

College of Life
and Environmental Sciences

What do Birmingham postgraduates do?



School of Geography, Earth and Environmental Sciences

First destinations of postgraduates

- Analysis of first employment destinations for the College of Life and Environmental Sciences
- Employability data for Geography, Earth and Environmental Sciences postgraduates, 2009–13
- Illustration of the range of occupations undertaken by our postgraduates

Foreword

I AM DELIGHTED TO INTRODUCE 'WHAT DO BIRMINGHAM POSTGRADUATES DO?' WHICH LOOKS IN DETAIL AT THE FIRST DESTINATIONS OF OUR GEOGRAPHY, EARTH AND ENVIRONMENTAL SCIENCES POSTGRADUATES AND AT EMPLOYMENT PROSPECTS FOR ALL POSTGRADUATES WITHIN THE WIDER COLLEGE OF LIFE AND ENVIRONMENTAL SCIENCES.



In addition to providing accessible information on employment destinations of our postgraduates, this publication is also designed to give an insight into the kinds of employment sectors and jobs for which a postgraduate degree at Birmingham can prepare you.

Pursuing a postgraduate degree offers you the opportunity to explore your chosen area of interest in depth, as well as developing your knowledge and understanding in a subject area about which you are truly passionate. Beyond the transferable skills that you will take with you into the workplace, your postgraduate qualification will give you the chance to engage

in critical enquiry, to grow as a scholar and even to become an expert in your field.

Here, we show you how your postgraduate qualification can help you make that knowledge and expertise work for you after graduation. First of all, we give you an overview of the employability and first destinations of postgraduates across the wider College of Life and Environmental Sciences as a whole. Then for the school that is relevant to you (Biosciences; Geography, Earth and Environmental Sciences; Psychology; or Sport, Exercise and Rehabilitation Sciences) you will see a snapshot of the achievements of our postgraduates six months after graduation. All data is taken from the results of a 'Destinations of Leavers' survey issued to our postgraduates after this time.

You will be able to see, by department, how many of the postgraduates who replied to this survey successfully entered employment and/or further study within just six months, along with a range of the diverse and exciting

career opportunities that will be open to you after studying for a postgraduate degree in your chosen area.

Accompanying the data are case studies in which recent postgraduate alumni share their experiences of postgraduate study at Birmingham. Here, our alumni talk about the value inherent in postgraduate study, the knowledge and skills they developed during their degrees and where their qualifications have taken them since graduation.

I hope you find the information presented here useful and our alumni stories inspiring. We very much look forward to welcoming you to our campus soon.

A handwritten signature in black ink, appearing to read 'Ivan Sansom'.

Dr Ivan Sansom
Director of Education
College of Life and Environmental Sciences



College of Life and Environmental Sciences

Employability

The College of Life and Environmental Sciences spans an extensive breadth of disciplines, with expertise which aligns strongly with key international challenges, including lifelong health and wellbeing, food security, energy security and living with environmental change.

The College conducts internationally recognised teaching and research, hosts exciting initiatives in new fields of study, fosters effective collaboration between schools and has excellent research facilities.

The College uses training, fieldwork and its high quality facilities to enable students to gain generic and discipline-specific skills while studying exciting topics from ecology through to cancer research and forensic psychology.

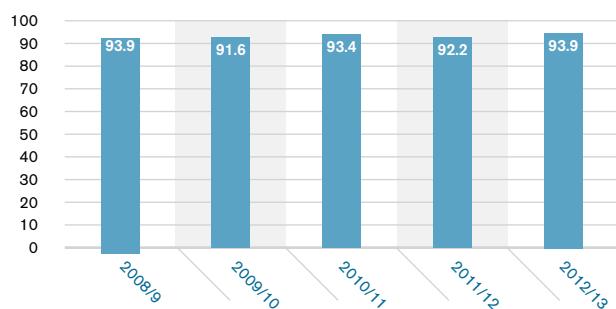
The College comprises four schools:

- School of Biosciences
- School Geography, Earth and Environmental Sciences (GEES)
- School of Psychology
- School of Sport, Exercise and Rehabilitation Sciences

