

School of Earth and Environmental Sciences

Undergraduate Degree Programmes

www.cardiff.ac.uk/earth-environmental-sciences

Welcome to our School

Our flexible degree programmes allow you to you tailor your course to your interests and career aspirations.



High employability

95% of our graduates were in employment and / or further study, due to start a new job or course, or doing other activities such as travelling, 15 months after the end of their course.

Higher Education Statistics agency. Latest graduate outcomes survey (2018/19)

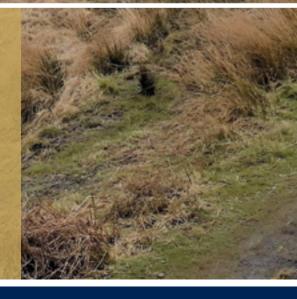


Outstanding facilities

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

"Cardiff has given me unbelievable opportunities and experiences."

Jess Cartwright



8th in the UK for Earth Systems and Environmental Sciences research

Research Excellence Framework 2021

Practical learning

We provide lots of field classes and laboratory work to ensure you graduate with practical skills and plenty of hands-on experience.



"The variety of modules allowed me to gain employment in different sectors."

Kate McElligott



Contents

A world of opportunities	2
Choose Cardiff	4
Our facilities	6
Professional placements	8
Year abroad	10
Your learning experience	11
Our degree programmes	13
Choosing a course	13
Environmental Geography	14
Environmental Geoscience	16
Exploration Geology	18
Marine Geography	20
Geology	22
Physical Geography	24
• Environmental Sustainability Science	26
Further study	27
Research that matters	29
Employability and careers	31
A capital city	33
A leading university	34
Living in Cardiff	35
Applications	36
How to find the School	37

Copyright Higher Education Statistics Agency Limited 2021. The Higher Education Statistics Agency Limited cannot accept responsibility for any inferences or conclusions derived by third parties from its data.

A world of opportunities





Our students benefit from high-quality, research-informed teaching ensuring the very best learning experience. Studying Earth and environmental sciences at Cardiff will prepare you for a wide range of exciting and diverse career opportunities.

We work hard to create an ideal learning environment for you. The combination of teaching and research excellence in our school gives you the chance to learn from some of the world's leading academics. You will be supported to make sure you get the most out of your experience at the university, and you'll have access to our high-quality teaching facilities - from libraries and lecture halls, to labs and online learning tools.

We pride ourselves on supporting our students to fulfil their potential and to graduate as confident, skilled and adaptable individuals ready for life after Cardiff University.

In this brochure, you will find specific information on your specialist subject, our school and the opportunities that are available to you. You will also find information about the city of Cardiff and its beautiful surroundings, which provide an outstanding natural laboratory for our Earth and environmental scientists.

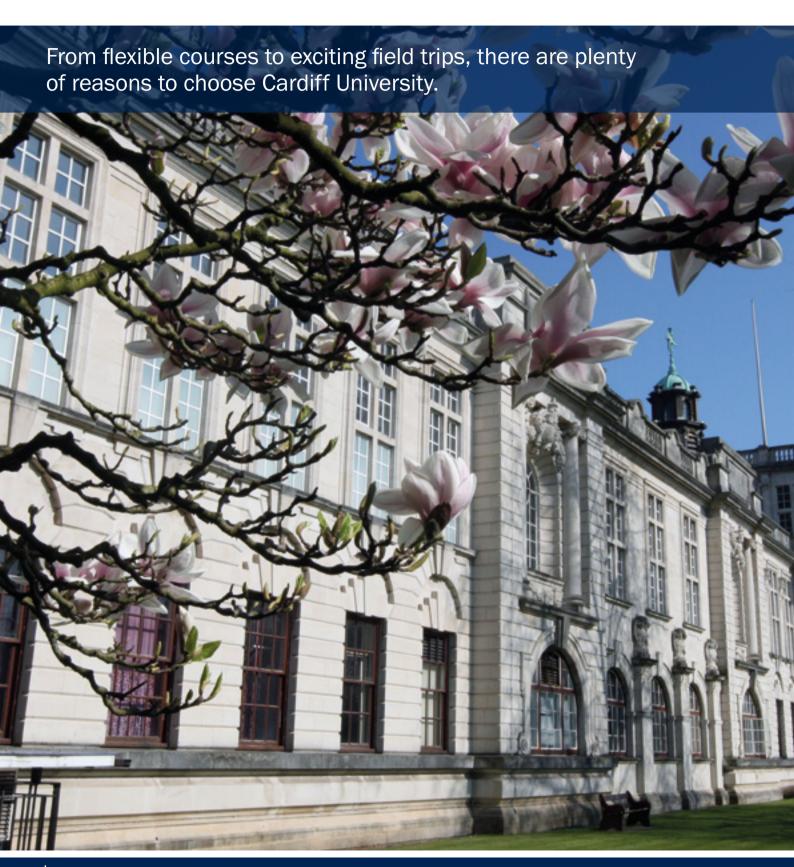
If you would like to arrange a visit, please get in contact, our telephone number and email addresses are given on the back page.

I hope you will be able to join us soon, but for now I wish you every success with your studies.

Professor Ian R. Hall Head of School



Choose Cardiff





Here are our top five reasons to study at the School of Earth and Environmental Sciences:

1. Fieldwork

Fieldwork is an essential experience for all our students and contributes to effective learning and personal development, as well as creating some memorable experiences in exciting locations.

We offer a wide range of field trips in the UK and overseas to students on all undergraduate degrees, where you will apply the skills you have learnt in lectures. The cost of compulsory field trips is included in the price of our courses.

2. Placements

Students on all our courses can spend a year either in the UK or overseas gaining valuable work experience before they graduate. It is a great chance at the end of your second year to take on a professional role with a company or organisation. Some of our students have been successful in securing permanent jobs with their placement companies after graduating.

3. Flexible courses

We offer a flexible range of undergraduate degree programmes, which are available as a three-year bachelor's degree (BSc) or a four-year undergraduate master's degree (MSci). Most of our courses have a common first semester, so you are free to switch between them until the end of the first semester if you change your mind. You can switch

between courses in the same discipline e.g. Earth science (Exploration Geology, Geology, Environmental Geoscience) or geography (Physical Geography, Environmental Geography and Marine Geography) until the end of year one. Environmental Sustainability Science students may transfer onto another geography degree at the end of year one.

4. Teaching and research excellence

As a Russell Group university, we offer you access to excellent teaching and top-class research facilities. You will be surrounded by world-class lecturers and a highly motivated and talented peer group. In the most recent research assessment, Research Excellence Framework (REF 2021), 100% of our research was deemed world-leading or internationally excellent, which puts us 8th in the UK in terms of overall research in Earth Systems and Environmental Science.

5. Strong career prospects

Our graduates go on to work in a wide variety of careers, from environmental consultancy and engineering geology to marine conservation. We have a wealth of industry contacts, including geotechnical and marine surveying firms, as well as mineral exploration companies, who provide undergraduate placements and projects for our students.



Our facilities

We've made sure our environment meets all your needs to help you achieve your potential.



School facilities

You will study in the Main Building at our Cathays Park campus. Situated on Park Place, we're just a short walk from the students' union, support services and the city centre. We have a selection of lecture theatres, computer suites, break-out seating space and a library.

Library services

The Science Library is located on the first floor of Main Building and contains collections on biosciences, chemistry, computer science, Earth and environmental sciences. You can borrow up to 35 items at a time, the standard loans are 2 or 4 week loans and all loans automatically renew unless there is a hold placed on the book. 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.

Access to the library and computer facilities is available throughout the day and early evening during term times.

Key facilities

From the latest analytical techniques to a coastal research vessel, our facilities support research and teaching activities throughout the School.

Our facilities include:

- · 3D seismic laboratory
- · Electron microbeam facility
- Terrestrial laser scanner
- · RV Guiding Light
- · Palaeoclimate and climate systems facility
- Element analysis
- Microscopy and imaging facility
- · Geochemical preparation
- Rock preparation
- · High-performance computing

IT facilities

Computing facilities are available within the School of Earth and Environmental Sciences and in the Science Library.

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.

Wifi is available throughout the whole campus.

Personal tutor and student mentor scheme

You will be allocated a personal tutor to help and advise you during your time at Cardiff University. Your tutor is one of your first ports of call in the school if you have any problems or questions. They can offer help, encouragement and feedback on your performance on the course.

We also run a Student Mentoring Scheme where first years can get pastoral advice and support from established students.

