

UNIVERSITY OF
Southampton

INVESTIGATING OUR DYNAMIC PLANET

OCEAN AND EARTH SCIENCE
POSTGRADUATE COURSES 2020

FOUNDING
MEMBER OF THE
**RUSSELL
GROUP**

RESEARCH EXCELLENCE

As a centre for excellence in Ocean and Earth science teaching and research, we seek to understand how the ocean fits within the dynamic Earth system.

We have research expertise in:

- Geochemistry
- Geology and Geophysics
- Marine Biogeochemistry
- Marine Biology and Ecology
- Palaeoceanography and Palaeoclimate
- Physical Oceanography

Our unique waterfront campus, based at the National Oceanography Centre Southampton (NOCS), has allowed us to recruit top-level researchers and educators from around the world.

Our postgraduate programmes offer our students access to research vessels, cutting-edge technology and facilities, as well as opportunities for fieldwork and scientific cruises.



Understanding rip currents to help save lives



Developing digital data storage capable of surviving for billions of years by creating the recording and retrieval processes of 5D digital data by femtosecond laser writing

Investigating how carbon dioxide from the deep helped bring an end to the last Ice Age



Investigating how underwater sound linked to human activity could alter the behaviour of seabed creatures and change whole marine ecosystems



- 1 Kiwa tyleri ("Hoff Crab") - a species of deep-sea squat lobster
2. New Organic Geochemistry Facility
3. Autonomous Underwater Vehicle (AUV)
4. Geochemical sampling of a Hydrothermal Vent

TAUGHT PROGRAMMES

Key facts

Unless otherwise stated

Entry requirements: a UK bachelors degree with upper second-class honors or higher in relevant subject. See international equivalent qualifications www.southampton.ac.uk/pg/entry

English language: band F, IELTS 7.0 overall, with a minimum of 6.0 in all components. For more information visit www.southampton.ac.uk/pg/el

Duration: See individual course listing

Assessment: coursework, examinations and project

Start date: September

Applying: University online application form with transcripts and personal statement

Closing date: 31 July

Fees and funding: scholarships and bursaries are available for some of our programmes. Visit www.southampton.ac.uk/pg/fees for programme-specific details

Ocean and Earth Science at Southampton offers Masters and research opportunities for students looking to push the boundaries of their knowledge and learning. We offer a range of postgraduate training, developed over the past 50 years with employers, international collaborators, governments, and graduates.

We have two types of taught Masters options. The Master of Science (MSc) is based more on taught modules, with a research project. Our MSc degree programmes aim to expand subject knowledge and develop skills that are highly valued by employers. In many cases you can choose a named pathway within a broad-based degree structure. MRes is a research based degree programme which includes a range of optional specialist modules plus an extended research project which provides an excellent preparation for further research work.

MSc Oceanography (1 yr)

Programme Director:
Professor Thomas Bibby

Our degree is designed primarily for students with no previous specialisation in marine science. Our programme provides a foundation in interdisciplinary marine science with the opportunity to specialise in particular pathways:

Pathways include:

- Marine Biology and Ecology
- Physical Oceanography and Climate Dynamics
- Marine Biogeochemistry
- Marine Geology and Geophysics

Graduates often pursue careers in the marine environmental sector or undertake PhD research in marine sciences.

MRes Ocean Science (1 yr)

Programme Director:
Dr Anna Hickman

Our programme provides the opportunity to conduct research alongside world-class academics in marine science. Our course will allow you to focus on a particular area of oceanography (which may be influenced by the subject area of your first degree) to develop your knowledge and skills in areas determined by the modules you select and the nature of the research you undertake. There are pathways for students with strong or more limited oceanography backgrounds. The MRes is a research led programme that differs from the MSc in focusing less on taught modules and more on the research project (about two-thirds of the year).



Find out more:

www.southampton.ac.uk/oespg

Or to have specific questions answered:

T: +44 (0)23 8059 9699

E: enquiry@southampton.ac.uk

TAUGHT PROGRAMMES

MRes Marine Geology and Geophysics (1 yr)

Programme Director:
Dr Nick Harmon

Our programme will provide you with broad knowledge of marine geological and geophysical techniques, and advanced training in marine geophysical exploration techniques, mathematical modelling, geodynamics, coastal processes, micropalaeontology or palaeoceanographic expertise. You will gain hands-on research experience through an advanced project with leading international researchers. The MRes focuses less on taught modules and more on the research project (about two-thirds of the year).

MSc Marine Environment and Resources (2 yrs)

Programme Director:
Professor Duncan Purdie

This MSc is a joint two-year European programme that provides the opportunity to study at the Universities of Southampton, Bilbao, Bordeaux and Liege and will develop your ability to make a difference in marine environmental resource management. You will spend a full semester at three of the four universities and will study in English. This experience of mobility, with emphasis on environment and resources, will empower you in the pan-European job and research market.

