



MSc in Earth Science

Distance learning degree qualification



GLOBAL
STUDY
GLOBAL
RECOGNITION

Qualification details

This MSc course explores current aspects of Earth science, investigating how the Earth's lithosphere, hydrosphere, cryosphere, atmosphere, and biosphere are dependent upon each other, interacting across a wide range of temporal and spatial scales.

You will learn to critically evaluate current research and gain skills that allow you to update your knowledge of Earth science. You will investigate how to deal with complex interacting Earth systems, how to quantify fluxes within the Earth system and understand the climatic consequences of changing the balance between different components. You will learn how to communicate scientific information to specialists and non-specialists.

Career relevance & employability

Completing this MSc course will equip you with a set of key transferable skills, which will be relevant to Earth science, as well as providing you with a basis of postgraduate level science skills. You will learn to critically evaluate current research and advanced scholarship in your field of study as well as evaluating research methodologies. You will discover how to deal with complex issues and make sound judgements and decisions in complex and unpredictable situations.

You will learn to communicate information and conclusions to specialist and non-specialist audiences including professional audiences, demonstrate

self-direction and originality in tackling and solving problems and act autonomously in planning and implementing tasks at a postgraduate level.

Entry requirements

To successfully undertake this postgraduate study you will need to have studied Earth science at degree level. If you do not have a degree in Earth science (or similar) then you are likely to need to undertake additional study before starting the qualification.

If you have other study or experience that you believe equips you to take this qualification you can still apply, but must supply evidence of that study or experience.

Credit for previous study elsewhere

If you have already completed some successful study at undergraduate or postgraduate level at another institution you may be able to transfer credit for this study and count it towards this Open University qualification. If you wish to apply to transfer credit you must do so as soon as possible as it may affect your choice of OU modules. If you are awarded credit for study completed elsewhere, you may find that you need to study fewer OU modules to complete your qualification with us. No credit transfer can be given for S810.

On completion

On successful completion of the required modules you can be awarded a Master of Science in Earth Science entitling you to use the letters MSc Earth Sci (Open) after your name. The degree will be classified as pass, merit or distinction. You will have the opportunity of being presented at a degree ceremony.

Modules

For this 180-credit masters degree you require:

30 credits from the following optional undergraduate modules (or from transferred credit):

Undergraduate optional modules	Credits
<i>Oceanography</i> (S330)	30
<i>The geological record of environmental change</i> (S369)	30
<i>Understanding the continents</i> (S339)	30
<i>Ocean Science</i> (S331) NEW	30

And 150 credits from the following compulsory modules:

Postgraduate compulsory modules	Credits
<i>Developing research skills in science</i> (S825)	30
<i>Earth science: a systems approach</i> (S808)	60
<i>MSc project module</i> (S810)	60



Modules

For details on all the modules available, please refer to our website, www.openuniversity.edu.

Assessment key

- EMA = End-of-module assessment
- iCMA = Interactive computer marked assessment
- TMA = Tutor-marked assignment

Oceanography (S330)	
Credits:	30 at Postgraduate
Assessment:	4 TMAs, 1 Examination

Oceans cover seventy percent of the Earth’s surface, regulating our climate and maintaining our atmosphere. They also contain virtually all the known chemical elements. This course deals with their physics, chemistry and biology, as well as the structure of the basins that contain them – covering topics like underwater volcanoes; the greenhouse effect; eddy systems; the El Niño phenomenon and its link to droughts and floods; and the global view of ocean properties that satellite technology can provide. This is a wide-ranging, multi-disciplinary course for anyone interested in the natural world.

The geological record of environmental change (S369)	
Credits:	30 at Postgraduate
Assessment:	3 TMAs, 1 Examination

This course explores how we can track environmental change through the geological record. It begins with the sedimentary sequences produced by changes in relative sea level, and the likely role of climatic and tectonic processes in producing these changes. You’ll also examine the greenhouse world of the Cretaceous and its tropical/subtropical marine environments; high latitude terrestrial environments; the effect on the environment of large igneous provinces and meteorite impacts; and the mass extinction event at the end of the period. Finally, the course documents the Ice Age, offering possible explanations for the natural climatic changes during the last 2.6 million years.

Understanding the continents (S339)	
Credits:	30 at Postgraduate
Assessment:	3 TMAs, 1 iCMA, 1 Examination

This wide-ranging course develops your knowledge of the continents: its theme is crustal evolution in contrasting environments. It revises and extends your knowledge of plate-tectonic processes and looks at the East African rift system and Iceland as examples of extensional regimes.