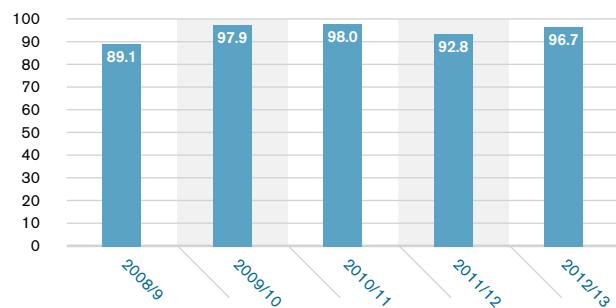
Over the last five years, 93% of taught postgraduates and 94.9% of research postgraduates from the College of Life and Environmental Sciences have been in work and/or further study just six months after graduating.

The two charts to the right show the breakdown of these statistics for each year, for taught postgraduate and research postgraduate respondents.

Percentage of Life and Environmental Sciences taught postgraduates in work and/or further study six months after graduation



Percentage of Life and Environmental Sciences taught postgraduates in work and/or further study six months after graduation



SOURCE: *Destinations of Leavers from Higher Education Institutions*, Higher Education Statistics Agency, 2008–13



'I always had an ambition to be a weatherman, but to join the Met Office I needed a science degree; maths or physics usually. I did a geography degree but that meant I wouldn't be able to join the Met Office. I saw that Birmingham had an MSc in Meteorology and Climatology which would enable me to join the Met Office, so that was my motivation.'

'Weather broadcasting has changed an awful lot and I think that the public's demand for accuracy is far greater than it used to be. You

used to be able to get away with banal phrases like 'sunshine and showers' but such is the demand now, and the level of technology, that you can't get away with phrases like that any more. You have to be much more specific.'

'At Birmingham I was surrounded by other weather enthusiasts and we had our own weather station up on the top of the Muirhead Tower. Some of the people I worked with at the University have been inspirational in my career and I have very fond memories.'

John Hammond, MSc Applied Meteorology and Climatology, graduated 1989
John is now a TV Weather Forecaster for the BBC.



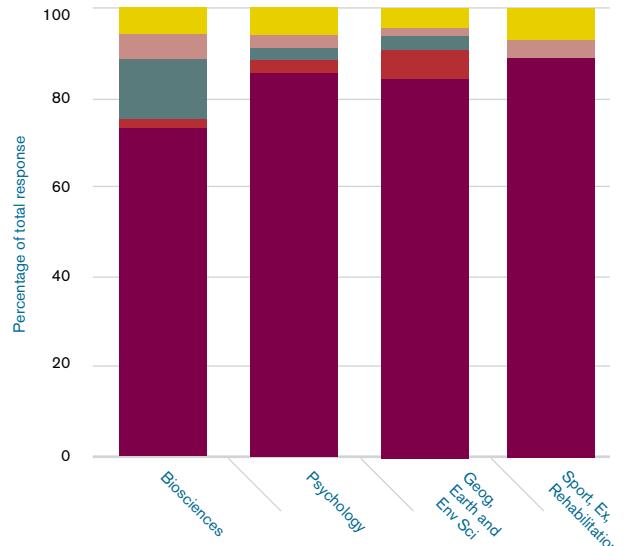
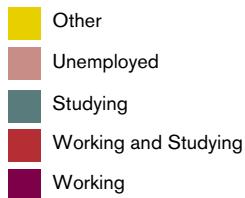
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College of Life and Environmental Sciences

