

# Geography and Earth Sciences

For entry in 2017

Geography | Environmental Earth Science | Physical Geography |  
Human Geography | Daearyddiaeth

# Department of Geography and Earth Sciences

At Aberystwyth we can offer you excellent teaching, with some of the best researchers in their field, in an area of outstanding beauty, and a close community relationship that exists between the Department's staff and students.

Set on the coast of Cardigan Bay and surrounded by the beautiful Cambrian Mountains, Aberystwyth offers one of the most picturesque locations in Europe. We are uniquely placed to offer you a perfect environment in which to study geography, Earth, and environmental sciences.

**OVER 97% OF OUR GRADUATES  
WERE IN EMPLOYMENT OR  
FURTHER STUDY WITHIN 6 MONTHS**

Our lecturers are research innovators, conducting research that is world-leading in nature. Our research impact can be seen from the most recent Research Excellence Framework in 2014, where we were ranked the best in Wales for Geography, with 78% of our research classed as "world-leading" or "internationally excellent". The Department is also in the top ten of UK geography departments with regard to research power, which provides a measure of the quality of research, as well as the number of staff undertaking research within the Department. Furthermore, 100% of our research was classified as having either outstanding or very considerable impacts in terms of their reach and significance.

**TWO OF OUR STAFF HAVE HAD  
GEOLOGICAL FEATURES NAMED  
AFTER THEM – THE HAMBREY  
CLIFFS AND GLASSER GLACIER**

Many of our staff are leading experts in their field, and are at the forefront of research into global issues including climate and environmental change, river basin dynamics and hydrology; glaciology; cultural, historical and new political geographies.

*Cover photo taken by Tomos Nolan, student.*



*The Little River fluvial processes simulator*

Our graduates are highly sought after. The most recent statistics show that 97% of our students were in full-time education or in further study six months after graduating. Recent graduates include geologists, architects, airline pilots, environmental consultants for large global companies, and many go on to further study and research.

**WE ARE ONE OF THE MOST PROMINENT  
AND WELL-RESPECTED DEPARTMENTS  
OF OUR KIND IN THE UK, CELEBRATING  
OUR CENTENARY IN 2017**

## VALUABLE TRAVEL AWARDS AVAILABLE, TO HELP YOU EXPLORE THE WORLD WHILE YOU'RE HERE

*Geography field course in Dublin's Docklands*

### Facilities

We have a range of analytical instrumentation including equipment for sedimentological and geochemical analysis; a series of major geochemical analytical laboratories; well-equipped computing laboratory suites; and other laboratories equipped for petrological study, mapping, environmental modelling, remote sensing, and water and sediment analysis.

Depending on your course, you will also have access to a mass spectrometer, atomic absorption spectrometer, ion chromatograph, GPS, GIS and remote sensing equipment, digital data transcribers, data recording technology, the latest UAV technology, and a modern river-process simulator.

You will receive training in computer-based data handling and retrieval, statistical analysis, analysis of natural materials, field surveys and social research methods to support the taught fieldwork components throughout your degree and your independent research. You will also have access to specialist software for mapping, statistical and qualitative analysis, and modeling. The Department also houses the Digital Map Library, which has been recently upgraded, and provides individual workstations for students to access comprehensive digital mapping resources and GIS software. The library also holds a large collection of paper maps of various scales and ages as well as past undergraduate dissertations and project essays. Laboratory spaces are available to use when they are not timetabled for other classes, and the "Think Tank" in the Department is particularly useful for preparation of group projects and reports.

The National Library of Wales, situated adjacent to the campus, is available to all students. As a copyright library, the National Library is entitled to receive copies of every book published in Britain and has millions of books on every subject, thousands of manuscripts and archives, maps, pictures and photographs, films and music, and electronic information.

### Studying through the medium of Welsh

The Department is strongly committed to teaching through the medium of Welsh, and is dedicated to the Coleg Cymraeg Cenedlaethol's (CCC) aim to expand and improve our range of Welsh medium education available.

Through our BSc Daearyddiaeth (F801) degree scheme you can study geography (both human and physical) through the medium of Welsh. Students on this course are eligible for the Coleg Cymraeg Cenedlaethol's Main Scholarship (see [www.colegcymraeg.ac.uk/cy](http://www.colegcymraeg.ac.uk/cy)).