You will study subduction zone processes; consider the Tibetan mountain range; examine the Himalaya and the Scottish Highlands as examples of collisional processes; and analyse the tectonic and magmatic framework of Britain. This course is intended for those with an understanding of the essentials of igneous and metamorphic rock-formation processes, plate-tectonic theory and structural processes.

Developing research skills in science (S825)	
Credits:	30 at Postgraduate
Assessment:	2 TMAs, 1 EMA

This course builds on your undergraduate level science to develop a strong appreciation of postgraduate research skills. It will develop knowledge and understanding of techniques and skills applicable to postgraduate scientific study and research methodologies and critical awareness of literature. It will support you in understanding and evaluating current research.

Earth science: a systems approach (S808)	
Credits:	60 at Postgraduate
Assessment:	4 TMAs, 1 EMA

Modern Earth science is the study of the Earth as a complex system of interacting reservoirs including the geosphere (core, mantle and crust), and the superficial reservoirs, including the hydrosphere, cryosphere and atmosphere. The resulting Earth system produces slowly changing stable habitats for life – the same Earth system produces sudden and catastrophic environmental changes. This online course explores several of the most important Earth system interactions through physical observations in the modern world, geological observations, measurements of changing chemical signatures, and quantitative and semi-quantitative models.

MSc project module (S810)	
Credits:	60 at Postgraduate
Assessment:	4 TMAs, 1 EMA

This masters-level project course in science, which is entirely online, is an opportunity for you to carry out an in-depth investigation into a subject of your own choice. The only constraint on the subject is that it must be linked to one or more of the knowledge-based objectives of your previous science MSc modules. Your project can be literature based, involve laboratory or fieldwork, or include the design and use of a questionnaire. You will have the support and guidance of a tutor, both by email and online.

FAQs

Can I study in any country?

This course is approved for study in most countries. Please use the Course Finder menu at www.openuniversity.edu to see if it is available in your country.

Is an OU qualification recognised in my country?

An OU degree is equal in academic standard to a degree from any other British university. The University is subject to the same quality assurance procedures, through the Quality Assurance Agency (QAA), as all other British universities, and uses external assessors and examiners to ensure comparability of standard and level in its courses.

A leaflet is available on how you can apply for formal recognition in your country. To download the leaflet, please go to www.openuniversity.edu/brochures/recognition.pdf.

What tutor support will I receive?

The OU excels in its unrivalled support for students. You’ll have email and online support from a tutor and you will be able to discuss your study in online tutor group discussions, using our customised learning environment. Our community websites Platform and OpenLearn offer a different perspective on your subject, and a huge range of OU resources on YouTube and iTunes U can expand your understanding. In addition, you can tap into a range of enthusiastic and welcoming OU social network groups on Facebook, Twitter and LinkedIn.

Are there any entry requirements?

To gain entry to our postgraduate programmes you’ll normally need an undergraduate degree or equivalent. However, your previous work experience and study, or qualifications from other higher-education institutions, may all count towards programme entry.

As part of the registration process, however, you will be asked to confirm your proficiency in English (if you are unsure, you can take a short online test, please see our website www.openuniversity.edu for more information).

Can I count previous study towards an OU qualification?

Any higher-education level studies you’ve successfully completed elsewhere may count towards your OU degree or other qualification. We enable you to do this by awarding you a certain amount of ‘transferred credit’. By transferring credit gained from previous study, you can reduce the amount you need from OU study to achieve your qualification. For more information please go to www.openuniversity.edu.

How do you work towards a qualification?

We measure the size of our qualifications in credits - you need 60 credits for a certificate, 120 credits for a diploma and 180 credits for a masters degree.

How long does it take?

Our qualifications are designed to be flexible. So if you want to vary the amount of time you spend studying, you can. The table below is a guide on the time required, but call us today to discuss how you can vary the study intensity and therefore the time taken to complete your course.

Postgraduate qualifications	Credits required	Time required to complete ¹
Masters degree	180	3-4 years part-time study

¹For illustrative purposes only – in most cases you can vary the number of credits taken per year and therefore the time taken to complete the course.



How much will it cost?

You pay for your postgraduate studies module by module, rather than for an entire programme up front. Therefore, the total cost of a qualification may vary according to which modules you choose and how long you take to complete your degree.

The EU fee for this qualification in 2012/13 is:

£9,310

Please note: prices are approximate and subject to change. Please check our website or call us for latest details.

For information please go to www.openuniversity.edu and view the details on the Courses pages.

When can I start?

