and the Medical Physics Department.

Our course content is informed by industrial collaborations with organisations like Biomet, Simpleware and Arthritis Research UK. Many of the guest lecturers are linked to health care providers such as the Cardiff and Vale Orthopaedic Centre, Cardiff and Vale University Health Board, and the Medical Physics Department.

Our MEng degree programmes are accredited by the Institution of Mechanical Engineers on behalf of the Engineering

Council for the purposes of fully meeting the academic requirement for registration as a Chartered Engineer.

Our BEng degree programmes are accredited by the Institution of Mechanical Engineers on behalf of the Engineering Council for the purposes of fully meeting the academic requirement for registration as an Incorporated Engineer and partly meeting the academic requirement for registration as a Chartered Engineer.

Career opportunities

Graduate medical engineers benefit from employment opportunities within both the medical engineering and broader mechanical engineering sector.

Graduates are employed within organisations such as Biomet, Johnson and Johnson, Huntleigh Medical, and the National Health Service. Medical engineers can also pursue a career in the healthcare sector. Our graduates also regularly earn positions in the highly competitive Clinical Engineer/Scientist training scheme (visit www.ipem.org.uk for further details).

Numerous opportunities are also available worldwide for postgraduate study, with many graduates having since been awarded a Doctor of Philosophy (PhD). Students have also sought further specialisation by studying for a Master of Science (MSc) qualification.

Graduate engineers are sought after in a number of unrelated fields such as accountancy, finance, government and education, so for those who wish to pursue a career pathway away from engineering there are a range of other exciting opportunities.

Research with impact

We are one of the top universities in the UK for engineering research and 97% of our submitted research was rated as internationally excellent or world leading (REF 2014).

Why is university research important for you?

It means our teaching staff have up-to-date knowledge and are participating actively in their field. Our research informs our course design and ours is based on cutting-edge knowledge and commercial connections, so our graduates are primed for success.

The breadth of our research is reflected in the range of taught modules offered to our undergraduate students, who can get involved through practical classes and their own research projects in the laboratory and in the field.

In the last Research Excellence Framework, the School's research in Civil Engineering was ranked 1st in the UK for quality and General Engineering research (incorporating our other engineering disciplines) was ranked 7th.

Our research in both the Civil and General Engineering categories was also rated top in the UK for its impact.

The School of Engineering is home to fifteen established research centres focusing on practical applications across the field of engineering. The following case studies illustrate some of the research that is taking place at the School and the benefits it is providing for society and the economy on a local and global scale.

Research rethinks disposal of nuclear waste

Our pioneering computer simulations are helping engineer safer ways to store nuclear waste.

The safe disposal of high-level nuclear waste is a global issue. Though temporary storage facilities exist around the world, we sought to develop a longer-term solution that was recognised by multinational governments and nuclear authorities.

Researchers from our Geoenvironmental Research Centre, backed by the European Commission's EURATOM programme, developed a model to understand how barriers used in nuclear waste disposal perform.

The team developed a computerised model called COMPASS to simulate the behaviour of a nuclear waste repository over time and show how nuclear repository barriers perform. The computerised model provided innovative predictions of the behaviour and long-term durability of engineered barriers.

The project has had significant impact on engineering design, environmental conditions, economic investment and public policy. The software has been utilised by International Nuclear Waste Disposal Authorities, and our work has led to the design and construction of a new repositories in Sweden and Finland.

As a direct consequence of the research, £200M investment has been made from 2008-2013 by SKB, the Swedish Nuclear Fuel and Waste Management Company. This sum is markedly less than the expense of continuing storage of high level nuclear waste (at Sellafield in the UK, for example, this amounts to £1.6B per year, in addition to the cost of clean-up and maintenance work, which is priced at £67.5B.

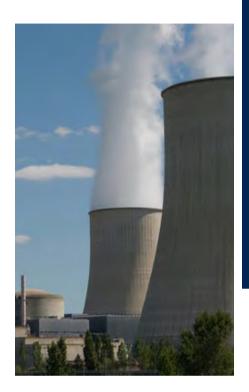
The activities that the research has enabled, highlighted by the scale of investment, are a major step towards a permanent long-term solution to high level nuclear waste

Saving lives and safeguarding water

We are developing accurate and reliable models to safeguard people against global water risks.