Your lecturers are always on hand to help with subject-specific queries and will support your learning through example classes, tutorials and help sessions.

Earth Society

Earth Society, our student-led society, is a great way to meet new people and have some fun. It can also help you break out of your comfort zone, and in some cases, even improve your future career prospects through involvement in their charitable, academic and industry-led events.

Earth Society host events including an end of year summer ball, various field trips and regular socials.

Society of Economic Geologist's Student Chapter

The Cardiff University Society of Economic Geologist's Chapter is an active, student run, academic society that hosts regular talks by external speakers from industry and academia, plus lectures from members of the school.

The society organises field trips to places of interest including mineral deposits and mines across Europe. Recently our students have been to Ireland, Sweden, Finland and Serbia.

Nearby facilities

Our school is in the same building as the Welsh office of the British Geological Survey and next door to the National Museum of Wales, providing easy access to the exhibition galleries and collections to enhance our teaching.

British Geological Survey Wales has a strong environmental focus and helps provide support for student projects along with advice on professional skills and careers.



Professional placements

A professional placement is a great way for you to apply the knowledge you will gain during the first two years of study.

Employers are increasingly looking for graduates with industry experience. On most of our courses, you will have the opportunity to undertake a professional placement between your second and third year of study. It is normally a paid position and can take place in the UK or abroad.

Why a professional placement?

In a competitive graduate job market, a placement can help you gain extra skills and experience to make you stand out from the crowd. It could help you to secure a permanent role after you graduate, as well as providing real-world context to support your studies. Most placements have competitive salaries, providing an excellent opportunity to earn an income to help supplement your studies.

If you're not sure what career path to follow, a placement year can help you to figure out what you want to do, which might help you make those all-important decisions about your future.

Employers see placements as an opportunity to trial good candidates to recruit for graduate jobs, and some of our students have been successful in securing permanent jobs with their placement companies post-graduation.

Where can I complete my placement?

Cardiff University has links with over 300 institutions and can provide you with the opportunity to embark on a placement across the world.

In recent years, our students have completed placements with the UK Hydrographic Office, Gardline, Titan, Fugro Marine Ltd, Dover Harbour Board, Panama Canal, Mineco, Parc Natural, Sharklab and more.

How does it work?

Your placement will last typically between 10-12 months and will take place between the second and third year of your degree. You will return to Cardiff University following the successful completion of your work placement at the start of the autumn semester ready for another year of studies.

As a placement year is part of your academic studies, you will pay a tuition fee. Placement year fees are reduced cost, please see our website for details.

Cardiff University's Careers and Employability service will support you throughout the process with regular job alerts, company presentations, CV workshops, help preparing for interviews and assessment centres, and one to one tailored advice.

Although we can assist you with finding placement opportunities, the responsibility to secure a placement lies with you. If you are not able to secure a placement, you will transfer to the same version of your degree course without completing a placement year.

Enrolment on a professional placement is subject to you achieving adequate marks in year one and the availability of suitable placements.

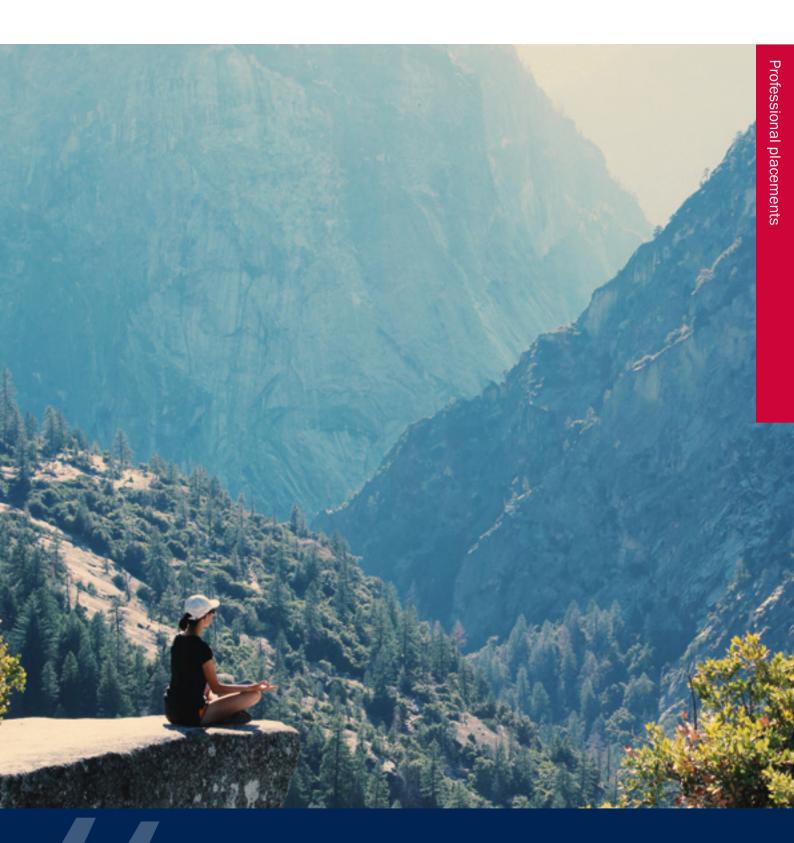
You do not need to apply for a placement version of this course. There's plenty of time to get a feel for university life before you decide whether you would like to complete a professional placement. You will be asked if you would like to complete a placement at the start of your second year and will switch to the four-year BSc with a Professional Placement via an internal transfer.



Don't just take our word for it . . .

I thoroughly enjoyed my studies at Cardiff University, in particular the opportunity to undertake a placement year, which I completed at the Port of Dover. This really helped me gain experience applying the skills I had developed at university, in addition to helping me understand my future possible career options. Post education, I returned to the Port of Dover where I am now the Environment and Sustainability Manager at one of the UK's busiest ports.

Megan Turner, Marine Geography with a Professional Placement (BSc, 2019)



My year abroad was the most memorable and life-changing year of my life, I met some of my closest friends, experienced things I never thought I would, and have a newfound appreciation for others.

Leah Sier, Geology with a year studying abroad in Australia

Year abroad

Take the opportunity to expand your knowledge with skills gained living and studying in another country.

Our numerous partnerships with top universities mean you will be able to study in some of the most iconic and inspiring cities in the world. Destinations include the Netherlands, Sweden, Germany, as well as many other universities further afield in the United States, Australia, New Zealand, Canada and Singapore.

Why a year abroad?

An international experience will not only enhance your CV by demonstrating essential skills such as communication, flexibility, and collaborative working, but can provide you with valuable networking opportunities. Studying abroad is a great way to broaden your academic knowledge, immerse yourself in another culture and gain skills that could be valued by employers.

Above all, it would be the start of a new adventure. You will experience other cultures and viewpoints, make new friends, and share unforgettable experiences during your time abroad. You may also have the chance to embrace a new language.





How will it work?

Your placement will last one academic year (this will vary depending on your chosen location) and will take place between the second and third year of your degree.

The Global Opportunities team provides a dedicated resource and source of expertise for all the international opportunities available at Cardiff University. They will be able to support you in the application process if you consider a period abroad to study, work or volunteer and offer a range of international opportunities.

You will return to the university following the successful completion of your year abroad at the start of the autumn semester, ready for another year of studies.

To apply to a Year Abroad programme, you must choose the four-year version of the bachelor's degree with a year abroad, which will have its own UCAS code and is a separate course from the three-year bachelor's degree. You don't need to commit to a university abroad until the start of your second year, so there will be plenty of time to add this on at a later date if you're not sure what you would like to do when you apply.



Don't just take our word for it . . .

At the University of British Columbia, I was introduced to the living tradition of indigenous culture and I discovered a contemporary philosophy on economic paradigms. I worked with clients to innovate on a sustainable campus, and documented the endangered killer whales in response to a government call for expertise. We learn by doing new things - when everything is new, the best learning happens.

Caroline Pilat, Environmental Geoscience

Your learning experience

The first year is designed to give you a solid foundation in Earth and geographical sciences which you can build upon with specialised modules as your course progresses.



Many of our first-year students haven't been able to study Earth science subjects at school. This is why our first semester is common across most of our degree programmes.

The first year is common to all of our degree programmes, with the exception of the Environmental Sustainability Science, which has a unique course structure that doesn't share a common first year with our other degree programmes. The structure of this course is explained on page 26.