In the Department you can study up to 80 credits through the medium of Welsh in each of the three years. Our Human Geography, Geography, and Physical Geography schemes are eligible for the CCC Incentive Scholarships.

### Exchange Schemes and Travel Awards

A number of schemes exist for studying abroad. Our students can apply for a place on the International Exchange Programme, which involves spending the second year of the degree at one of several universities including Washington State, Montana, Pittsburgh, Boise State Idaho and Utica College of Syracuse University. There are also opportunities for third year students to undertake one semester of study in the Norwegian high Arctic at the University Centre in Svalbard (UNIS). Alternatively, international placements can be arranged as part of the Year in Employment Scheme. Joint honours language students automatically spend a year in another European country between their second and third years as part of the language degree requirements.

## Fieldwork

Aberystwyth is uniquely placed in the heart of Mid Wales and as such provides enviable resources for local fieldwork throughout your degree. Geography utilizes these natural environmental laboratories to the full in its teaching and research, as well as drawing in environments much further afield. As well as being a valuable social experience, the field courses illustrate topics covered in lectures and helps develop a range of key skills, notably teamwork, initiative and time management.

Aberystwyth lies on the beautiful rugged coastline of Cardigan Bay, surrounded by rolling hills and moorland, and Snowdonia National Park is within easy reach of the town. The region is a classic one for the study of geology, environmental impacts, and we make full use of these local opportunities for fieldwork.

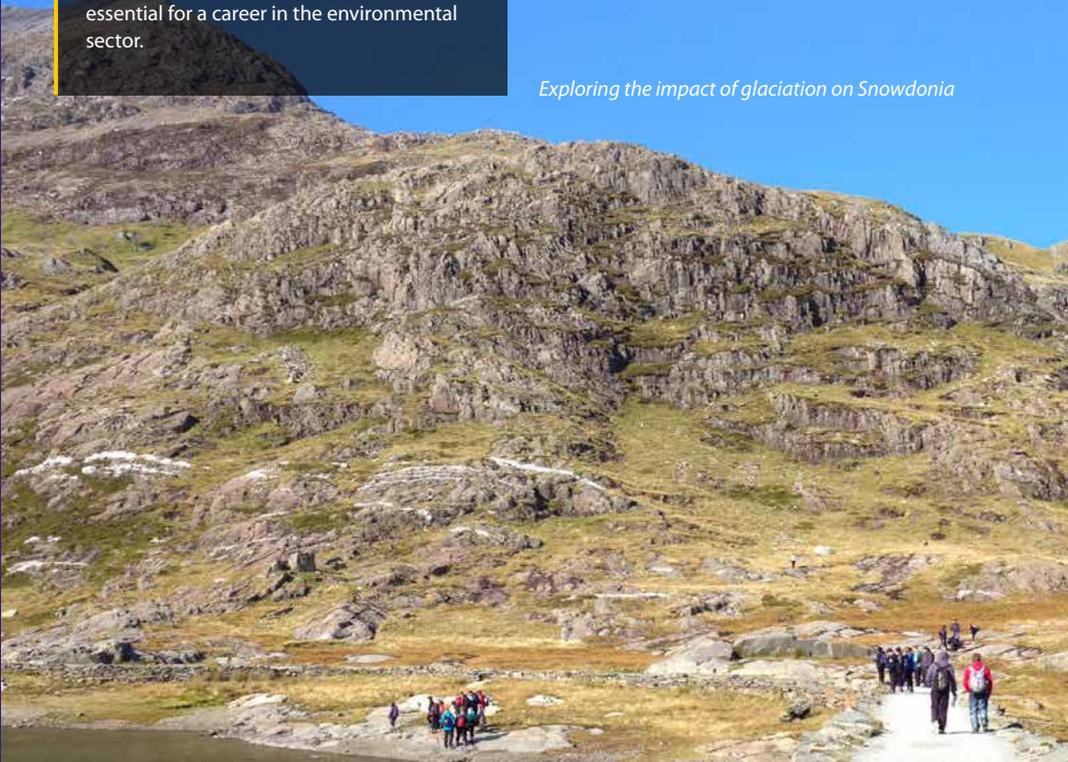
We believe field skills are amongst the most important aspects of your training and are essential for a career in the environmental sector.

## Geography

From induction fieldwork at the start of your first year, through the residential fieldwork in your second year, to in-depth investigations in your final year – fieldwork is at the heart of all of our Geography degree schemes.

