Course Information Sheet for entry in 2026-27:
Autonomous Intelligent Machines and Systems (EPSRC CDT)

Course facts

Mode of study	Full Time	Part Time
Expected length	4 years	8 years

About the course

The EPSRC CDT in Autonomous Intelligent Machines and Systems (AIMS) is a research-based course combining machine learning, robotics, vision, control, and cyber-physical systems, with academic training and industry-led projects in intelligent systems.

This course provides a comprehensive, state-of-the-art view of autonomous intelligent systems, combining theoretical foundations, systems research, academic training and industry-initiated projects and thus mixing both practical and theoretical aspects of intelligent machines and systems.

Course structure

An overview of the course structure is provided below. Details of the compulsory and optional elements of the course are provided in the *Course components* section of this page.

The first year, or first two years if studying part-time, is oriented towards developing your knowledge base. You will need to take 16 courses during your first year, or over two years if studying part-time. Your day will comprise of lectures each morning with laboratory sessions each afternoon.

You will undertake two mini-projects, each lasting ten-twelve weeks. These will be precursors to your DPhil study, to hone your research skills and shape your main research area (if studying part-time, you will take one in your first year and the other in your second year).

Years two to four, or three to eight if studying part-time, see an increasing emphasis on individual research. You will be encouraged to develop projects based on your own research ideas.

To learn more about the research topics you'll have the opportunity to explore, please refer to the *Research areas* section on this page.

Training will continue alongside your research project.

Research seminars are used to discuss papers, for rehearsing conference talks and for building links between groups. An annual workshop gives the opportunity to present research to students, industrial partners and invited researchers from other universities. Industrial collaborators are invited to share their latest problems and market trends and to discuss opportunities for future collaboration.

If studying full-time, you will spend one or two months over the second or third summer in an industrial lab to gain experience in industry-led projects and expanding your horizons by engaging in an AIMS topic that is not your main one. If studying part-time, it is recommended that you take on an internship between years four and six.

After the end of the internship, further interaction will be encouraged by inviting your industrial supervisors to join your group in Oxford for short periods.

You will also be encouraged to take demonstrations of your systems to companies, government departments, as well as schools.

Attendance

The course can be studied full-time or part-time with both modes requiring attendance in Oxford. Full-time students are subject to the University's Residence requirements. (//www.ox.ac.uk/admissions/graduate/after-you-apply/accommodation/residence-requirements) Part-time students are required to attend course-related activities in Oxford for a minimum of 30 days each year.

For part-time study you would be expected to be in Oxford for at least four out of the eight weeks of the first two terms in the first and second year, with an additional 10-12 weeks also during April-September for years one and two to complete the mini-projects.

The full-time course is usually studied over three to four years. The part-time courses is usually studied over six to eight years.

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 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, as well as guidance on what technology to bring with you as a new student (https://www.it.ox.ac.uk/what-to-bring) at Oxford.

The AIMS CDT is resourced by the UK's Engineering and Physical Sciences Research Council, and is jointly hosted by the Department of Computer Science and Department of Engineering Science.

There are strong links with researchers in other departments in the mathematical and physical sciences, and, ever increasingly, with researchers and practitioners in medical science departments and University hospitals.

The key research cluster for AIMS is information, control and vision engineering, which is well-supported by experienced technical, computing, and administrative staff. The department has well-equipped research areas and workshops, as well as offices, lecture theatres, library, common room, stores, reprographics and other facilities.

Supervision

For this course, the allocation of graduate supervision is the responsibility of the Department of Engineering Science and/or Department of Computer Science 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 Department of Engineering Science and Department of Computer Science.

Students will have the opportunity to meet their supervisor on a regular basis to discuss their progress. For full-time students, these meetings are usually at least once every two weeks, averaged across the year, and once a month for part-time students.

Assessment

If you are studying full-time, you will be assessed continually throughout the first year during courses and projects and at its end the course supervisors will assess whether sufficient progress has been made to continue to the research phase. 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.

If studying part-time, you will be assessed over the first two years. Timings will differ for the presentation for part-time students.

For the DPhil you will be required to submit a substantial thesis which is read and examined by experts in the field, one from the department and one from elsewhere. Often the thesis will result in the publication of several journal and conference papers.

Course components

Compulsory study

You will normally take 16 courses during your first year, over two years if studying part-time.

The list of available courses may vary each year but recent options have included:

- AI Safety & Alignment
- Signal Processing

- Optimization
- Machine Learning
- Reinforcement Learning
- Autonomous Robotics
- Discriminative & Deep Learning for Big Data
- Introduction to Modern Control
- Computer Vision
- Privacy & Security
- Internet of Things
- Systems Verification
- Autonomous Systems Safety & Governance
- Cooperative AI: Foundations & Frontiers
- Deep Learning in Distributed and Constrained Systems
- Game Theory

Further training, which will continue alongside your research project, will include:

- academic reading
- writing and presentation skills
- business and commerce (to include innovation and IP curatorship and entrepreneurship)
- career development and planning
- ethics and law (where the societal implications of autonomous systems will be considered).

Annual workshop

You will attend an annual workshop, which provides the opportunity to present research to students, industrial partners and invited researchers from other universities.

Internship

If studying full-time, you will spend one or two months over the second or third summer in an industrial lab to gain experience in industry-led projects and expanding your horizons by engaging in an AIMS topic that is not your main one. If studying part-time, it is recommended that you take on an internship between years four and six.

Research areas

You'll have the opportunity to undertake research within the specialised themes of this course, which include:

- Machine learning
- Robotics
- Vision
- Control
- Cyber-physical systems.