To give you more opportunities to start, most qualifications have two intakes a year – February and October for this qualification.

Can I meet and network with other students?

Definitely – when you start with the OU you automatically become a member of the Open University Student Association (OUSA). OUSA also runs a popular student forum site. For more information, go to www.ousa.org.uk.

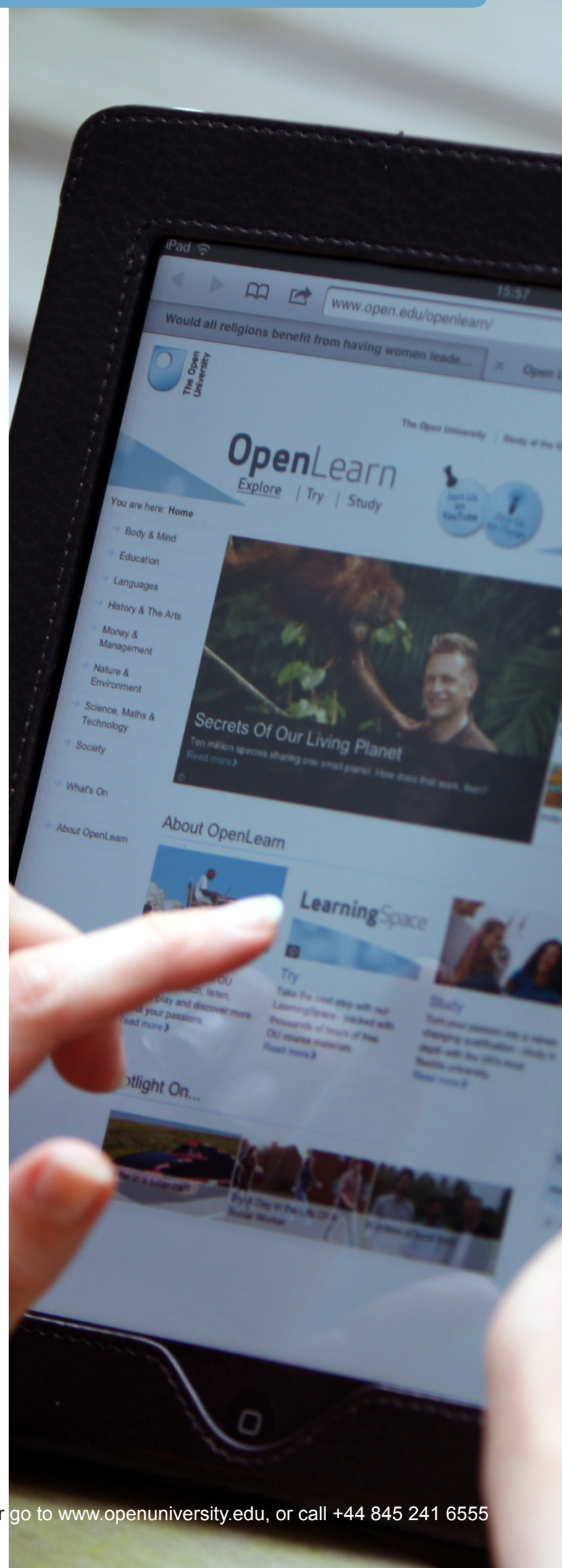
Once you have gained your qualification, you can join the OU Alumni Association, our vibrant and active alumni community with 280,000 members worldwide. You will enjoy many membership benefits, including regular newsletters, good networking opportunities and access to the alumni website.

How is my privacy protected?

We record your personal information when you contact us and use this to manage registration, study, examination and other services. When you register, we'll tell you more about how we process and use your personal information.

When should I apply?

Apply as early as you can – particularly if you wish to claim for credit for previous study. Registration open dates are shown in the Courses section on each qualification page at www.openuniversity.edu.



What do I need to do next?

It takes just 2 simple steps.

Begin the process to secure your place. Here's how easy it is.

1. Register now

Go to www.openuniversity.edu, select the Courses section and the degree you require. You will then be asked to select your first module to register.

Alternatively call us on **+44 845 241 6555**.

Don't worry, you don't need to pay anything at this stage.

As soon as you have registered you'll get an **email confirmation** which contains your login details.

2. Choose your first module, make payment to enrol

Before you start studying you will need to choose and register on your first modules and arrange payment; instructions for this will be emailed to you.

Once complete you will officially be an Open University student – welcome!



All details shown in this leaflet are correct as at February 2013, but are subject to change.

Please call +44 845 241 6555 for the latest details.



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