All of our single honours and major geographers participate in a week-long residential overseas field course during their second year with joint honours students being given the opportunity to participate in field courses as an optional module. A range of courses are offered, reflecting different contextual and methodological approaches, and different costs. Recent destinations have included New York, New Zealand, Crete and Ireland. While 'overseas' destinations can cost between £200-£800, depending on destination, the Department is pleased to offer physical and human geography field courses at no charge to students.

*Exploring the impact of glaciation on Snowdonia*



# Environmental Earth Science

Environmental Earth Science students undertake fieldwork during each year of their degree. In the first year, a residential field course introduces basic geological and geomorphological techniques, such as developing observational skills, notebook and logging methods for recording Earth science data, and makes use of the classic geology and geomorphology of North Wales in introducing you to Earth science field work. The content brings you into contact with a wide range of material, from describing igneous rocks or making accurate field sketches of Quaternary cliff sections to investigating contaminated mine waters. The course also involves visits to industrial sites such as power stations and natural gas treatment works.

At the start of the second year, students undertake a week of intensive technique training where they are introduced to the range of sampling, surveying, geological and geomorphological mapping

techniques. This provides the techniques needed for their forthcoming dissertation projects, but also equips them with the range of key skills required to undertake the typical fieldwork they may encounter in careers in environmental consultancy.

In the final year of the degree, there is a week-long field course to southern Ireland during which students frequently work in small groups. They study a range of subjects, and conduct targeted exercises to investigate aspects of environmental rehabilitation and the impact of current and abandoned metal mining, or short mapping exercises and geological assessments, “walk over” surveys and other studies related to bulk material extraction. These all build further on the skills developed in the earlier field courses, as well as enhancing the understanding of lecture and laboratory course material.

# Environmental Science

Environmental Science students attend several residential field courses during their studies at Aberystwyth. In the first year students participate in a field course in North Wales, which provides a valuable introduction to a range of themes that will be addressed within the course. During the second year all Environmental Scientists attend a week-long

field course, currently to southern Ireland. During this course students receive training in the fieldwork techniques they will use in the completion of their third year dissertations, including a range of specialist subjects and targeted field exercises.



# Our degree schemes

## ■ Environmental Earth Science

This degree studies the Earth's physical environment, and the impact that human civilization has had upon it. At Aberystwyth, it involves the study of Planet Earth as a unified system, exploring the interactions between the lithosphere and the secondary environment, which includes the hydrosphere, biosphere and atmosphere. Particular emphasis is placed on Earth surface processes and their links with the underlying geology and the secondary environment. Our understanding of these processes is then applied to addressing environmental issues, such as resource exploitation, pollution, waste disposal, ground water, water supplies, natural hazards, and conservation.

You will be introduced to the solid Earth and surface processes environments and the links between them. You will look at past and present environmental changes and their effects on planetary life, and assess the potential for predicting future changes in our climate and environment. You will also acquire important field and laboratory skills, will be introduced to the principles of geochemistry and will receive training in the methods of chemical analysis of natural materials.

### Key Facts

**Degree type:** BSc

**UCAS code:** F640

**Duration:** 3 years

**Entry requirements:** BBC with C in a science subject

**IB:** 28-30 with 4/5 points in science at Higher Level

### Available as a major/minor degree with:

*Education. Visit our website or contact the department for more information.*

## ■ Environmental Science

Environmental Science lies at the intersection of geography, biology and Earth sciences, providing a scientific basis for understanding the Earth System from a physical, biological and chemical perspective and the fundamental interaction of these processes. It focuses upon the impacts of humankind on natural processes, coupled with investigation into the societal response to both natural and human-induced environmental issues and the ways in which they are managed and potentially overcome.

At Aberystwyth, the degree focuses on past, present and future environmental processes and their complex interactions with human activities. In addition to a fundamental training in Environmental Science, you may choose optional modules that will enable you to pursue those areas which are of most interest to you.

### Key Facts

**Degree type:** BSc

**UCAS code:** F750

**Duration:** 3 years

**Entry requirements:** BBC with C in Biology or Geography

**IB:** 28-30 with 4/5 points in science at Higher Level

*Investigating debris-covered glaciers - photo by Alun Hubbard.*



## Geography

On the Geography degree you will study the human and physical processes affecting the globe, and the political and environmental issues that arise as a consequence of human interactions with the Earth. An understanding of how human society and the global environment relates to all our lives, whether we live in Britain or beyond, is of central importance to the contemporary world.