NASA's Earth Observatory estimates two billion people are likely to be vulnerable to flooding by 2050. Our researchers recognised the need for more accurate models to predict flood risk and water quality levels for a range of extreme events.

The research has also been driven by changes to planning laws concerning floodplains, increased flood insurance excesses, and increasing demands for improved water quality in rivers, estuaries and coastal basins.



Researchers in the Hydro-environmental Research Centre integrated and refined existing models to give more accurate solutions for dam breaks and embankment breach flows. The refinements also led to the ability to simulate the effects of flooding in urban environments, treating buildings as impermeable rather than solid to replicate the effect of flooding on built-up floodplains.

The impacts of the research are marked environmental, health, economic and industrial benefits. It is used by major organisations around the world on large-scale projects and for mitigation planning against national and international risks associated with floods and water quality.

In Romania, the models have been used to map flood risk over 700km of the Siret River and its major tributaries, following a major event in 2005 resulting in fatalities. In the Philippines, the research is helping to map potential flood risk scenarios across the country.

The models have also been used to show the viability of Sabah Al Ahmad Sea City - a major coastal waterway development in Kuwait.

A capital city



Cardiff is a compact city with an enormous character. Nestled between the rugged coastline and breathtaking mountainous scenery of Wales, the country's capital is a cornucopia of culture, marrying historical delights with cosmopolitan amenities.

Providing an endless array of activities, one stroll through its cobbled streets can see you learn about the rich tapestry of Cardiff's past at Cardiff Castle before soaking in the atmosphere as the crowds spill from the Principality Stadium after one of the many sporting events it holds year round.

The vibrant and independent culinary scene is the heartbeat of the city. With something

to please every palate, you can enjoy fine dining, plant-based treats and exotic cuisines from almost every corner of the globe, without forgetting Welsh Cakes for dessert!

Wales is the land of song, and Cardiff certainly contributes heftily to this legacy. This city is built with music running through its veins, from the oldest record store in the world Spillers Records, which is tucked away in Morgan Arcade, to more contemporary and intimate venues which host some of the world's most exciting new musical talent.

Though your Cardiff bucket list may be bursting at the seams, be sure to make a little room for our National Museum which is a place of

true wonder, while the iconic Wales Millennium Centre in the idyllic setting of Cardiff Bay is simply not to be missed.

Bustling with personality, Cardiff is a city made for students, offering an endless string of entertainment opportunities while remaining inexpensive and easy to navigate.

The modern shopping centres, aesthetic arcades, luscious green parks and thriving nightlife are a huge draw for living in Cardiff, though you'll always find your way back to our Students' Union, which is the true home of the student scene in the city.

"The official capital of Wales only since 1955, the buoyant city of Cardiff (Caerdydd) has, since the turn of the millennium, witnessed a remarkable evolution from a large town to a truly international city, with massive developments in the centre as well as on the rejuvenated waterfront. With a reputation as a party town, allied to lots of top-class sport and cultural attractions, it is one of the UK's most enticing destinations."

Rough Guide 2020

A leading university





Our students learn from leading researchers in over 300 courses across the University. As Wales' only Russell Group institution, we have gained an international reputation for excellence in teaching and research, which is built from our history of achievement since 1883.

Cardiff University becomes home for approximately 5,500 new undergraduate students every year. While competition for places is strong, we pride ourselves on being an inclusive university, welcoming applications from everyone who wishes to study with us.

We are a global university with over 8,600 international students from more than 130 countries and open our doors to all applications, irrespective of background.

Facilities and development

Committed to investing in our services, Cardiff University is home to new and well-equipped laboratories, lecture theatres, libraries and computing facilities to name a few, with more exciting developments continuously underway.

We take our environmental, safety and security responsibilities seriously, embracing our comprehensive Energy, Water and Waste Policy, which is already making great savings in energy consumption and helping us to do our bit to tackle climate change.

Global Opportunities

We are partnered with over 300 leading institutions across the world, and our Global Opportunities team will help you to gain valuable international experience, through study, work or volunteering.

Supporting you

Our student support and wellbeing centres deliver a substantial range of services available to all students that are free, impartial, non-judgemental and confidential, aimed to help you make the most of student life and support you during your study.

We are also rated as one of the best universities for supporting LGBT+ students and are proud to be ranked highly in the Stonewall Workplace Equality Index.