Year one

During the first year, you will be introduced to the study of the Earth and oceans as a system and develop key scientific skills. General skills such as observation, numeracy, presentation and communication will be invaluable to your future studies and careers. We introduce these skills and let you develop them during the first year.

In the first few weeks you will go on introductory fieldtrips in South Wales. They'll give you a flavour of what you will learn in the first year, a chance to settle into the pace of university life and give you opportunities to get to know other new students and staff.

Fieldwork in the first year includes day and half-day trips as part of core modules, where you will learn essential field skills, such as using your compass as well as identifying geological and geographical processes in the landscape.

In the spring you will also take part in a residential field excursion and depending on the programme, you may have the opportunity to undertake work at sea.

Some of the first-year modules extend over the two semesters and all modules include lectures that are complimented by practical laboratory work to help build skills and reinforce key concepts. Several modules include individual and group study projects that might require you to use photographs or other data you have recorded in the field.

We believe it is important to take account of the varying skills and qualifications of the students arriving in the school, so the broadbased first year will complement your own talents and interests.

Supplementary workshops are available to you if you need extra support. You will be allocated a personal tutor in the first week of your course and they will advise you of the best way to organise your studies to utilise your background achievements.

Because the first semester is common to most of our undergraduate degree programmes, you can transfer between degree programmes up to the start of the second semester in mid-January. During the second semester the Earth science programmes (Geology, Exploration Geology and Environmental Geoscience) study identical modules. Likewise, our environmental/geographical science programmes (Environmental Geography, Marine Geography and Physical Geography) study the same modules in semester two. This means that in most cases, you can switch between these courses up until the end of the first year.

Assessment

Most modules are assessed by a combination of examination and various types of continuous assessment including essays, reports, posters and presentations. The nature and weighting of the continuous assessment varies with the requirements of different modules. You will need to achieve a satisfactory standard in the 120 credits studied before progressing to the second year.

Years two and three

There is a greater choice of optional modules on all courses in years two and three.

The year is divided into two semesters, the first running from early October to January (autumn semester) and the second from February until June (spring semester).

Professional placement programmes

If you choose to complete a course with a professional placement, you will commence salaried employment during year three. You will return to Cardiff University following the successful completion of year three at the start of the autumn semester ready for another year of studies.

Year four (MSci students only)

Year four is when you study for your master's degree. Your core modules include your dissertation (60 credits) and a fieldwork module.

You can choose to do your master's dissertation on any topic related to your chosen subject that we can supervise in the school. You can either choose from a list of potential projects circulated by the school or you can work with a supervisor to design a project in an area you're particularly interested in.

You will work one-to-one with a research supervisor throughout the year and possibly with a wider group of research students and industry professionals. Some of our best master's research projects have been published in scientific literature.



Choosing a course



We offer bachelor's degree (BSc) or master's degree (MSci) programmes with a variety of options, but which is right for you?

BSc

The Bachelor of Science is a three-year degree programme that gives you the opportunity to complete a professional placement between years two and three.

- A three-year degree programme (four years if you enrol on a professional placement option)
- Broad range of careers open to you in the Earth and geographical sciences, and many other areas such as business, communications or teaching
- Perfect for students who prefer applied project work to a career as a research professional
- Our accredited degrees will provide a great and well-respected introduction to many Earth and environmental professions
- You have the opportunity to top-up your studies with our one-year vocational master's degree in Applied Environmental

Geology (MSc), Environmental Hazards (MSc), or Water in a Changing World (MSc)

 All our bachelor's degree programmes are also available as a four-year option where the third year is taken as a professional placement. Enrolment on these programmes occurs during year two and is subject to students achieving adequate marks in year one and the availability of suitable placements.

MSci

The Master of Science is a four-year degree programme that gives you the opportunity to explore your chosen subject area more than the equivalent three-year bachelor's degree programme. You will have the opportunity to undertake your own research project as part of this degree but will also be expected achieve an average of over 60% in year 3 to remain on the master's degree.

- · A four-year degree programme
- Identical entry requirements to the bachelor's degree
- There are options in environmental modelling or business and research skills that provide an enhanced basis for entering professional research careers in Earth and geographical sciences
- There is increased flexibility to choose research topics and modules that match your interests
- You have an opportunity to work within our research groups
- There are more extensive opportunities for small group and individual tuition
- A higher level of education comparable with international first-degree qualification

Transferring between programmes

Transfer from a bachelor's degree to a master's degree is possible at the end of years one or two. Likewise, transfer from a master's degree to the equivalent bachelor's degree can also take place at the end of years one and two.

Environmental Geography

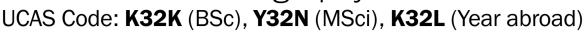
ار Ye



Professional

Placement







Explore Earth's surface processes and study the human impacts on the environment through a mix of lectures and field trips.

Are you passionate about finding solutions to the most urgent environmental threats facing our planet today? Having an in-depth scientific understanding of the natural environment is key to finding and addressing issues like climate change, water pollution, soil degradation and erosion. If you're concerned about the health of the planet and want to make a positive difference, then one of our Environmental Geography courses could be for you.

You will explore surface processes occurring within the natural environment and develop a scientific understanding of the impact that people have had on the chemistry and ecology of our planet's environment over time. You will study different environments across the world on land and at sea, from extreme polar environments to tropical coral reefs. The course will also address the pressures that our environments face today and in the future, covering topics such as water quality chemistry and mapping vegetation and soils. You will get hands-on with mapping and

monitoring and produce your own maps using state-of-the-art, professional mapping software. Graduates leave with experience of hands-on fieldwork and cutting-edge research as well

as a range of geographical skills in mapping,

research, analysis and problem-solving that are transferable across a range of roles and industries.

You can choose between the three-year bachelor's degree and the four-year master's degree. Our master's degrees involve a fourth year of study where you work on an independent research project with a world-leading scientist from the school and their research team. You will develop the advanced research skills needed for a career in academic or industrial research and development.

Fieldwork opportunities

Wales is like a playground for environmental geographers. From impressive mountains in the north to a biodiverse tidal estuary in the south, we have a huge range of natural environments to explore. We make the most of our location and take regular day trips to Gower, the Glamorgan Heritage Coast and the Brecon Beacons in South Wales.

There will also be opportunities to go on overseas trips, in the past we've been to the Netherlands and Switzerland. The cost of compulsory field trips is included in your course fees.

Careers and employability

With the planet under increasing pressure from climate change, over-exploitation and pollution, the knowledge and skills of an environmental geographer are in demand.

An environmental geographer will play an important role in a greener, low carbon future, using their understanding of the Earth to find sustainable solutions to the challenges we face in the future.

You can choose to work in a variety of different industries and roles including conservation and environmental management, as an environmental consultant or a geospatial analyst. You will also have essential employability skills that sectors like insurance, finance, education and planning are looking for.

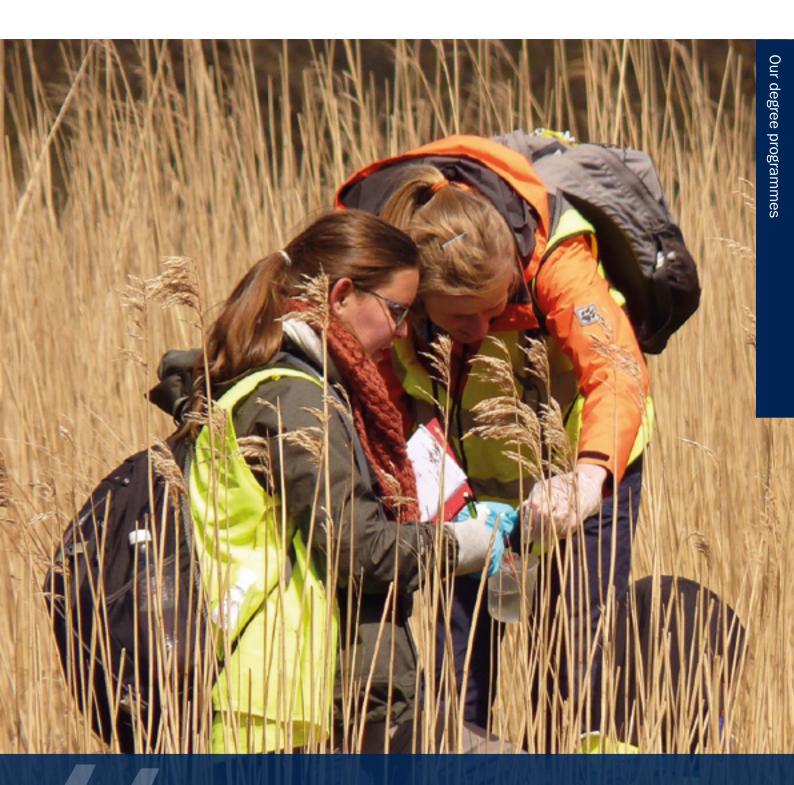
Some of our past students have gone on to work at the Environment Agency, Natural Resources Wales, local government, environmental consultancies and environmental charities.

