Course Information Sheet for entry in 2025-26: Intelligent Earth (UKRI CDT in AI for the Environment)

Course facts

Mode of study Expected length





About the course

The Intelligent Earth CDT is a four-year doctoral programme designed to equip a new generation of students with advanced AI skills to tackle some of the most pressing environmental issues.

The programme will train a new generation of quantitative environmental data scientists to make substantial contributions in environmental and data sciences through five closely connected themes:

- 1. Climate
- 2. Biodiversity
- 3. Natural hazards
- 4. Environmental solutions
- 5. Core AI/ML research on complex environmental data

The programme is intrinsically interdisciplinary: you will be advised by both an environmental science supervisor and an Al supervisor from two different departments, plus a non-academic partner who also serves as host for a secondment. This course is suitable for quantitative applicants from data science, mathematical, physical and environmental science backgrounds.

The teaching model for all courses will be tailored towards training students to become independent researchers. After introductory lectures, you will be introduced to the corresponding AI tools, frameworks and environmental datasets to apply the taught material in tutorial-based project work. You will work in interdisciplinary groups tackling grand challenges in environmental science of increasing complexity with AI. The programme will be individually tailored to your needs.

Key components of the teaching programme:

- Induction week
- · Core courses in foundations of AI/ML and foundations of the four environmental themes
- Responsible AI training
- Computational skills training
- Advanced cross-cohort courses will focus on specific areas of AI applied to grand challenges and associated datasets from the four
 environmental themes
- Professional skills training
- Teaching skills training

In the second half of year one, you will undertake a three-month research project supervised by one of the potential DPhil supervisors.

In addition to the formal teaching programme, student experience and training will be enriched by:

- Weekly Intelligent Earth seminars
- Annual two-week hackathons
- Annual two-day CDT conference

Course structure

In year one, you will take core courses and computational skills training courses, followed by advanced cross-cohort courses, responsible AI training, and professional skills training modules, culminating in a three-month research project followed by the annual hackathon and conference. Course free periods will be used for consolidation, supervisor matching, and DPhil proposal development.

In year two, you will transition to your primary department and supervisors, and you will start your DPhil research. You will take advanced cross-cohort courses and professional/computational skill training modules. A secondment with non-academic partners may also take place at this stage, but may alternatively take place in year three.

In year three, your focus will be on DPhil research with optional advanced courses and professional/computational skill training modules based on your individual training needs. A secondment with non-academic partners may also take place at this stage if it was not undertaken in year two.

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In year four, you will finalise your DPhil research and complete your thesis writing. Professional training will focus on career development, job/fellowship applications and interviews.

Attendance

The course is full-time and requires attendance in Oxford. Full-time students are subject to the University's Residence requirements.

One of the following departments will serve as your primary department from year two onwards, when you will begin your DPhil research:

- Department of Biology
- Department of Computer Science
- Department of Earth Sciences
- Department of Engineering Science
- School of Geography and the Environment
- Department of Physics
- Department of Statistics

Provision exists for students on some courses to undertake their research in a 'well-founded laboratory' outside of the University. This may require travel to and attendance at a site that is not located in Oxford. Where known, existing collaborations will be outlined on this page. Please read the course information carefully, including the additional information about course fees and costs.

Resources to support your study

As a graduate student, you will have access to the University's wide range of world-class resources including libraries, museums, galleries, digital resources and IT services.

The Bodleian Libraries is the largest library system in the UK. It includes the main Bodleian Library and libraries across Oxford, including major research libraries and faculty, department and institute libraries. Together, the Libraries hold more than 13 million printed items, provide access to e-journals, and contain outstanding special collections including rare books and manuscripts, classical papyri, maps, music, art and printed ephemera.

The University's IT Services is available to all students to support with core university IT systems and tools, as well as many other services and facilities. IT Services also offers a range of IT learning courses for students, to support with learning and research.

The programme is resourced by UK Research and Innovation (UKRI) with contributions from the university and partners. It will be integrated in Oxford's Doctoral Training Centre and training may take place in a number of locations across the university and students will often work together on problem sets, or in groups, with the support of demonstrators.