Changes to this course

The University will seek to deliver this course in accordance with the description set out in this course page. 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. The safety of students, staff and visitors is paramount and major changes to delivery or services may have to be made if a pandemic, epidemic or local health emergency occurs. In addition, in certain circumstances, for example due to visa difficulties or because the health needs of students cannot be met, it may be necessary to make adjustments to course requirements for international study.

Where possible your academic supervisor will not change for the duration of your course. However, it may be necessary to assign a new academic supervisor during the course of study or before registration for reasons which might include illness, sabbatical leave, parental leave or change in employment.

For further information please see our page on changes to courses (//www.ox.ac.uk/admissions/graduate/courses/changes-to-courses) and the provisions of the student contract (//www.ox.ac.uk/admissions/graduate/after-you-apply/your-offer-and-contract) regarding changes to courses.

Costs

Annual course fees for the 2026-27 academic year at the University of Oxford

The fees for this course are charged on an annual basis.

Full-time study

Fee status	Annual Course fees
Home	£10,470
Overseas	£34,700

Part-time study

Fee status	Annual Course fees
Home	£5,235
Overseas	£17,350

What do course fees cover?

Course fees cover your teaching as well as other academic services and facilities provided to support your studies. Unless specified in the additional information section 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 costs information below.

How long do I need to pay 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 fees will usually increase annually, as explained in the University's Terms and Conditions (//www.ox.ac.uk/students/new/contract) .

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

The University continuation charge, per term for entry in 2026-27 is £656, 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 will be between £150 and £500, as explained in our information about continuation charges (//www.ox.ac.uk/admissions/graduate/fees-and-funding/fees-and-other-charges/continuation-charges) . 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.

Where can I find more information about fees?

Our fees and other charges (//www.ox.ac.uk/admissions/graduate/fees-and-funding/fees-and-other-charges) pages provide further information, including details about:

- course fees and fee liability (//www.ox.ac.uk/admissions/graduate/fees-and-funding/fees-and-other-charges/courses-fees-and-liability) ;
- how your fee status is determined (//www.ox.ac.uk/admissions/graduate/fees-and-funding/fees-and-other-charges/fee-status) ;
- changes to fees and other charges (//www.ox.ac.uk/admissions/graduate/fees-and-funding/fees-and-other-charges/changes-to-fees-and-charges) ; and
- continuation charges (//www.ox.ac.uk/admissions/graduate/fees-and-funding/fees-and-other-charges/continuation-charges) .

Information about how much fees and other costs will usually increase each academic year is set out in the University's Terms and Conditions (//www.ox.ac.uk/students/new/contract) .

Additional costs

Full-time study

There are no compulsory elements of this course that entail additional costs beyond fees (or, after fee liability ends, continuation charges) and living costs. However, please note that, depending on your choice of research topic and the

research required to complete it, you may incur additional expenses, such as travel expenses, research expenses, and field trips. You will need to meet these additional costs, although you may be able to apply for small grants from your department to help you cover some of these expenses.

Part-time study

Please note that you are required to attend in Oxford for a minimum of 30 days each year, and you may incur additional travel and accommodation expenses for this. Also, depending on your choice of research topic and the research required to complete it, you may incur further additional expenses, such as travel expenses, research expenses, and field trips. You will need to meet these additional costs, although you may be able to apply for small grants from your department to help you cover some of these expenses.

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.

Living costs for full-time study

For the 2026-27 academic year, the range of likely living costs for a single, full-time student is between £1,405 and £2,105 for each month spent in Oxford. We provide the cost per month so you can multiply up by the number of months you expect to live in Oxford. Depending on your circumstances, you may also need to budget for the costs of a student visa and immigration health surcharge (//www.ox.ac.uk/admissions/graduate/fees-and-funding/living-costs) and/or living costs for family members or other dependants (//www.ox.ac.uk/admissions/graduate/fees-and-funding/living-costs#field_listing_content_content-item--2) that you plan to bring with you to Oxford (if dependant visa eligibility criteria (//www.ox.ac.uk/students/visa/before/family) are met).

Living costs for part-time study

Your living costs may vary depending on your personal circumstances but you will still need to cover your cost of living on a full-time basis for the duration of your course, even if you will not be based in Oxford throughout your studies. While the range of likely living costs for a single, full-time student living in Oxford in the 2026-27 academic year is between £1,405 and £2,105 per month, living costs outside Oxford may be different.

Part-time students who are not based in Oxford will need to calculate travel and accommodation costs carefully. Depending on your circumstances and study plans, this may include the cost of a visitor visa to attend for short blocks of time (//www.ox.ac.uk/admissions/graduate/fees-and-funding/living-costs) (if visitor visa eligibility criteria (//www.ox.ac.uk/students/visa/before/visitors) are met).

Further information about living costs

The current economic climate and periods of high national inflation in recent years make it harder to estimate potential changes to the cost of living over the next few years. For study in Oxford beyond the 2026-27 academic year, it is suggested that you budget for potential increases in living expenses of around 4% each year – although this rate may vary depending on the national economic situation.

A breakdown of likely living costs for one month during the 2026-27 academic year are shown below. These costs are based on a single, full-time graduate student, with no dependants, living in Oxford.

Likely living costs for one month in Oxford during the 2026-27 academic year

	Lower range	Upper range
Food	£315	£545
Accommodation	£825	£990
Personal items	£160	£310
Social activities	£50	£130
Study costs	£35	£90
Other	£20	£40
Total	£1,405	£2,105

For information about how these figures have been calculated as well as tables showing the likely living costs for nine and twelve months, please refer to the living costs (//www.ox.ac.uk/admissions/graduate/fees-and-funding/living-costs) page of our website.

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).