Don't just take our word for it...



During the first few weeks, you will go on many field trips. These help to teach you about new techniques and give you an overview of the course and they're a great opportunity to meet new people. Whilst all my flatmates were sat in lectures, I was out exploring Cardiff and the surrounding area.

Philippa Smith



There were many reasons that made me choose Cardiff University to study Environmental Geoscience, but it was the opportunity to have an industrial placement year as well as the variety of field trips and high standard of teaching which separated the university from my other choices. I thoroughly enjoyed my degree.

Hanna Hayward, Environmental Geoscience

Environmental Geoscience UCAS Code: **F648** (BSc), **F649** (MSci), **F643** (Year abroad)











Explore different processes that happen on our planet, like acid rain and global warming, and find solutions to geological problems in the UK and around the world.

Do you have a curious mind? Are you fascinated by how the Earth works? An environmental geoscientist uses their understanding of the planet and its processes to predict hazards like floods and earthquakes, clean up the dangerous waste left by industries like chemical manufacturing or mining, and help civil engineers plan the construction of new roads, tunnels or buildings.

On our Environmental Geoscience course, you will explore the different processes that happen on our planet like earthquakes, acid rain and global warming. You will use this knowledge to solve real problems where the geological aspects of civil engineering, environmental monitoring and remediation, and climate change are relevant in the UK and globally. Plus, you will develop high level skills in mapping, research, analysis and problem-solving.

You don't need to have studied geology as we'll be starting year one with the basic principles to bring everyone to the same level.

Our degrees are accredited by the Geological Society, the professional body for geosciences in the UK. We've worked with industry to design our degree, so you graduate with the practical skills needed to be a professional environmental geoscientist. These skills cover fieldwork, the use of instrumentation for environmental monitoring, data capture and presentation using Geographical Information Systems (GIS) software, and technical report writing.

You can choose between our three-year bachelor's degree, the four-year version of our bachelor's degree including a placement year, or our four-year master's degree. In the past our students have gone on placement with water companies, civil engineering firms and environmental consultancies.

Our master's degree includes an additional fourth year of study where you work on a research project with a leading scientist from the school and their research staff. You will develop advanced skills in research and get experience of applying your findings to an issue or problem in environmental geoscience, such as modelling the effects of volcanic eruptions on air travel or the health effects of volcanic ash in the lungs.

Fieldwork opportunities

We make the most of our location and take regular day and longer residential trips to areas of natural beauty, as well as old industrial and mining sites in South Wales. This area is ideally suited to teaching how geology impacts on both the landscapes and industry of the region.

There will also be opportunities to do overseas trips to explore environmental hazards and problems in different climates, in the past we've been to Tenerife and to Cyprus. The cost of compulsory field trips is included in your course fees.

Careers and employability

With the planet facing increasing environmental threats and challenges both natural and anthropogenic, the knowledge and skills of an environmental geoscientist are in ever-increasing demand. Environmental geoscientists will play an important role in developing sustainable infrastructure, green energy projects and helping to manage and remove pollution left by former industries like mining and chemicals manufacturing.

You can choose to work in a variety of different industries and roles including conservation and environmental management, as an engineering geologist, a water engineer or an environmental consultant. You will also have essential employability skills that sectors like insurance, finance, education and planning are looking for.

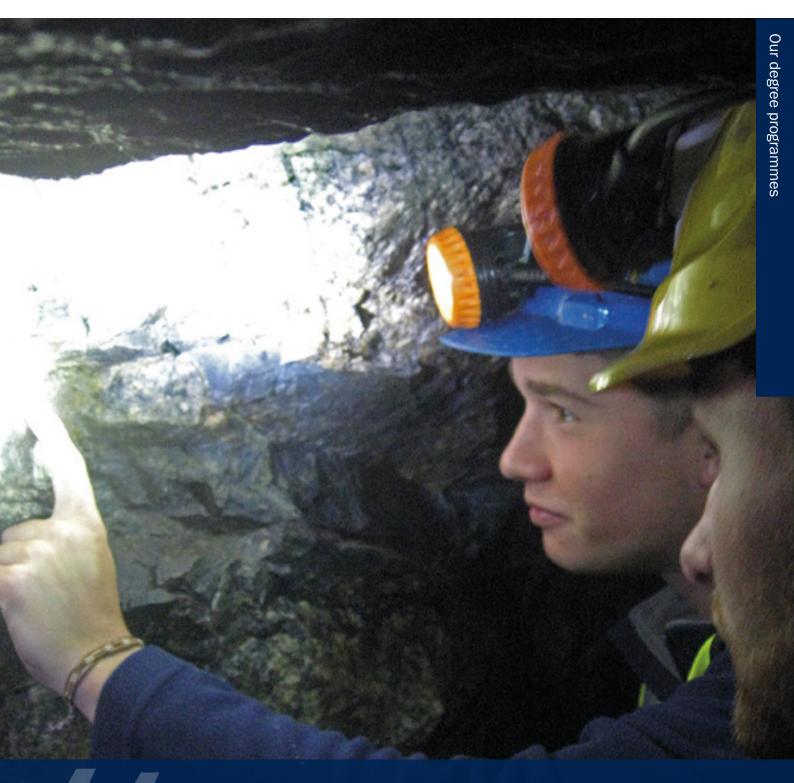
Some of our past students have gone on to work at the Environment Agency, BAM Construction, Atkins, Welsh Water, LCM Environmental Services and Mott MacDonald.



Don't just take our word for it . . .

After graduating from three amazing years studying Environmental Geoscience, I became a Conservation Officer for the National Trust where I manage 270 acres of green space in Bermuda. I am constantly aided by the experiences and processes taught during the course. I gained invaluable international experience and made many lifelong friends.

Lawrence Doughty, Environmental Geoscience



My studies at Cardiff University helped me to develop the knowledge, sound understanding and confidence I needed to work in remote regions of the world. The strong emphasis on applied modules and the experience of exploration-focused fieldwork in Spain and Cyprus make this course unique and it was perfect in preparing me for a career in mineral exploration.

Jemma Harrison, Exploration Geology

Professionally accredited





Professional placement



Exploration Geology UCAS Code: **F625** (BSc), **F626** (MSc), **F627** (Year abroad)

Learn how to explore for Earth's natural resources on this unique degree, the only undergraduate course in the UK to focus on specialist training in resource exploration.

People have been using Earth's natural resources like metals, minerals, oil and gas for centuries to build our towns and cities, power our homes, and to make the vehicles, devices and tools that our modern world depends on. New resources are increasingly hard to find and require specialist skills and technology to locate and exploit responsibly. Exploration geology is treasure hunting, for business and societal benefit. It will appeal to anyone interested in unravelling Earth's mysteries, whilst seeking out the essential resources that will maintain our society into the future.

On our Exploration Geology course, you will learn how the Earth's processes have created the planet's natural resources and how to explore for them to meet future demand. Exploration geologists will be central to delivering a low carbon future by helping meet the surging demand for metals, like copper and lithium, to supply. the renewable energy industry that's needed to tackle climate change.

You don't need to have studied geology already as we'll be starting year one with the basic principles to bring everyone to the same level.

Our degrees are accredited by the Geological Society, the professional body for geosciences in the UK. We've worked with industry to design our course, so you graduate with the specialist skills needed to be a professional exploration geologist. These skills cover fieldwork (both on surface and underground), experience of modern exploration software, critical analysis of data, and the confidence to make key decisions from limited information. We have a long-established summer placement scheme where students work alongside exploration companies while completing their dissertations. Cardiff University has been training mining engineers and geologists for over 100 years and you can become part of this ongoing story.

You can choose between the three-year bachelor's degree, the four-year version of our bachelor's degree including a placement year, and the four-year master's degree. Our master's degree includes an additional fourth year of study where you get the chance to work on an exploration research project with an academic from the school in their research field. You will develop advanced skills in research and gain experience of applying your findings in an industrial context.