You will have access to computational facilities as well as a laptop. When you move out to your department you will also have access to the facilities provided by that department. You will remain a member of the CDT and be able to return to the CDT facilities, based within the Doctoral Training Centre, on Keble Road, to use the facilities there.

You will have access to seminars in all eight departments as well as across the wider university. In addition to the training modules offered by the CDT, you will be able to sign up for a wide range of training courses and modules offered by departments across the university via the University's Researcher Training Tool.

You will also have access to Oxford's wide library network, including the recently refurbished Radcliffe Science Library.

Supervision

The allocation of graduate supervision for this course is the responsibility of the Intelligent Earth CDT 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 Intelligent Earth CDT.

During your first year, you will have a supervisor from the academic leadership of the CDT. Meetings with your supervisor will serve to monitor academic progress as well as to discuss any academic issues or questions arising. When you transition into one of the participating departments to commence you research project in year two, you will be co-advised by two supervisors, one from an environmental science department and one from an AI department. First-year supervisors will act as mentors throughout the programme, providing academic and pastoral guidance.

You will be expected to meet your supervisor at least once every two weeks, averaged across the year, to discuss your progress.

Assessment

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You will be assessed continually throughout the first year training courses modules. In the second half you will undertake a three-month research project and will be required to deliver a written report that will be assessed.

At the end of the second year, you will be required to write a report and give a presentation on your research, and to present a detailed and coherent plan for the research-intensive phase in the third and fourth years of your doctoral studies. Progress towards completion is again formally assessed some way into the final year of study.

You will carry out your DPhil project in the department of your primary supervisor 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.

Changes to this course

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 you commence your course. These might include significant changes made necessary by any pandemic, 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).

Costs

Annual fees for entry in 2025-26

| Fee status | Annual Course fees | |
|------------|--------------------|--|
| Home | £10,070 | |
| Overseas | £33,370 | |

Information about course fees

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 (http://www.graduate.ox.ac.uk/terms).

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 2025-26 is £672, 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 £600. Please contact your college for more details, including information about whether your college's continuation charge is applied at a different rate for part-time study.

Additional cost information

CDT funded studentships come with an additional research training support grant (RTSG) to cover costs of associated equipment, research and travel. 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 and any additional course-specific costs, 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 the 2025-26 academic year 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 one month

| | Lower range | Upper range |
|-------------------|-------------|-------------|
| Food | £330 | £515 |
| Accommodation | £790 | £955 |
| Personal items | £200 | £335 |
| Social activities | £45 | £100 |
| Study costs | £40 | £90 |
| Other | £20 | £40 |
| Total | £1,425 | £2,035 |

Likely living costs for nine months

| | Lower range | Upper range |
|-------------------|-------------|-------------|
| Food | £2,970 | £4,635 |
| Accommodation | £7,110 | £8,595 |
| Personal items | £1,800 | £3,015 |
| Social activities | £405 | £900 |
| Study costs | £360 | £810 |
| Other | £180 | £360 |
| Total | £12,825 | £18,315 |

Likely living costs for twelve months

| | Lower range | Upper range |
|-------------------|-------------|-------------|
| Food | £3,960 | £6,180 |
| Accommodation | £9,480 | £11,460 |
| Personal items | £2,400 | £4,020 |
| Social activities | £540 | £1,200 |
| Study costs | £480 | £1,080 |
| Other | £240 | £480 |
| Total | £17,100 | £24,420 |

When planning your finances for any future years of study at Oxford beyond the 2025-26 academic year, it is suggested that you allow for potential increases in living expenses of 4% each year – although this rate may vary depending on the national economic situation.

More information about how these figures have been calculated is available at www.graduate.ox.ac.uk/livingcosts.

Document accessibility

If you require a more accessible version of this document please contact Graduate Admissions and Recruitment by email (graduate.admissions@admin.ox.ac.uk) or via the online form (http://www.graduate.ox.ac.uk/ask/form).