

## Course Information Sheet for entry in 2021-22: Environmental Research (NERC Doctoral Training Partnership)



### About the course

The NERC-Oxford DTP in Environmental Research is a four-year DPhil programme which offers a novel training environment across three broad science streams. Researchers in the DTP work across and at the frontiers of environmental research, to advance knowledge and find solutions to pressing environmental challenges in collaboration with outside partners. You will carry out your research projects in one of nine departments after an initial training period.

The three streams of the NERC-Oxford DTP are as follows:

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#### **Biodiversity, ecology and evolutionary processes**

Research in this theme in Oxford spans pure to applied science, linked by an overarching aim to understand the generation, maintenance and loss of biological diversity from the gene to the species, and the structure, function and dynamics of ecosystems at a variety of spatial and temporal scales.

Pure aspects of research include unravelling biotic and abiotic interactions between the atmosphere and biosphere, and their role in the Earth System; the effect of the environment on evolutionary processes at all levels from genes and genomes to populations; the use of experimental, macroecological and phylogenetic approaches to understand the biology and distribution of species; the quantification of evolutionary patterns and the assembly of modern biodiversity by integrating fossil and genetic datasets; and understanding carbon and other biogeochemical cycles.

Information generated by research in these areas provides the critical foundation to address many of the global challenges facing humanity today from climate change and biodiversity loss, to food security, to pest and pathogen outbreaks.

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#### **Physical climate system**

Oxford researchers are advancing understanding of the behaviour of the climate system across the full breadth of atmosphere, oceans, cryosphere and biosphere. This includes atmospheric dynamics from weather to seasonal prediction to climate; atmospheric composition, clouds and aerosols; the physics and biogeochemical coupling of the oceans; and studies of past climates and the effects of biosphere change on climate.

Oxford has new strengths in cryosphere and Arctic research and our researchers are established in the areas of effects of anthropogenic climate change on the physical climate system and biogeochemical processes, and lead the way in innovative citizen science, from climateprediction.net which uses a distributed network of volunteer computers to provide very large ensembles of climate model simulations, to rapid disaster response.

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#### **Dynamic Earth, surface processes and natural hazards**

Within this stream investigators are developing new analytical, theoretical and experimental approaches to image, simulate and understand Earth's internal structure; and advancing understanding of the fundamental processes that underpin the behaviour of earthquakes, volcanoes and their impacts on timescales from the human, to the geological.

The DTP is developing new approaches in the field of climate adaptation, and the management of climate-related risks to infrastructure, and redefining relationships between Earth surface processes and climate in desert and wider dryland regions. Oxford researchers continue to develop and apply

new ways to investigate deep Earth and Earth-surface processes from the formation of the Earth to human history through experiment, analysis and theory.

You will either be recruited to a research stream or to a pre-determined project, but in either case you will begin your course based with the DTP. During the first two terms, you will undergo an intensive training programme during which you will have the opportunity develop your research skills and acquire an understanding of how researchers in other disciplines operate before writing your own research proposal in collaboration with your supervisor and in most cases an external partner.

You will be trained in 'hard' skills such as mathematics, programming and scientific computing, as well as being offered a broad-brush understanding of the Earth system across all disciplines of the DTP. There will also be course modules in softer transferable skills such as project design, proposal writing, communication and problem solving to underpin the exploration of research methodologies.

Elective training will continue throughout the degree and you will be able to select from a portfolio of advanced training courses to create your own tailored training programme. Later in the course modules will include thesis writing and paper writing. You will remain a member of the DTP even after transferring out to a department.

## Supervision

The allocation of graduate supervision for this course is the responsibility of the Doctoral Training Partnership and it is not always possible to accommodate the preferences of incoming graduate students to work with a particular member of staff. Under exceptional circumstances a supervisor may be found outside the Doctoral Training Partnership. The DTP strongly advises students to have at least two supervisors to ensure a good level of support both pastorally and academically.

For some projects it may be beneficial to seek supervision across two or more departments to support different aspects of the project.

Departments have differing guidelines on how often students meet with their supervisors (this will probably vary through the project, and may also depend on the area of research), and we recommend that students establish a routine at an early stage in their project development.

## Assessment

Your work will be informally assessed on the training modules throughout your degree and you will need to attain a certain number of attendance and submission credits before you begin your research project, and each year thereafter.