Postgraduate destinations

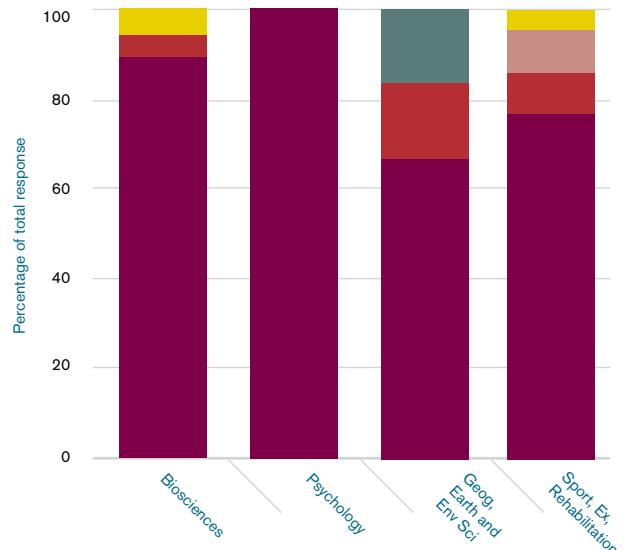
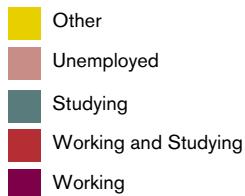
Taught postgraduate destinations

The chart to the right summarises the destinations of Life and Environmental Sciences postgraduates from the 2012/13 academic year, six months after graduation:



Research postgraduate destinations

The chart to the right summarises the destinations of Life and Environmental Sciences postgraduates from the 2012/13 academic year, six months after graduation:



SOURCE: *Destinations of Leavers from Higher Education Institutions*, Higher Education Statistics Agency, 2008–13



'I chose to complete an MSc to further my learning and career prospects; the course has most definitely helped me to achieve both of these goals. I feel more confident in my knowledge and also in how I express it; in interviews, employers have commented on the wide range of skills and knowledge the course has given me. One such interview has recently seen me appointed

to my current role, a job I feel I would not have been qualified for had I not spent a challenging, exciting and hugely stimulating and worthwhile year on the MSc course at Birmingham.'

'The enthusiasm and support of the lecturers means that you can quickly catch up if you need to do. Not all the time was spent in lectures; lab and field work were also key on the course, in particular trips to see restoration techniques put into practice. There was also the option of attending the annual River Restoration Centre conference, a very valuable contact-building

venture. I also had the opportunity of undertaking my dissertation on intermittent streams in Lyon, France.'

Jenny Mercer, MSc River Environments and their Management

Jenny now works as Wetland Creation and River Restoration Consultant with ecological consultancy Middlemarch.

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School of Geography, Earth and Environmental Sciences

EMPLOYABILITY

GEOGRAPHY

Highlights:

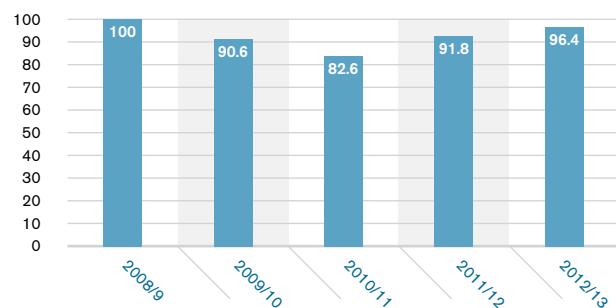
- Over the past five years, a total of 92.3% of taught postgraduate respondents were in work or further study six months after graduation
- Over the past five years, a total of 82.5% of research postgraduate respondents had successfully found work or further study six months after graduating

Geographers develop a wide range of skills which are attractive to future employers. These include: conducting fieldwork; scientific laboratory techniques; producing maps and diagrams; using social survey and interpretative methods; collecting and analysing information; and recognising the moral and ethical issues involved in debates and enquiries. These are in addition to more general transferable skills such as communication, presentation skills, flexibility and strong IT skills. As a result, our Geography postgraduates are very employable, competing well in the graduate marketplace.

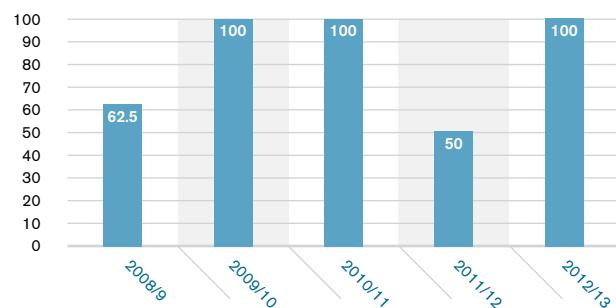
A significant number of Geography postgraduates entered subject-related employment in areas such as planning, surveying and environmental consultancy. Graduates also opted for a wide range of other careers in sectors including media, recruitment consultancy and finance. A number of our research postgraduates also go on to forge successful careers in academic research and teaching.