The degree enables you to either specialise in a particular field or to maintain a breadth of interests. You will be introduced to key concepts in geographical study, issues and techniques in the collection, and analysis and presentation of geographical data. You will become familiar with the key environmental issues affecting the world today, including climate change, landscape processes, economic development, and globalisation. You will also develop your field, laboratory and computer research skills, and will learn how to analyse quantitative datasets and to produce maps and other graphical representations of geographical data.

### Key Facts

**Degree type:** BSc

**UCAS code:** F800

**Duration:** 3 years

**Entry requirements:** BBB with B in Geography or ABB without Geography

**IB:** 28-30 with 4/5 points in Higher Level Geography

## Human Geography

Human geography addresses some of the major issues facing the world today – globalisation, sustainable development, inequality and poverty, geopolitics, nationalism and regionalism, migration, multiculturalism and social and economic change – but also examines the everyday world around us, from the spaces in which children play to the culture of motorway driving.

You will study the historical processes behind contemporary trends, drawing together perspectives from different countries and cultures, and using different sources ranging from maps and statistics, to film, art and literature. You will be introduced to key concepts in geographical study, and to issues and techniques in the collection, analysis and presentation of geographical data. You will also develop your field, laboratory and computer research skills in preparation for your independent research project. You will learn how to analyse quantitative and qualitative datasets and to produce maps and other graphical representations of geographical data.

### Key Facts

**Degree type:** BA

**UCAS code:** L700

**Duration:** 3 years

**Entry requirements:** BBB with B in Geography or ABB without Geography

**IB:** 28-30 with 4/5 points in Higher Level Geography

**Available with (joint honours and major):** *Business and Management, Economics, Education, English Literature, French, History, International Politics, and Politics.*



## ■ Daearyddiaeth

The Department has a long tradition of teaching through the medium of Welsh. Students can study two thirds of their course in Welsh on our Daearyddiaeth scheme. In this broad-based geography course you will study the human and physical processes structuring the globe, and the political and environmental issues that arise as a consequence of human interactions with the earth. Examples are taken from around the world, but many of the modules have a particular focus on Wales, its geography and its environment. Module themes range from fluvial geomorphology, hydrology and earth science to political and cultural geography and are informed by cutting-edge research.

Assessments include examinations, essays, reports, posters, oral presentations, role-play exercises and short films and there is a strong element of group work throughout the course. Welsh medium staff often take advantage of the flexibility of small groups sizes to teach in new and innovative ways, including in local and/or international fieldwork in each of the three years of study. As well as an understanding of the complex interactions shaping Wales and the world, our graduates are able to discuss these themes in Welsh and English, and as a result they are highly employable.

This scheme is eligible for the Coleg Cymraeg Cenedlaethol's Main Scholarship. For more information visit: [www.colegcymraeg.ac.uk](http://www.colegcymraeg.ac.uk)

## ■ Physical Geography

An understanding of the global environment and problems relating to it impinge on all our lives. At Aberystwyth, you will study the processes structuring the natural world and the environmental management issues that arise as a consequence of such processes.

This degree enables you to either specialise in a particular field or to maintain a breadth of interest. The opportunities are wide and the module structure is flexible to suit your needs. You will be taught by world-class staff that will help develop your understanding of the physical processes shaping the Earth, from sea to rivers, glaciers to volcanoes, including landscapes from the arid to the Arctic. You will explore contemporary and palaeo-environments, and consider the impacts of human activity in the future.

A week-long international residential field course is an important feature in second year. Recent destinations have included New Zealand, Crete and Killarney.

### Key Facts

**Degree type:** BSc

**UCAS code:** F801

**Duration:** 3 years

**Entry requirements:** BBB with B in Geography or ABB without Geography

**IB:** 28-30 with 4/5 points in Higher Level Geography

### Key Facts

**Degree type:** BSc

**UCAS code:** F840

**Duration:** 3 years

**Entry requirements:** BBB with B in Geography or ABB without Geography

**IB:** 28-30 with 4/5 points in Higher Level Geography

**Available with (joint honours and major):** *Computer Science, Education, Mathematics, and Statistics.*

# New for 2017

Subject to their approval, the following options will be available for entry in September 2017. For each of these schemes, students can apply for a four-year student loan. For further information please visit our website, or contact us.