You will carry out your DPhil project in one of our departments and will gain your DPhil from the department in which you carry out your research project. You will follow the same milestones and assessments as a standard DPhil, so you will have Probationer Research Student (PRS) status until you confirm your status as a DPhil student by term six. By term nine you will confirm status and you will submit your thesis for assessment by the end of term 12. The nine departments of the DTP are as follows:

- Research Laboratory for Archaeology and the History of Art
- Department of Physics (sub-department of Atmospheric, Oceanic and Planetary Physics)
- Department of Earth Sciences
- School of Geography and the Environment
- Department of Plant Sciences
- Department of Zoology
- Mathematical Institute
- Department of Chemistry
- Department of Engineering Science.

## Changes to courses

The University will seek to deliver this course in accordance with the description set out above. However, there may be situations in which it is desirable or necessary for the University to make changes in course provision, either before or after registration. These may include significant changes made necessary by a pandemic (including Covid-19), epidemic or local health emergency. For further information, please see the University's Terms and Conditions (<http://www.graduate.ox.ac.uk/terms>) and our page on changes to courses (<http://www.graduate.ox.ac.uk/coursechanges>).

## Expected length of course

	Full Time Only
Expected length	4 years

## Costs

### Annual fees for entry in 2021-22

Fee status	Annual Course fees
Home (UK, Republic of Ireland, Channel Islands & Isle of Man)	£8,290
Overseas (including EU)	£27,460

Course fees are payable each year, for the duration of your fee liability (your fee liability is the length of time for which you are required to pay course fees). For courses lasting longer than one year, please be aware that fees will usually increase annually. Information about how much fees and other costs may increase is set out in the University's Terms and Conditions.

Course fees cover your teaching as well as other academic services and facilities provided to support your studies. Unless specified in the additional cost information (below), course fees do not cover your accommodation, residential costs or other living costs. They also don't cover any additional costs and charges that are outlined in the additional cost information.

Graduate students who have reached the end of their standard period of fee liability may be required to pay a termly University and/or a college continuation charge.

The University continuation charge, per term for entry in 2021-22 is £528, please be aware that this will increase annually. For part-time students, the termly charge will be half of the termly rate payable by full-time students.

If a college continuation charge applies (not applicable for non-matriculated courses) it is likely to be in the region of £100 to £400 per term. Please contact your college for more details.

### Additional cost information

NERC studentships come with an additional research training support grant (RTSG) to cover costs of associated fieldwork, laboratory and equipment. Individual research projects come with variable research costs and students will need to discuss these with their supervisor and plan a budget for their project. In some cases students may need to apply for additional funding, either from the RTSG or from college or other sources. Students should always involve their supervisor with such funding requests.

## Living costs

In addition to your course fees, you will need to ensure that you have adequate funds to support your living costs for the duration of your course.

The likely living costs for 2021-22 are published below. These costs are based on a single, full-time graduate student, with no dependants, living in Oxford. We provide the cost per month so you can multiply up by the number of months you expect to live in Oxford.

Likely living costs for 2021-22

	Likely living costs for 1 month		Likely living costs for 9 months		Likely living costs for 12 months	
	Lower range	Upper range	Lower range	Upper range	Lower range	Upper range
<b>Food</b>	£280	£400	£2,520	£3,600	£3,360	£4,800
<b>Accommodation</b>	£655	£790	£5,895	£7,110	£7,860	£9,480
<b>Personal items</b>	£130	£250	£1,170	£2,250	£1,560	£3,000
<b>Social activities</b>	£45	£115	£405	£1,035	£540	£1,380
<b>Study costs</b>	£45	£100	£405	£900	£540	£1,200
<b>Other</b>	£20	£55	£180	£495	£240	£660
<b>Total</b>	£1,175	£1,710	£10,575	£15,390	£14,100	£20,520

When planning your finances for any future years of study at Oxford beyond 2021-22, you should allow for an estimated increase in living expenses of 3% each year.

More information about how these figures have been calculated is available at [www.graduate.ox.ac.uk/livingcosts](http://www.graduate.ox.ac.uk/livingcosts).

## Document accessibility

If you require an accessible version of the document please contact Graduate Admissions and Recruitment by email ([graduate.admissions@admin.ox.ac.uk](mailto:graduate.admissions@admin.ox.ac.uk)) or via the online form (<http://www.graduate.ox.ac.uk/ask>).