The charts to the right show results from Destinations of Leavers surveys for our Geography postgraduates over the past five years.

Percentage of taught postgraduate respondents in work and/or further study six months after graduation



Percentage of research postgraduate respondents in work and/or further study six months after graduation



SOURCE: Destinations of Leavers from Higher Education Institutions, Higher Education Statistics Agency, 2008–13

RANGE OF OCCUPATIONS

Below is an overview of the kinds of employment sectors, organisations and professions that recent Geography postgraduates have entered, based on responses to 'Destinations of Leavers' surveys conducted six months after graduation.

Range of employment sectors

- Administration of the state and the social and economic policy of the community
- Architectural and engineering activities and related technical consultancy
- Business and management consultancy
- Construction of residential and non-residential buildings
- Construction of roads and railways
- Engineering activities and related technical consultancy
- General public administration
- Higher education
- Regulation of the activities of providing health care, education, cultural services and other social services, excluding social security
- Research and experimental development in natural sciences and engineering

Range of employers

- Advantage West Midlands
- Akzonobel
- Amey
- Buglife
- Centre for Ecology and Hydrology
- Environment Agency
- Groundwork Black Country
- Henley Research International
- Homes and Communities Agency
- Nissan Technical Centre Europe Ltd
- Severn Trent Water Ltd
- Sustainability West Midlands
- The NEC Group
- University of Birmingham
- University of Oxford

Range of occupations

- Civil Servant
- Cultural Researcher
- Development Officer
- Director
- Economic Development Officer
- Enterprise Officer
- Environmental Planner
- Freshwater Biologist
- Graduate Transport Planner
- Hydrologist
- Lecturer
- Research Fellow
- Strategic Planner
- Sustainability Officer
- Technical Planner

School of Geography, Earth and Environmental Sciences

EMPLOYABILITY

EARTH AND ENVIRONMENTAL SCIENCES

Highlights:

- Over the past five years, a total of 90.6% of taught postgraduate respondents were in work or further study six months after graduation
- Over the past five years, a total of 96.4% of research postgraduate respondents had successfully found work or further study six months after graduating

Many of Birmingham's Earth and Environmental Sciences postgraduates enter careers in the exploration industry (which can fluctuate depending on the financial strength of the oil and gas industries), in water exploration and water supply, or in the environmental sector.

In recent years some of our postgraduates have entered careers in renewable energy and climate change after completing specialist postgraduate study with us. Popular destinations for Earth and Environmental Sciences postgraduates include oil companies and contractors; mining, quarrying and civil engineering companies; consultancies; and local government and government-supported scientific establishments.

Our Earth and Environmental Scientists compete well in the job market, applying the technical abilities, analytical skills and subject knowledge they develop during their postgraduate studies.

The charts to the right show results from Destinations of Leavers surveys for our Earth and Environmental Sciences postgraduates over the past five years.

'Academically, I expected the MSc to be a step up in terms of workload, lecture contact time and challenging course content. However, the course also provided much more of an emphasis on the world beyond education: on what employers would expect in terms of delivering reports and projects to professional standards on challenging timescales.

My favourite part of the course was the summer project, as through excellent contacts within the department I was able to work on a live project with Worcestershire County Council and the British Geological Survey.

'During my MSc, I really benefited from the practical aspects of field work and visiting working sites where active remediation, operation and monitoring were taking place. Combined with in-depth lectures, the programme gave me a solid grounding in the technical industry.'

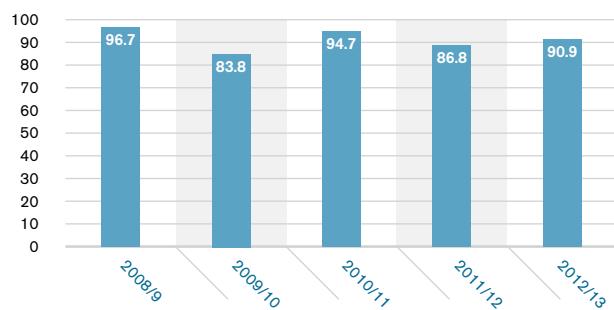
After graduating I successfully gained entry to the Veolia Water UK graduate training programme. This is a two-year project-based scheme where I have worked on private finance initiatives as far north as the Highlands as a Process Engineer. The excellent technical knowledge and insights into the water industry I gained on the MSc have made it much easier to jump right into projects and learn quickly on the job.'