## **Geography degrees with a Year in Industry\***(subject to approval)

Our new four-year degree schemes will enable students to combine a year working in employment with their studies in Geography, Human Geography or Physical Geography. The first two years of this scheme will be spent studying at Aberystwyth, and the third year will consist of a work placement in the public, private, or third sectors. During the year in industry students will have the opportunity to further develop their transferable skills, and will broaden their understanding of how organisations use geographic concepts, methods, and approaches in applied contexts. On completion of their work placement, students return to spend the fourth year of their degree studying at Aberystwyth.

## **Geography degrees with a Year Abroad\***(subject to approval)

Our new four-year degree schemes will enable students to combine a year studying at a university abroad with their studies in Geography, Human Geography or Physical Geography. The first two years of this degree will be spent studying at Aberystwyth, and the third year will be spent studying overseas. During the year abroad students will have the opportunity to extend their geographical learning, experience new cultures, and learn more about the geography of the places in which they are studying. On completion of their overseas studies, students will return to spend the fourth year of their degree at Aberystwyth.

## **Combined Masters degrees - MGeogs\***(subject to final approval)

If you're considering studying a Masters level degree immediately after your first degree, then these schemes might be of interest to you. Our MGeog, MHumGeog and MPhyGeog degree schemes offer students the opportunity to combine studies on our Geography, Human Geography, or Physical Geography undergraduate degree schemes and a year of Master's postgraduate study, all within a single four-year integrated scheme. These degrees have the advantages of enabling students to further develop their geographical skills and knowledge, and extend their studies for a further year without having to specialise in a single area of geographical inquiry.

The first two years of the schemes are designed to introduce you to core geographical themes. The third year of the scheme enables students to specialise in several specific research areas within geography. The fourth year focuses on the practical application of geographical knowledge through independent research work and assessments that focus on simulated consultancy projects, research grant applications, and the production of press releases and academic papers at postgraduate level.

One of the main advantages of these schemes, is that you can apply for a four-year student loan for the whole course, rather than trying to separately fund a Masters degree following your first degree.



## Scholarships, Bursaries and Awards

We offer a range of valuable Scholarships, Bursaries and Awards at Aberystwyth to ensure that students of all backgrounds can enjoy the benefits of higher education. Our provision includes the long-established and well-regarded Entrance Scholarship competition. Further information can be found online: [www.aber.ac.uk/scholarships](http://www.aber.ac.uk/scholarships) or you can contact us on [marketing@aber.ac.uk](mailto:marketing@aber.ac.uk).

## Open Days and Visiting Days

During the year the University hosts several main Open Days, where you can visit any part of the University. For more information, including dates and registering for the open day visit our website [www.aber.ac.uk/openday](http://www.aber.ac.uk/openday), or contact us on 01970 622065, or email [openday@aber.ac.uk](mailto:openday@aber.ac.uk).

Once you've applied for a place at Aberystwyth, you will automatically be invited to attend a Visiting Day. These visits focus specifically on the course you're interested in, and the department that is home to that course. You'll have a chance to speak in more depth with our tutors and current students, as well as having a tour of the Department, some of the University's accommodation, and the town.

## Postgraduate opportunities at Aberystwyth

The Department has a large and vibrant postgraduate community that plays a key role in our research culture. We are committed to developing innovative and novel interdisciplinary postgraduate teaching and research as well as undertaking world-leading research in geography, Earth and environmental science.

We offer a variety of postgraduate degrees covering the entire range of subjects within Geography and Earth Sciences. The Department has an excellent record in helping postgraduates to secure funding, including prestigious external sources such as UK Research Councils (AHRC, ESRC, NERC, EPSRC), industry partnerships, and Aberystwyth University's AberDocs Scholarship Competition. The Department also offers a range of bursaries, travel awards, and discretionary funds.

### Important information

*The programme information published in this brochure is regularly reviewed and may be subject to change. Prospective students are advised to check the definitive programme information available on our website before making an application, to ensure that the programme meets their needs.*

- Coastal, campus university
- Guaranteed first year accommodation
- Valuable scholarships and bursaries available
- Free access to the National Library of Wales

For further information contact:

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Aberystwyth University  
SY23 3DB

**Tel:** 01970 622606

**Email:** [iges-admissions@aber.ac.uk](mailto:iges-admissions@aber.ac.uk)

[www.aber.ac.uk/en/iges](http://www.aber.ac.uk/en/iges)

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