Fieldwork opportunities

We have a former gold mine close to Cardiff and many other outstanding natural landscapes for us to explore nearby. We make the most of our location and take regular day and longer residential trips to explore mining sites across Wales. There will also be opportunities to do overseas trips, in the past we've been to Spain and Cyprus. The cost of compulsory field trips is included in your course fees.

Careers and employability

Our constant demand for metals, construction materials and other natural resources means the knowledge and high skills of an exploration geologist are in demand.

With a degree in Exploration Geology you have a range of career options open to you and can apply for roles like an exploration geologist, a hydrogeologist, a mineralogist or an environmental consultant. The practical and business-focussed aspects of the degree mean that you will also have essential employability skills that sectors like insurance, finance, education and planning also look for.

Some of our past students have gone on to work for Anglo-American Plc, Northern Nickel, Karelian Gold Ltd, Mineco and SRK Consulting.

Many of our students that spent time in industry as part of their dissertation project went on to work for the same organisation after graduation.



Don't just take our word for it . . .

I had the opportunity to undertake an industrial placement with a leading oilfield service provider in south Libya. This placement gave me a unique insight into the practical aspects of the petroleum industry, but I realised that my true career aspirations lay within the renewables sector. I now work for an Integrated Service Provider supporting the offshore wind industry, and will shortly be completing postgraduate study in the area of Marine Renewable Energy.

Sam Strivens, Exploration Geology



I have been fortunate enough to be employed in the marine sector ever since graduation. I am currently Project Manager of the Manta Trust's Laamu Atoll research initiative. There is no way I would have been able to get to do this incredible job if it had not been for my foundation in marine science gained at Cardiff. I would highly recommend this course for anyone even considering a career in the marine sector due to its broad scope, which allows anyone to explore almost every job possibility under the sun.

Beth Taylor, Marine Geography

Marine Geography

UCAS Code: F845 (BSc), 1D78 (MSci), F848 (Year abroad)











The ocean is arguably the last major frontier on Earth for exploration and discovery, with marine geographers instrumental in solving physical, hydrographical and managerial issues relating to the ocean and its coastlines.

The world's oceans and coasts are full of amazing habitats and wildlife and they sustain many important industries including shipping, tourism and renewable energy. In addition, governments and businesses worldwide are looking to harness new offshore resources. As a marine geographer you will have the skills and knowledge needed to keep our oceans healthy and make sure that the growth in marine industry and economy happens in a sustainable way. On the UK's only Marine Geography degree, you will explore the science behind marine conservation and sustainability, and associated challenges. As part of this, you will examine the influence of climate change, increased coastal erosion and flooding, as

Graduates leave with the skills to solve a range of complex real marine and coastal environmental problems and with experience of hands-on fieldwork and cutting-edge research with world-leading scientists and external professionals.

well as the need to adapt to such coastal

futures.

Choose between our three-year bachelor's degree, the four-year version of our bachelor's degree including a placement year, or our four-year master's degree.

Our previous students have completed placements in a range of topics including offshore surveying, ecosystem mapping and port environmental management.

Our master's degrees involve a fourth year of study where you work on a research project in an exciting topic within Marine Geography with an academic from the school and their research team. You will develop the advanced research skills needed for a career in academic research or in marine environmental consultancy.

Fieldwork opportunities

South Wales has a rich and diverse marine environment including estuaries with large tidal ranges, islands thriving with wildlife and outstanding beaches along the Gower Peninsula. You will get plenty of opportunity to develop your field and boat work skills with regular day trips and residential trips along the Bristol Channel and to sites such as the

Glamorgan Heritage Coast and the Gower, South Wales.

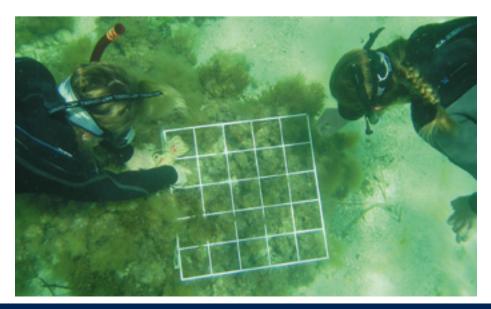
There will also be opportunities to do overseas trips, in the recent past we've been to Malta, Jersey and Samos, Greece. You will get involved in a range of activities like offshore surveying, water quality monitoring, ecological mapping and beach profiling. The cost of compulsory field trips is included in your course fees.

Careers and employability

Keeping our oceans healthy is critical to our future. The skills and knowledge of marine geographers are needed to tackle current and future ocean challenges to not only make sure that important habitats and wildlife are protected but also to ensure that maritime industries like fishing, tourism, shipping and renewable energy are developed sustainably.

You can choose to work in a variety of different industries and roles including conservation and marine management, as an environmental consultant or marine geospatial analyst. You will also have many skills that other sectors like insurance, finance, education and planning are looking for.

Some of our past students now work in the Hydrographic Office, Titan Environmental Surveys, the Environment Agency, Natural Resources Wales, Welsh Government and the Marine Management Organisation as well as for a number of ports and marine conservation organisations around the world.



Don't just take our word for it . . .

77

During my placement at Parc Natural, I examined the uses of the marine park protecting the Medes Islands. I was involved in a range of projects including coastal monitoring, sand dune restoration and research diving, which allowed me to witness much of the biology the islands had to offer, including barracudas, moray eels, amberjack tuna and eagle rays.

Destiny Newman, Marine Geography



The course provided all the necessary foundations for my career. I'm not just referring to the technical knowledge developed under the guidance of world-class lecturers, but also important skills such as research, report writing and analysis. The facilities at the university and notably the School of Earth and Environmental Sciences were fantastic, and the Students' Union provided a great base to meet new friends and begin my career.

Michael Finch, Geology graduate

Geology











Geologists study the minerals and rocks that form the solid Earth, the processes that occur on and within our planet, and the evolution of life on its surface.

To find solutions to some of the biggest problems facing our planet today we need to understand the Earth's history and processes. How can we use what we know about past climates on Earth to understand the effects of climate change today? How can we use what we know about earthquakes and volcanoes to predict hazards and make sure people and buildings are safe in the future? These are just some of the challenges that we'll explore.

On our Geology course you will explore Earth's fascinating history, internal systems and materials through a mix of inspiring lectures, hands-on practical work, frontier research and field trips in the UK and Europe. You'll discover how rocks and minerals are formed, how animals evolve over geological time, what causes earthquakes and volcanoes and how the science of geology impacts on our lives today.

You don't need to have studied geology already as we'll be starting year one with the basic principles to bring everyone to the same level.

Our degrees are accredited by the Geological Society, the professional body for geosciences in the UK. We've worked with industry to design our degree, so you graduate with the specialist skills needed to be a professional geologist. These skills cover fieldwork, experience of data capture using Geographical Information Systems (GIS) software, critical analysis of data, and the confidence to make key decisions from limited information.

You can choose between the three-year bachelor's degree, our four-year bachelor's degree with a professional placement and the four-year master's degree. Our master's degree includes an additional fourth year of study where you work on an research project with an academic from the school in their research field. You will develop advanced



skills in research and get experience of scientific writing and presentation at a professional level.

Fieldwork opportunities

South Wales has a diverse geological history and there are lots of outstanding natural landscapes for us to explore and for you to develop your fieldwork skills. We make the most of our location and explore how geology impacts on the landscapes and the industry of the local region through regular day trips and longer residential trips.

There will also be opportunities to go on an overseas mapping trip, in the past we've been to Spain and Cyprus. The cost of compulsory field trips is included in your course fees.

Careers and employability

With a geology degree you can choose to work in a variety of different roles including an engineering geologist, a hydrogeologist, a mineralogist, and an environmental consultant. You will also have essential employability skills that sectors like insurance, finance, education and planning are looking for.

Our past students have gone on to work for top employers including British Geological Survey, the Environment Agency, Digirock, Boliden Mining, Network Rail, Balfour Beatty and the engineering and mining consultancy Royal HaskoningDHV.

Don't just take our word for it . . .



The knowledge and skills I gained at Cardiff has been very valuable in my career so far, varying from computer modelling to the subsidence effects of sediment loading in deltas and Antarctic ice sheets to natural hazard prediction. On the practical side, fieldwork and experience of presentation at conferences helped me build up the communication, team working and planning skills I now use daily.

Martin Wolstencroft, Geology



I chose to study Physical Geography at Cardiff University because of the wide range of modules on offer, which allowed me to focus on all the things I was interested in. I've had a great experience on the course so far, made good friends and enjoyed the lectures and field work.