Virtual campus tour

Discover more about the University and the city of Cardiff through our interactive online tour at:

virtualtour.cardiff.ac.uk

Living in Cardiff





"Cardiff has one of the biggest, best and most active students' unions in the UK, with high quality facilities including Y Plas, a 2,150 capacity nightclub; and the Great Hall, a major concert venue."

Complete University Guide, 2019



Cardiff is the perfect place to be a student. It mirrors the hive of activity a big city offers, but in an intimate and compact setting with endless character. Drink in the atmosphere, soak up the culture and get stuck into the host of activities available in our city; your new home.

A guarantee of accommodation

If you accept your offer of a place at Cardiff on a firm basis, you are guaranteed a single occupancy place in University accommodation during your first year, living with other first year undergraduate students.

The residential dates for your particular accommodation will be confirmed in your Offer of Residence.

Residence Life

While staying in Cardiff student accommodation, you will have access to the incredible service provided by the Residence Life Team who work tirelessly to enhance your student experience.

Working in partnership with Student Support and Wellbeing, the Residences Office and the Students' Union, Residence Life will welcome you to Cardiff and help you to make a smooth transition into University.

They also help foster a strong sense of community through social events and cultural activities, as well as practical support too.

Students' Union

Our Students' Union is at the heart of the Cardiff student experience. It's a student-led and independent part of the University, dedicated to making your time with us the best it can be.

Built on the foundation of inclusion, diversity, personal development and friendship, the Students' Union runs a range of activities and services to help enhance your Cardiff University experience.

These include advice, training, skills development, entertainment, volunteering opportunities and employment throughout your time at Cardiff and to prepare you for a career after University too.

Find out more ...

Accommodation

For further information please visit our website: www.cardiff.ac.uk/residences

You can also watch our residences film online at: www.youtube.com/watch?v=hxzX-dYLfB8

Students' Union

- f facebook.com/cardiffstudents
- snapchat.com/add/cardiffstudents
- instagram.com/cardiffstudents
- @cardiffstudents
- ▶ www.youtube.com/cardiffstudents

Applications



To be considered for entry onto one of our degree programmes you should apply online via the UCAS website using the 'UCAS Apply' facility.

To use this facility you need to log onto: www.ucas.ac.uk/apply

The website will provide you with information on how to apply and explain the procedure. Applications should be made by 15 January.

After we have received and considered your application, we may invite you to visit the School sometime during the period November to April. There will not be a formal interview, but there will be a guided tour of the School, and the city. You will meet students and staff, providing us with the opportunity of getting to know more about you and enabling you to find out what life is like as an engineering student at Cardiff.

Typical total number of places available in the first year for all courses: **410**

Typical number of applications: 2,500

Entry requirements

For detailed entry requirements and latest typical offers please see:

www.cardiff.ac.uk/ugcourses

These typical requirements are for guidance. Please check our website for the latest information.

A-level: BEng: AAB - BBB, MEng: AAA-AAB. Must include Maths at A-level.

WBA: The Welsh Baccalaureate Advanced Skills Challenge Certificate will be accepted in lieu of one A-level (at the grades listed above), excluding any specified subjects.

IB: For BEng, this is 31-34 overall or 665-666 at higher level (to include HL maths). At MEng, it's 32-36 overall or 665-666 HL (to include HL maths).

BTEC: DD in BTEC Diploma in any subject and A-Level Maths at Grade A or B depending on course.

Other: Applications from those offering alternative equivalent qualifications are welcome, as are those who may have other relevant work/life experience.

Specific subjects

A-level maths (or equivalent). Also grade C/grade 4 or higher in GCSE maths and English (or equivalent). Applicants to the Year in France/Germany/Spain programmes are also required to have grade C/grade 4 or higher at GCSE in the appropriate language (or an equivalent qualification).

Foundation year

If you have a GCSE pass in Mathematics and good A-level passes in non-mathematical subjects, the Foundation Year would be an ideal route for you to enter engineering. If you wish to apply for the foundation year, enter H101 in the choices section of your UCAS application, plus the code for the degree programme you wish to follow after the foundation year. This is an integrated degree programme (foundation year, plus chosen degree programme).

Applications continued



Equality and diversity

We are committed to supporting, developing and promoting equality and diversity in all our practices and activities. We aim to establish an inclusive culture free from discrimination and based upon the values of dignity, courtesy and respect. We recognise the right of every person to be treated in accordance with these values.