All applications must be made at www.merconsortium.eu and all enquiries should go through mer@merconsortium.eu

MSc Engineering in the Coastal Environment (1 yr)

Programme Director:
Dr Ivan Haigh

Skilled graduates who can understand environmental issues from an engineering perspective are in high demand. Designed with your future career in mind, and with extensive input from industry, this course will enable you to acquire knowledge of environmental coastal engineering, develop key skills such as the use of numerical models and geographic information system, understand the design of coastal structures, and enable you to apply this knowledge to address real problems in the coastal zone.



“I will have the opportunity to join a research cruise for my MSc project. Three weeks on board the RRS James Cook! That is definitely not an everyday opportunity.”

America Zelada Leon
MSc Oceanography

RESEARCH PROGRAMMES

Key facts

Unless otherwise stated

Entry requirements: a first or upper second, or a 2:2 plus MSc Distinction or Merit in a relevant subject. See international equivalent qualifications www.southampton.ac.uk/pg/entry

English language: band 1C; IELTS 6.5 overall, with a minimum of 5.5 in all components. For more information visit www.southampton.ac.uk/pg/el

Start date: usually October, but possible throughout the year for PhD and DM

Applying: University online application form, degree transcripts, references and interview

Closing date: none, but studentship deadlines may vary

Fees and funding: studentships are available for some projects via UK Research and Innovation, University and industrial partner funding. Visit www.southampton.ac.uk/pg/fees. We also welcome self-funded applicants

Students from all over the world choose to undertake research at the National Oceanography Centre Southampton (NOCS). With an interdisciplinary emphasis, our research focuses on scientific excellence with a global impact. We host cutting-edge facilities and attract leading researchers from around the world.

Graduate School of the National Oceanography Centre Southampton (GSNOCS)

The National Oceanography Centre Southampton (NOCS) attracts prominent research scientists and educators from around the world. The combination of direct access to ships and ocean technology and a strong research emphasis provides many opportunities for fieldwork and scientific cruises not traditionally found in university environments.

We offer postgraduate training at PhD and MRes level in a dynamic, cutting edge research environment. We recruit about 40 new PhD students each year into the Graduate School of the National Oceanography Centre Southampton, to train the next generation of principal investigators, policy advisors and leaders of industry. These students carry out research of the highest quality, leading to publications in top journals. We are a large, international, scientifically diverse and genuinely interdisciplinary community with backgrounds in biology, chemistry, computer science, Earth science, engineering, environmental sciences, geography, geology, geophysics, mathematics, meteorology, natural sciences, oceanography and physics.

We offer a variety of PhD opportunities that sit within our six research groups shown below, as well as specifically funded opportunities through INSPIRE.

Research groups include:

- Geochemistry
- Marine Biology and Ecology
- Geology and Geophysics
- Marine Biogeochemistry
- Palaeoceanography and Palaeoclimate
- Physical Oceanography

INSPIRE Doctoral Training Programme

INSPIRE (the Innovative Southampton Partnership for Investigators Researching the Environment) is creating an innovative multidisciplinary experience for the effective training of future leaders in environmental science, engineering, technology development, business and policy. You will be registered at the University of Southampton and will undertake your PhD research at the University or one of the hosting partner organisations. Unique features of INSPIRE include opportunities for placements at a range of prestigious research organisations or industrial and policy partners.



Find out more:

www.southampton.ac.uk/oespg

Or to have specific questions answered:

T: +44 (0)23 8059 9699

E: enquiry@southampton.ac.uk

GLOBAL IMPACT

Ocean and Earth Science is at the leading-edge of science.

Examples include:

- Ranked 2 in the UK for research intensity*
- Ranked as the leading marine science department in the UK*
- Ranked 2 in the UK, for proportion of research recognised as world-leading (4*)*
- 93% of Ocean and Earth Science overall research submission was judged as world-leading or internationally excellent*
- Awarded a rare and prestigious Regius Professorship in Ocean Sciences by Her Majesty The Queen, to mark her 90th birthday

Our researchers are at the cutting-edge of knowledge, working on solutions to some of today's toughest challenges. While much of our research begins with concepts at a fundamental level, we are passionate about using the findings to make a real impact on the world around us.

Our REF success demonstrates that our research has a significant impact on society and is making a contribution to the global understanding of our planet.

*Latest Research Excellence Framework (REF) 2014

*Unit of Assessment 7

WE ARE:



Sampling the Corinth Rift to help assess the earthquake hazard potential of the region

Helping endangered species by highlighting the need to preserve deep-sea animals and their habitats from future human activities such as deep sea mining

Predicting the affects climate change will have on marine ecosystems as a result of rising global temperatures

tracking the history of planets' motions and their effects on earth's climate, from a period around 200 million years ago

Investigating how and when the rare, unexpected and hazardous ocean phenomena known as 'rogue waves' occur

HOW DO I APPLY?