Perran Hutton, MSc Hydrogeology,
graduated 2010

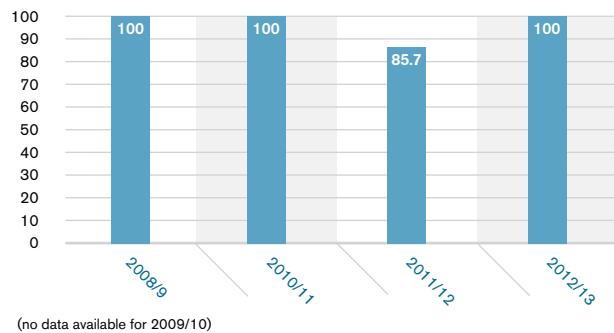
Perran is now Operations Unit Controller for Veolia Water (UK). He is based in Inverness but is also responsible for sites out in Fort William.

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Percentage of taught postgraduate respondents in work and/or further study six months after graduation



Percentage of research postgraduate respondents in work and/or further study six months after graduation



SOURCE: Destinations of Leavers from Higher Education Institutions, Higher Education Statistics Agency, 2008–13



School of Geography, Earth and Environmental Sciences

RANGE OF OCCUPATIONS

Below is an overview of the kinds of employment sectors, organisations and professions that recent Earth and Environmental Sciences postgraduates have entered, based on responses to 'Destinations of Leavers' surveys conducted six months after graduation.

Range of employment sectors

- Administration of the state and the social and economic policy of the community
- Architectural and engineering activities and related technical consultancy
- Architectural and engineering activities; technical testing and analysis
- Engineering activities and related technical consultancy
- Extraction of crude petroleum
- Extraction of crude petroleum and natural gas
- Higher education
- Manufacture of instruments and appliances for measuring, testing and navigation
- Other professional, scientific and technical activities
- Regulation of the activities of providing health care, education, cultural services and other social services, excluding social security
- Research and experimental development on natural sciences and engineering
- Water collection, treatment and supply

Range of employers

- Birmingham City Council
- Mayer Brown (legal services provider)
- Merlin Energy Resources Ltd

Meteogroup UK

- Met Office
- Mott Macdonald
- Nintendo
- Saudi Food and Drug Authority
- Schlumberger Ltd
- Severn Trent Water Ltd
- Shell International
- University of Birmingham
- Vaisala
- Weather Services International
- Zenith International Ltd

Range of occupations

- Air Quality Consultant
- Consultant Hydrogeologist
- Environmental Consultant
- Environmental Protection Officer
- Geospatial Software Developer
- Honorary Fellow
- Meteorologist
- Operational Meteorologist
- Plant Record Assistant
- Student Environmental Health Officer
- Town Planner
- Trainee Environmental Health Officer
- Trainee Weather Forecaster



'My PhD research looked at the characterisation of fault curvature, focusing on implications for wall rock deformation and the enhancement of automated fault interpretation software. Some of the best things about my experience as a PhD researcher at Birmingham included the access I had to expertise and the welcoming nature of the School and the University as a whole. The University offered me opportunities to enjoy life whilst also developing key skills. My advice to prospective PhD researchers would

be to take your time to consider your topic and supervisor, as both will determine your success.'

'My current job provides a relaxed but highly challenging working environment. Since completing my PhD I have presented at international events, discovered two gas fields and been invited to the Young Directors Forum. My PhD has provided a huge amount of background confidence which is recognised by employers and non-academics.'

Tim Wright, PhD Earth Sciences, graduated 2008

Tim's PhD research project focused on the characterisation of normal fault geometry. He is now Consultant Geoscientist for Merlin Energy Resources Ltd.

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