Jack Vincent, current student

Physical Geography





Year abroad



Physical geographers explore the evolution of Earth's surface and the science behind its physical processes.

From climatic changes and natural hazards to shifting tectonic plates, our planet is constantly evolving and reshaping itself. This course will study the science behind Earth's physical processes, including geomorphological processes and hydrology, so you can better understand the challenges that lie ahead and help to make positive differences in the future.

On our Physical Geography course, you will discover how landscapes have evolved, the current processes, impacts and influences on our planet, and how we can predict changes in the future. You will develop skills in mapping, research, analysis and problemsolving using state-of-the art field and laboratory equipment. Plus, you will utilise high-level, professional software applications to model future landscape changes.

Graduates leave with the skills to solve a range of complex real-world problems related to the physical environment and with experience of hands-on fieldwork and cutting-edge research with world-leading scientists.

Choose between our three-year bachelor's degree, the four-year version of our bachelor's degree including a placement year, or our four-year master's degree.

You will have the opportunity to complete a placement with organisations such as the Meteorological Office, engineering consultancies, and government agencies such as Natural Resources Wales.

Our master's degrees involve a fourth year of study where you work on a research project with a leading scientist from the school and their research staff. You will develop advanced skills in mapping, research, analysis and problem-solving.

Fieldwork opportunities

Wales is a natural laboratory for geographers. From impressive mountains in the north to a biodiverse tidal estuary in the south, we have a huge range of physical environments and processes to explore.

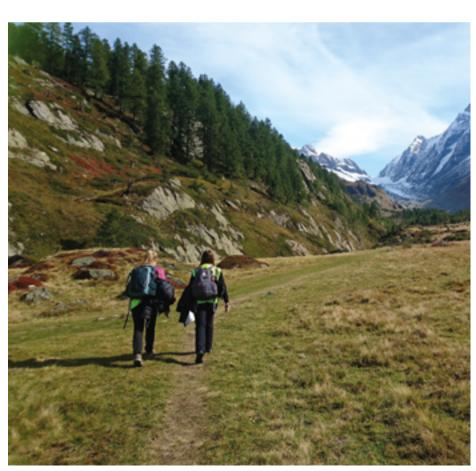
We make the most of our location and take regular day trips along the coast and to the Brecon Beacons in South Wales. You will complete a residential field course to a national park within Wales (either Pembrokeshire or Snowdonia) where you will learn key field skills including mapping and surveying techniques. There will also be opportunities to complete overseas trips, in locations such as Switzerland and Tenerife. The cost of compulsory field trips is included in your course fees.

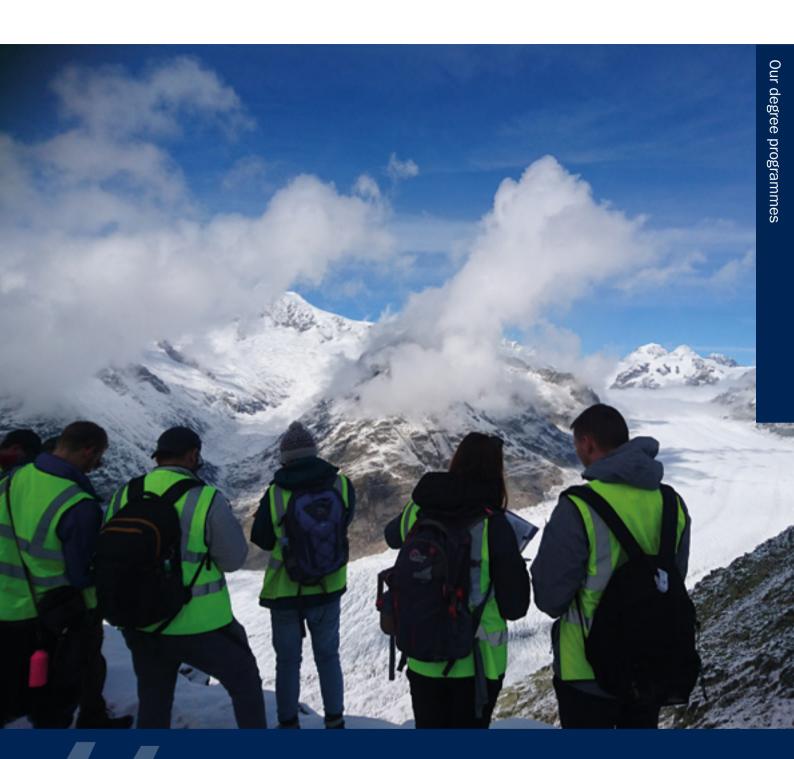
Careers and employability

With the planet under increasing pressure from climate change, human populations are residing in ever more vulnerable locations. As a physical geographer you can use your knowledge, skills and understanding of the Earth's processes to find sustainable solutions to contemporary and future complex challenges.

You can choose to work in a variety of different industries and roles in government, government agencies or environmental consultancies, including working as an environmental specialist or a geospatial analyst. You will also have employability skills that sectors like insurance, finance, education and planning are looking for.

Some of our school's past students have gone on to work at the Environment Agency, Natural Resources Wales, local government, environmental consultancies and environmental charities.





The Environmental Sustainability Science course is entirely unique to Cardiff University which I felt was refreshing, and given the relevance of sustainability in recent years is applicable to jobs in the future. This course emphasises the importance of independence and self-study, which develops a skill set that can be forward-thinking and practical. I have enjoyed the field trips we have been on this year and look forward to going abroad with the course in the coming years.

Lily Paradine, current student

Environmental Sustainability Science

UCAS Code: F651 (BSc)

Environmental sustainability is one of the biggest challenges and most important targets of the present. We need to take urgent action for our planet and develop strategies to work towards a more sustainable future.

This distinctively-focused course explores topical environmental areas based around the Sustainable Development Goals (SDGs) of the 2030 Agenda for Sustainable Development. This ensures our graduates develop highly sought-after skills and knowledge in major attention areas for researchers, governments and non-government organisations.

On our Environmental Sustainability Science course, you will explore three key areas: clean water, land degradation and climate action. We integrate fieldwork, skills and theory using problem-based learning based on real-world scenarios to help you develop sought-after transferable skills.

Working across multiple disciplines, you will learn to critically analyse, discuss and debate environmental sustainability issues and offer practical solutions to complex global problems.

You can choose between the three-year bachelor's degree, our four-year bachelor's degree with a professional placement and the four-year master's degree. Our master's degree includes an additional fourth year of study where you work on an exploration research project with an academic from the school in their research field. You will develop advanced skills in research and get experience of scientific writing and presentation at a professional level.

Course structure

This is a three-year full-time degree. The programme uses the United Nations SDGs to form Grand (societal or global) Challenges (GCs) as the focus of our teaching.

Year 1: 60 credits are contained in the core Grand Challenge (GC) module on clean water including an independent project. There are an additional 20 credits of core modules providing GC-related information and skills. Optional 40 credits are available from a selection of specialist modules.

Year 2: 60 credits are contained in the core GC module on land degradation and its impacts including an independent project. There is an additional core 20 credit module. Optional 40 credits are available from a selection of specialist modules.

Year 3: 60 credits are contained in the core GC module on climate action which includes your dissertation. There are an additional core 20 credits and optional 40 credits are available from a selection of specialist modules.

Fieldwork opportunities

From impressive mountains in the north to a biodiverse tidal estuary in the south, we have a huge range of physical environments and processes to explore in Wales.

We make the most of our location and take regular day trips along the coast and to national parks within Wales where you will learn key field skills. There will also be opportunities to complete overseas trips, in locations such as Spain, Greece and Tunisia where water resource management, land degradation and changing climate combine to challenge environmental sustainability. The cost of compulsory field trips is included in your course fees.

Careers and employability

Typical jobs for graduates include environmental and sustainability consultancy and regulation, conservation, science writing, national government policy, environmental charities, teaching, transport planning, environmental education and environmental health. This course also provides excellent training for postgraduate study and research.

Potential employers could include local government and organisations like the Environment Agency, BAM Construct UK, Airbus and Wales and West Utilities.



Further study

After your first degree you may wish to specialise in a particular area of Earth sciences by taking one of our master's degrees.



Applied Environmental Geology

Our vocationally orientated MSc in Applied Environmental Geology will help you develop all the skills required for the geoenvironmental, geotechnical, consulting and regulatory industries.

