# Course Information Sheet for entry in 2025-26: Fundamentals of AI (EIT CDT)

## **Course facts**

Mode of study	Full Time Only
Expected length	4 years



## About the course

The Centre for Doctoral Training (EIT CDT) in Fundamentals of AI will undertake foundational research in the underpinning theory and method development of Artificial Intelligence and machine learning that have the potential to have a transformative impact across a range of humane themes associated with the Ellison Institute of Technology (EIT).

The course will provide you with training in both cutting-edge AI research methodologies and the development of business and transferable skills.

You will undertake a significant, challenging and original research project, leading to the award of a DPhil.

Key topics and themes will focus on fundamentals of artificial intelligence, computational statistics, and machine learning, reflecting the breadth and depth of the research experience of the supervisory pool.

#### Course structure

Training will begin with an immersive three-week module that lays the foundation for a year-long, team-based open source software development project.

You will then undertake eight two-week core modules, taught during the first two terms, which will likely cover topics such as:

- deep learning
- causal inference
- generative Al
- bayesian inference
- data wrangling
- · statistics and probability, and
- networks analysis.

Modules are designed to foster both in-depth learning and cohort-building, and rely on team work and collaboration. Best practices in sustainable and reproducible research are in all aspects of the scientific training programme.

After the taught modules, you will carry out two 10-week research projects under the supervision of academics from the supervisor pool. During this time, you will be based in the home department of your mini-project supervisors. Towards the end of the first year, you will select your DPhil research project which is likely to be a continuation of one of your short research projects.

Projects will focus on underpinning theory and method development of Artificial Intelligence and machine learning that will have the potential to have a transformative impact across a range of humane themes associated with the Ellison Institute of Technology (EIT):

- health and medical science;
- · food security and sustainable agriculture;
- climate change and clean energy; and
- government innovation in the era of artificial intelligence.

The first two terms will be dedicated to intensive cohort training which will involve lectures, seminars and group work, all of which will take place on-site at the DTC. Further guest lectures and training opportunities will be organised for the full-cohort with opportunities for peer-to-peer learning.

# **Leadership and Innovation Programming Training**

Students in the EIT CDT will also have access to leadership and innovation training to support them through to graduation and beyond. With a core focus on leadership and purpose, this training emphasises self-leadership, personal values and the skills needed to lead others and systems. Innovation and entrepreneurship are also central, providing students with access to top innovators and experts, along with opportunities to learn both the theory and practice of entrepreneurship. The training is delivered through a variety of formats, including expert talks, practical workshops and peer discussions.

#### **Attendance**

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

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.

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 four 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 EIT CDT in Fundamentals in AI 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 CDT.

During your first year, you will have a supervisor from the academic leadership of the CDT. Regular meetings serve to monitor academic progress as well as to discuss any academic issues or questions arising. After the first year, you will transition into the home department of your primary supervisor to commence you research project, though you may also have a co-supervisor in the same (or another) department. First-year supervisors will act as mentors throughout the programme, providing academic and pastoral guidance.

You will be expected to meet your supervisor on a regular basis. These meetings should take place at least once every two weeks, averaged across the year, to discuss your progress.

#### **Assessment**

Each mini-project will be assessed by researchers from the supervisor pool on the basis of a report written by the student. Modules are assessed by a presentation in small groups on some material studied during the two-week module (known as micro-projects within the programme).

All students will be initially admitted to the status of Probationer Research Student (PRS). Within a maximum of six terms, students will be expected to apply for transfer of status from Probationer Research Student to DPhil status.

A successful transfer of status from PRS to DPhil status will require the submission of a thesis outline. Students who are successful at transfer will also be expected to apply for and gain confirmation of DPhil status to show that their work continues to be on track. This will need to be completed within ten terms of admission.

Both milestones normally involve an interview with two assessors and therefore provide important experience for the final oral examination. Students will be expected to submit a thesis at four years from the date of admission.

The final thesis is normally submitted for examination during the fourth year and is followed by the viva examination. The final award for Oxford based students will be a DPhil awarded by the University of Oxford.

To be successfully awarded a DPhil you will need to defend your thesis orally (viva voce) in front of two appointed examiners.

# 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

This course includes compulsory elements that entail additional costs beyond fees (or, after fee liability ends, continuation charges) and living costs. For those students in receipt of a full CDT studentship award, an additional research training support grant (RTSG) to cover costs of associated equipment, research and travel will be provided. Students who are not in receipt of a full CDT studentship award will need to cover these course-related costs. 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 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).