Before applying for postgraduate taught study, you should:

- check you meet the entry requirements
- if applicable, ensure that you meet any special requirements for international students
- identify how you will fund your postgraduate study
- obtain supporting documentation to include as part of your application

APPLY NOW

Apply to Southampton for postgraduate taught degrees and for more information on PhD opportunities



Find out more:

www.southampton.ac.uk/pg

CHOOSE SOUTHAMPTON



Top 100

global university*



Top 20

UK university**



Top 10

in the UK for
research intensity***



**National Oceanography
Centre Southampton**

(NOCS) is home to the UK
research vessel fleet

Over

96%

of our research environment
has been assessed
as world-leading and
internationally excellent***

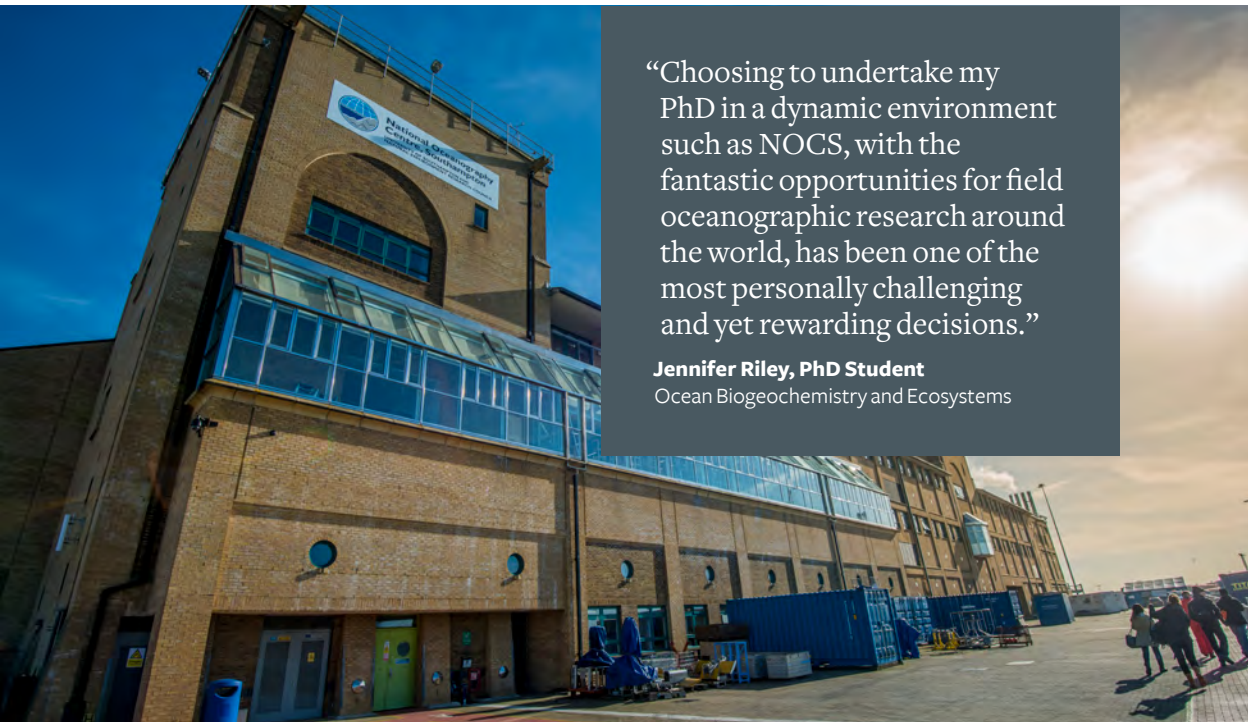


Ranked best Marine science
department
in the UK***

*QS World University Rankings, 2019 ** Complete University Guide, 2020 *** Latest REF, 2014

“Choosing to undertake my PhD in a dynamic environment such as NOCS, with the fantastic opportunities for field oceanographic research around the world, has been one of the most personally challenging and yet rewarding decisions.”

Jennifer Riley, PhD Student
Ocean Biogeochemistry and Ecosystems





Find out more:

www.southampton.ac.uk/oespg

UK enquiries:

enquiry@southampton.ac.uk

+44 (0)23 8059 9699

International and EU enquiries:

international@southampton.ac.uk

+44 (0)23 8059 9699



Disclaimer

This document is for information purposes only and is prepared well in advance of publication. While the University of Southampton uses all reasonable efforts to ensure that all statements, information and data contained in this document are accurate as at the date of publication, it reserves the right to make revisions or modifications to such statements, information or data at any time and without notice. Under no circumstances shall the University be liable for any reliance by the reader on any information in this document.

© University of Southampton 2019

This document can be made available, on request, in alternative formats such as electronic, large print, Braille or audio tape, and in some cases, other languages.



When finished with this document please recycle it.