We are committed to advancing equality on the grounds of age, disability, gender reassignment, marriage and civil partnership, pregnancy and maternity, race, religion and belief (including lack of belief), sex and sexual orientation and to fostering good relations between different groups.

For further information, please visit: www.cardiff.ac.uk/public-information/equality-and-diversity

Deferred entry

The School has no objection to the possibility of deferred entry provided the intervening year is spent in a positive and worthwhile way. Application is made through UCAS in the usual way, although the UCAS application must show the deferred year of entry.

Open Days

The University runs Open Days throughout the year, giving anyone considering applying to Cardiff the chance to find out more about life at university and see what we offer. If you apply and are offered a place, you will be invited to meet us at our specially-devised School Open Days.

When making that important decision, we strongly encourage you to join us. Not only will you have the opportunity to hear more about our degrees, you will also meet staff, have the chance to talk to current students and to get the feel for our cosmopolitan capital city.

Student support

Whether or not you use student support services it's reassuring to know that they are available to you should you need them.

Every student is assigned a personal tutor, but should you need extra support we have a range of services available to you. Such as;

- · Disability and Dyslexia support
 - Email: disability@cardiff.ac.uk
 Tel: +44 (0)29 2087 4844
 - Email: dyslexia@cardiff.ac.uk
 Tel: +44(0) 29 2087 4844

- Counselling and Wellbeing Guidance Email: wellbeingandcounselling@cardiff. ac.uk
 Tel: +44 (0)29 2087 4966
- International Student Support Email: iss@cardiff.ac.uk
 Tel: +44 (0)29 2087 6009
- Student Mentor Scheme www.cardiff.ac.uk/study/student-life/ student-support

Tuition fees and financial assistance

The University charges an annual fee which covers all tuition fees, registration and examinations other than the retaking of examinations, by applicants not currently registered. Please note charges for accommodation in University Residences are additional.

Please see the following website for more information: www.cardiff.ac.uk/fees

Scholarships and bursaries

For more information please visit the following website: www.cardiff.ac.uk/scholarships



Important Legal Information

The contents of this brochure relate to the Entry 2022 admissions cycle and are correct at the time of going to press in May 2021. However, there is a lengthy period of time between printing this brochure and applications being made to, and processed by us, so please check our website at: www.cardiff.ac.uk before making an application in case there are any changes to the course you are interested in or to other facilities and services described here. Where there is a difference between the contents of this brochure and our website, the contents of the website take precedence and represent the basis on which we intend to deliver our services to you.

Your degree: Students admitted to Cardiff University study for a Cardiff University degree.



This brochure is printed on paper obtained from well managed sources using vegetable-based inks. Both the paper used in the production of this prospectus and the manufacturing process are FSC® certified. The printers are also accredited to ISO14001, the internationally recognised environmental standard.

When you have finished with this brochure it can be recycled, but please consider passing on to a friend or leaving it in your careers library for others to use.

Thank you.

Cardiff University is a registered charity, no. 1136855

How to find the School

You will find us located in the Queen's Buildings on Newport Road (entrance via the Parade). We are conveniently situated close to the city centre, student halls of residence, and to all of the main University buildings, including the Students' Union.

Key

School of Engineering

University and NHS buildings

Student residences

This prospectus can be made available in alternative formats, including large print (text), Braille and on audio tape/CD.

To request an alternative format please contact Laura Roberts:

Tel: **029 2087 4455**

Email: RobertsL9@cardiff.ac.uk



To find out more about the School of Engineering please visit our website:

www.cardiff.ac.uk/engineering

Contact us

Tel: 029 2087 9999

Email: enquiry@cardiff.ac.uk

School of Engineering **Cardiff University** Queen's Buildings The Parade Cardiff CF24 3AA

Stay in touch



cardiffuniversity schoolofengineering



@EngineeringCU

Student life

Got questions about student life? Get them answered at:

www.cardiff.ac.uk/ studentbloggers

Want to know more about life at Cardiff University? Our student bloggers are recording their experiences and are happy to answer your questions.

Our student bloggers are real students studying on a range of courses. They are here to answer any questions you have about life at Cardiff University. What's a typical day like? What clubs and societies are there? Is Cardiff's music scene any good? It can be almost anything.