It has been running for 25 years and its enduring popularity means we have trained over 700 postgraduate geologists, who are now working in industry and government agencies in the UK, Europe and overseas.

The programme includes a five-month individual applied dissertation project, which typically involves elements of geotechnics, ground contamination and environmental assessment. It also includes compulsory fieldwork to maximise your transferable skills.

This programme is fully integrated with the professional development lecture programme of the Southern Wales Group of the Geological Society of London.

This programme is accredited by the Geological Society of London. Successful completion of this postgraduate degree can be used in credit towards gaining the professional Chartered Geologist qualification.

Water in a Changing World

Our MSc in Water in a Changing World draws on interdisciplinary knowledge to provide a broad outlook on water problems within the context of current realities and future projections of climate change. You will gain the up-to-date knowledge and skills needed to understand and solve challenging water problems from an informed perspective applicable to a diverse range of careers. This course provides a unique opportunity for graduates to explore a wide range of disciplines such as hydrology, climate science, freshwater ecology, economics, social science, and hazard and risk analysis.





Environmental Hazards

Our MSc in Environmental Hazards provides an advanced understanding of environmental hazards and technical expertise in risk assessment, with a focus on the methods needed to analyse past hazards and forecast future ones.

The course will help you to develop crucial skills in numerical and statistical modelling, remote sensing, fieldwork, and data analysis. There will be plenty of opportunities to gain hands-on experience using state-of-the-art field and laboratory equipment and professional software. You will use the latest modelling methods using remote sensing data from satellites such as CubeSat constellations and Sentinel, which are used to image the surface of the Earth.

Don't just take our word for it . . .

The dual coverage of Geotechnical and geoenvironmental aspects within the course really prepared me for a career in ground investigation. I have been able to draw on content from a variety of modules, which I feel gave me the edge in a recent (successful) job interview. The hands on and practical nature of the course meant that when I left and started my first 'proper job' I not only felt well prepared for the tasks at hand, but also like I already had a year's experience in industry under my belt.

Rhian Lynes, Applied Environmental Geology

Research that matters

Earth and Environmental Sciences is a research-led school with over 40 leading international scientists and around 50 postgraduate students investigating a diverse range of research topics.



Research within the School of Earth and Environmental Sciences is as fascinating as it is broad. Our researchers are addressing fundamental questions relating to the evolution of our planet. From deep within the Earth, through the crust, into the oceans and onto the land, our researchers are interested in all aspects of the Earth's formation and evolution.

Our research carries a dual benefit. It creates the foundation for significant developments in tackling major global challenges. And it informs the way we teach our courses, so we can help you to become a scientific leader and innovator.

Our researchers are divided into three research centres: the Centre for Solid Earth and Natural Resources, the Centre for Geobiology and Geochemistry, and the Centre for Resilience and Environmental Change; also known in short-hand as the Solid, Living and Changing research centres. Our specific research interests are broken down into several groups that may lie within a single centre or straddle centres. In this way we ensure that new and exciting partnerships between scientists with different interests can prosper.

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 virtual surveys using satellite images, as well as through their own research projects in the laboratory and in the field.

Centre for Solid Earth and Natural Resources (**Solid**)

Through a combination of field and 3D seismic data, laboratory investigations and numerical modelling, the Solid research centre investigates the composition and dynamic evolution of the Earth's mantle and crust, including the formation of mineral and hydrocarbon deposits, magmatic and hydrothermal processes, geodynamics, solid Earth dynamics, plate tectonics and the development of sedimentary basins. Our research in mineral deposits focuses on magmatic ore deposits of platinum-group elements, nickel, copper and chromium, notably in southern Africa and Canada; elements needed for the future green economy. Research on the ocean lithosphere concerns spreading ridges, transform faults, processes in mid-ocean ridge magma

chambers and ancient analogues within ophiolites, primarily in Cyprus and Oman. Members of this research centre work closely with various mineral and energy resource companies.

Research topics central to the Solid centre include: volcanology, fault mechanics, ocean lithosphere processes, subsurface and mantle geodynamics and processes in mineral deposit formation. Members from the centre also work within the African continent group, a multi-disciplinary initiative promoting research and education in the geosciences.

Centre for Geobiology and Geochemistry (**Living**)

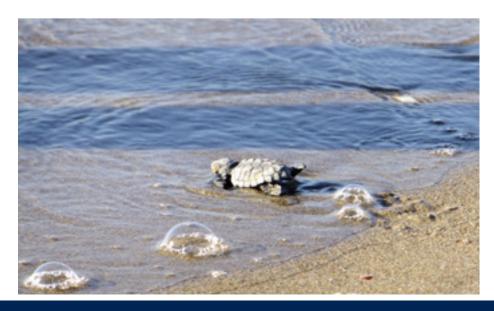
Life evolved on Earth some 3.5 billion years ago and has had a significant influence on environmental conditions, which continues today. Rocks contain a unique archive of past ecosystems in their fossils, which we study to document the rich history of life on Earth and its environmental impact. The Living research centre studies biogeochemical processes today and the fossil inferences of their past roles. Life on Earth has co-evolved with the planet and without life our environment would be very different, for example, little oxygen, high CO2, high temperatures, highly reduced oceans and no oil or gas. Microbes drive many of the responsible biogeochemical cycles and we investigate the rates, controls, feedbacks and the organisms involved. The centre also traces low and high temperature Earth system processes using geochemical, including mass spectrometry, methods.

Key research topics within the Living centre include: isotope geochemistry, geomicrobiology, microbial biogeochemistry, cold climates, ecosystems in deep time, plants and environmental dynamics and the taxonomy, stratigraphy, and evolution of marine microfossils.

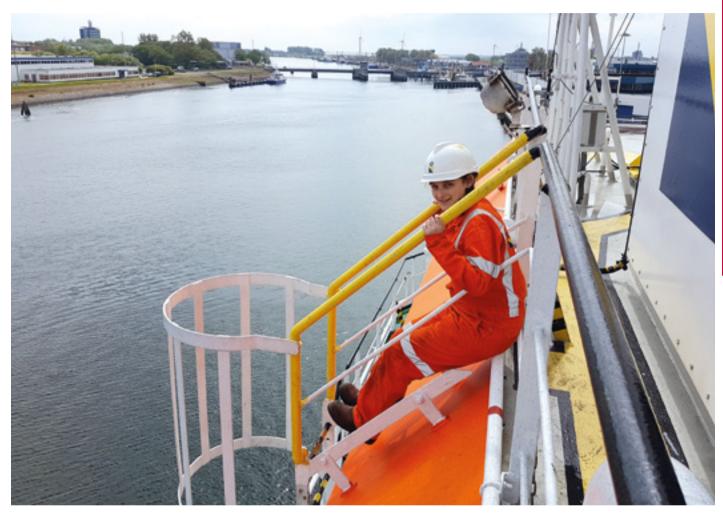
Centre for Resilience and Environmental Change (**Changing**)

The Changing research centre investigates the causes and consequences of changes in the Earth system, in the ocean, atmosphere and on land, from the geological past into the present and future, using a combination of field research, laboratory experimentation and numerical modelling. The emphasis is on understanding natural processes that cause changes on our planet and, in some cases, how human activity affects those processes and how they affect us, for example, landslips, coastal erosion and climate change. Research projects are underway all over the planet, from the oceans around Antarctica to forested mountains at the equator.

Research topics central to the Changing centre include: Earth surface processes, cold climates, marine microfossils, aeolian processes, and palaeoclimate and climate systems. Members from this centre are also working within the African continent group, including on hydrology and hydrogeology.



Employability and careers



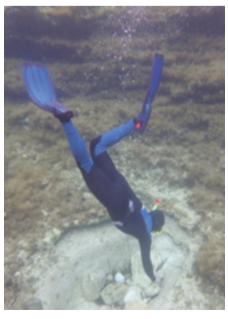
Graduates from all our degree programmes are highly sought after by employers. This has been shown year after year, with continued excellent employability results in surveys of our recent graduates.

In the sector, our graduates are valued for their field-based training and individual research projects, which make them ready for the daily challenges of working as geoscientists, surveyors, consultants and environmental scientists for government organisations and industry in the UK and overseas.

Some of our graduates choose not to enter the sector, opting to work in nonscientific fields such as finance, education, communications and administration. Many are particularly valued for the range of transferable skills they have developed during their time with us, making them ideal employees in a wide range of areas.

