

Course Information Sheet for entry in 2025-26: Superconductivity: Enabling Transformative Technologies (EPSRC CDT)



Course facts

Mode of study	Full Time	Part Time
Expected length	4 years	6 to 8 years

About the course

The Superconductivity CDT is a four-year training and research course which is part of the EPSRC Centre for Doctoral Training (CDT) on Superconductivity designed to equip students with advanced skills to tackle the biggest challenges in superconductivity.

The aim of the Superconductivity CDT is to train you with the essential multidisciplinary skills required to support the growing UK superconductivity industry and develop the transformative technologies needed to engineer Net-Zero, improved healthcare, and quantum devices.

The CDT brings together graduate superconductivity training in the Universities of Bristol, Oxford and Cambridge across their Physics, Materials, and Chemistry departments.

The CDT has partnerships with several major companies which use superconducting technology as well as with international large-scale facilities. This new centre will form a nucleus for the entire UK superconductivity community, offering training and networking opportunities to those in the wider ecosystem.

The Superconductivity CDT will train a new generation of superconductivity scientists to make substantial contributions in the development of transformative technologies through six closely connected themes:

- Fundamentals of Superconductivity
- Modelling of Superconductors
- Physical Properties of Superconductors
- Synthesis and Processing of Superconductors
- Applications of Superconductors
- Superconducting Devices

In exceptional circumstances you may transfer to an MSc by Research degree, which is considered on a case-by-case basis.

Course structure

You will be assigned your research project and supervisor(s) at the beginning of the course. You will choose a project from those advertised on both the Superconductivity CDT website and the Oxford Superconductivity website.

During the first year you will take a series of well-structured, graduate-level lecture courses and you will dedicate significant time to the taught elements of the training programme. These courses will lead you through the many aspects of superconductivity research from the fundamental theory, via the science of material design, to the application.

There will be a range of taught modules and you will choose lecture courses and additional practical or computational courses that are most relevant to your degree progression. You are likely to spend around half your time doing research, with the remaining half dedicated to taught modules, partner placements, cohort and group activities.

After the first year you will focus mainly on your research project, although alongside this you will be involved in outreach activities, and participate in cohort activities focused on additional soft skills training to prepare you for your future career along with thesis writing.

The CDT training contains a partner placement or a mini project for up to six weeks which will be co-delivered with the CDT partners and could take place away from Oxford.

It is possible to study part-time. The full-time first year courses will be spread across the first two years of the part-time programme. The remainder (6 years) will be focused on the research component and writing up. There is flexibility in how the units will be divided up between the first two years depending on the individual circumstances and when the programme is started. The progression milestones will also be extended accordingly to account for the part-time arrangements.

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. Part-time students are required to attend course-related activities in Oxford for a minimum of 30 days each year.

In some cases, you will be assigned joint projects that will require you to be based away from Oxford for certain periods of time.

Similarly, some of the projects may require you to undertake a portion of your research outside of the University, which may require travel to and attendance at a site that is not located in Oxford. In such cases the CDT will provide support towards associated costs.

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.

Training will be provided by superconductivity experts in world leading departments, together offering a comprehensive range of facilities for superconductivity research.

For more details on the facilities of each of the participating departments please refer to the 'Department' section of this course page as well as the Oxford Centre for Applied Superconductivity website.

Non-Academic Resources

There is a range of welfare and academic support available in the participating departments. Your supervisor, the Director of Graduate Studies, and Graduate Administrator are all available to offer support. There are also several support networks, all of which are available to our graduate students.

In addition to the resources available within the department, there is additional support available via the MPLS Division, Student Welfare and Support services, the Oxford University Student Union (OUSU), Careers Service, and your college.

OUSU's Student Advice Service also provides a confidential and impartial listening and advice service, and the University has a professionally staffed confidential Student Counselling Service for assistance with personal, emotional, social and academic problems.

There is an extensive framework of support for graduates within each college. Your college will allocate to you a College Advisor from among its Senior Members, usually in a cognate subject, who will arrange to see you from time to time and whom you may contact for additional advice and support on academic and other matters. In college you may also approach the Tutor for Graduates and/or the Senior Tutor for advice. The Tutor for Graduates is a fellow of the college with particular responsibility for the interests and welfare of graduate students. In some colleges, the Senior Tutor will also have the role of Tutor for Graduates. Each college will also have other named individuals who can offer individual advice.

Supervision

For this course, the allocation of graduate supervision is the responsibility of the departments involved in the CDT (Departments of Physics, Materials and Chemistry) and it is not always possible to accommodate the preferences of incoming graduate students to work with a particular member of staff.

Students on the Superconductivity CDT will be supervised by a University member of staff who acts as the academic supervisor. In many cases, students could be co-supervised by another scientist from one of the participating departments, or depending on the project, from an industry partner, if the project requires a co-supervisor from outside the University (see course page on the department website for details). In all these cases, your main University supervisor will be responsible for your progress and for ensuring that the project is of suitable content and level to satisfy the normal expectations of a DPhil at the University.

The frequency of student-supervisor meetings varies depending on the nature of your project but you should expect to interact with your supervisors weekly or, in some cases, monthly. Most supervisors run an extended research group, including several DPhil students and post-docs, who interact very frequently (often on a daily basis).

Assessment

All students will be initially admitted to the status of Probationer Research Student (PRS). Within a maximum of 6 terms as a PRS student (and normally by the fifth term) you will be expected to apply for the transfer of status from Probationer Research Student to DPhil status.

A successful transfer of status from PRS to DPhil status will require satisfactory attendance, the accumulation of the training credits and the submission of a report of up to 10,000 words. Students who are successful at transfer will also be expected to apply for and gain confirmation of DPhil status within ten terms of admission, to show that their work continues to be on track.

Both milestones normally involve an interview with two assessors (other than your supervisor) and therefore provide important experience for the final oral examination.

To be successfully awarded a DPhil in your respective area 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

Full-time study

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

Part-time study

Fee status	Annual Course fees
Home	£5,035
Overseas	£16,685

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

Full-time study

There are no compulsory elements of this course that entail additional costs beyond fees and living costs. However, as part of your course requirements, you may choose a project with an industrial partner outside Oxford. Please note that, depending on your choice of project and the location of the industrial partner, you may incur additional expenses, such as travel expenses. Funding contribution for travel will be offered if the project is based outside Oxford, and projects in Oxford will be available for any student who wishes to remain in Oxford.

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, as part of your course requirements, you may choose a project with an industrial partner outside Oxford. Please note that, depending on your choice of project and the location of the industrial partner, you may incur additional expenses, such as travel expenses. Funding contribution for travel will be offered if the project is based outside Oxford, and projects in Oxford will be available for any student who wishes to remain in Oxford.

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.

If you are studying part-time your living costs may vary depending on your personal circumstances but you must still ensure that you will have sufficient funding to meet these 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>).