Others go on to further research and study after their degree, after discovering a passion

in a particular area of Earth or geographical sciences during their degrees. Our options for further study include Applied Environmental Geology (MSc), Environmental Hazards (MSc) and Water in a Changing World (MSc). We also offer options for doctoral degrees (PhD).



Our degrees can open doors to a wide range of exciting and rewarding careers. Read stories from our alumni, describing their career paths since leaving the School of Earth and Environmental Sciences.

James Farmer Exploration Geology (BSc, 2017)

Cardiff city is an exceptional place to be a student, with the university right



next to the city centre, and equipped with all the amenities a capital provides, there really isn't many places that can compare. After graduating, I joined a geotechnical engineering firm where I gained valuable experience working on a variety of projects across the UK and developed my engineering geology knowledge. After a few winters, I decided to pursue my passion in working in the mining industry and moved to Western Australia, where after shortly arriving I succeed in getting a job as a geologist in the iron ore sector. I now work in the resource development department at Rio Tinto. Our main objective is to aid in collecting and interpreting data needed to create resource models with a high level of confidence, which is essential for ore body knowledge. Studying at Cardiff helped me gain the fundamentals I needed to work within these various industries around the world.

Caitlin Gilmour

Marine Geography with a Year in Industry (BSc, 2017)

Cardiff not only has an incredible University, but the city itself and the surrounding area is amazing. Whether you prefer culture and a night out, or the outdoors, Cardiff has



something for everybody. My undergraduate degree laid the foundations for the job I currently have as a fisheries and aquaculture consultant, which is based in the UK, but our work is typically focused overseas in Africa and south Asia. I absolutely loved the diversity of modules that were available, fieldwork opportunities and lecturers who made the experience so memorable. The year in industry really attracted me to the course, and it lived up to expectations as I spent a year in the Maldives honing my marine ecology research, scientific diving and community outreach skills. Many of those skills have been invaluable for my current position.



Matthew Williams

Environmental Geography (MSci, 2020)

Cardiff has thriving nightlife, hundreds of shops, beautiful parks and plenty of facilities. Its geographical location on the Severn estuary makes it a geographylover's ideal place to



study, being close to the Brecon Beacons. the Gower, and an incredibly complex estuarine environment. After graduating, I joined an engineering and environmental consultancy as a flood risk analyst. Most of my work revolves around flood and coastal erosion risk management, which includes flood auditing, business and strategic case applications, data collection, GIS work, report writing, public consultation, environmental surveying and more. My current work is underpinned by the wealth of knowledge I attained whilst studying at Cardiff. The thing I appreciated the most whilst studying there was the appreciation that I was being taught by experts in the field with a passion for their subject. The lecturer's care and consideration for students, willingness to set aside valuable time to help, and openness to discuss learning difficulties made studying at Cardiff a breeze.

Emily Reynolds

Environmental Geoscience (BSc, 2018) and Applied Environmental Geology (MSc, 2020)

My undergraduate and postgraduate degrees provided me with essential skills to pursue a career within the field of environmental consultancy. My



favourite aspect of my undergraduate degree was the varied modules on offer, as it allowed me to learn about a broad range of topics that are central to my chosen career, but also retain an interest in areas of earth science that I may not necessarily focus on in my current role. My education at Cardiff University provided me with confidence and the skills to secure my current role with Mott MacDonald. My role as a Graduate Environmental Consultant involves working on a range of projects including large scale road, rail and energy schemes, providing inputs into geoenvironmental risk assessments, **Environmental Impact Assessment (EIA)** reporting and environmental consenting. Working for a large multidisciplinary consultancy provides opportunities to work on a range of projects.

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.

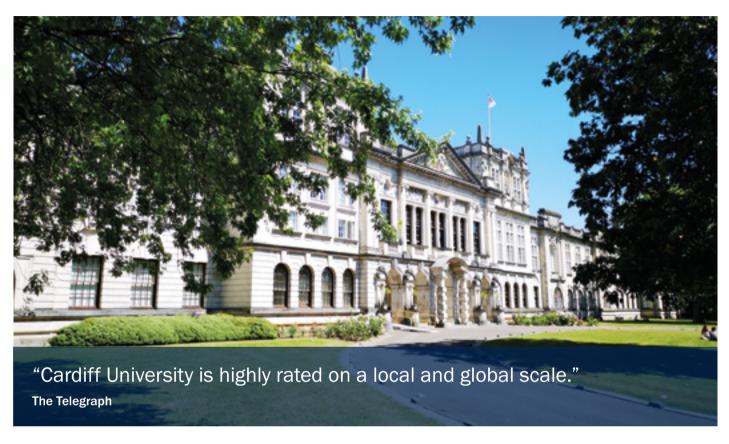
The modern shopping centres, aesthetic arcades, luscious green parks and thriving nightlife are a huge draw for living in Cardiff, though you'll always find your way back to our Students' Union, which is the true home of the student scene in the city.

"Cardiff University is a hugely popular UK university... It has a reputation for world-class research and provides an excellent experience for its student body."

The Telegraph University Guide

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 7,500 international students from more than 100 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 200 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, 2020

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
- **y** @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 explains the UCAS procedure.

Entry requirements

For detailed entry requirements and latest typical offers please see:

www.cardiff.ac.uk/ugcourses

Environmental Sustainability Science applicants must have either geography or environmental science. Applicants for all other degree programmes must have at least 1 STEM subject (Chemistry, Physics, Maths, Geology, Biology, Geography, Computer Science, ICT and Environmental Science) in their highest level entry qualifications.

Our typical offers are:

A-level: ABB if taking one science and BBB if taking two sciences (from the STEM subjects listed above).

International Baccalaureate:

Environmental Sustainability Science: 31-32 points; or 6,5,5 points from three higher level subjects, including a minimum of 6 points from higher level geography or environmental science. All other degree programmes: If taking two sciences at higher level: 31 points; or 6,5,5 points from three higher level subjects. If taking one science at higher level: 32 points; or 6,5,5 from three higher level subjects.

WBQ: WBQ core will be accepted in lieu of one A-level, excluding the required science or geography A-levels.

The School will consider combinations of qualifications which include both vocational and academic A-levels.

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
- · Counselling and Wellbeing Guidance

Email: studentsupportcentre@cardiff.ac.uk
Tel: (029) 2087 4844

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 re-taking of examinations, by applicants not currently registered. Please note charges for accommodation in University Residences are additional.

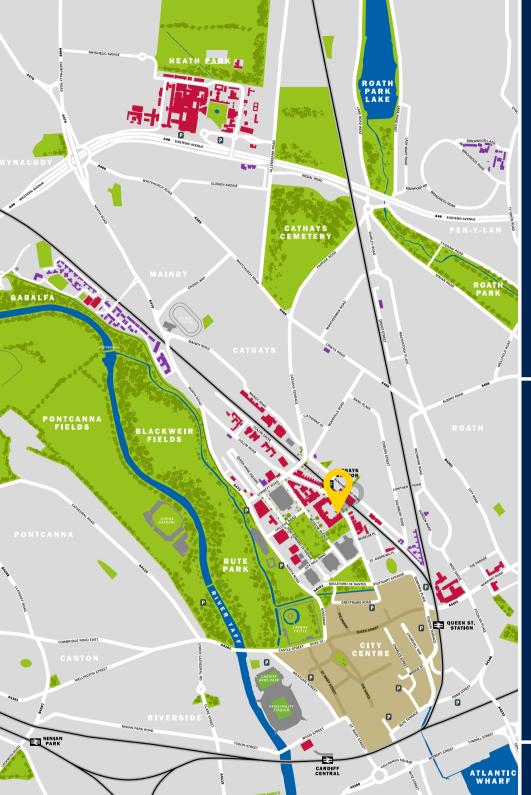
Please see the following website for more information:

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 2023 admissions cycle and are correct at the time of going to press in June 2022. 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

The School of Earth and Environmental Sciences is located in the Main Building which sits at the heart of the Cathays Park Campus, a short walk from the city centre. The Main Building is close to the Cathays railway station and is easily accessible from many of the University's Halls of Residence.

Key

- School of Earth and Environmental Sciences
- 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 Earth and Environmental Sciences please visit our website: www.cardiff.ac.uk/earthenvironmental-sciences

Contact us

Tel: **029 2087 4830**

Email: enquiry@cardiff.ac.uk

School of Earth and **Environmental Sciences Cardiff University** Main Building Cardiff CF10 3AT

Stay in touch

f cardiffuniug



@CU Earth @cardiffuniug



© @CU_Earth

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.

