Course Information Sheet for entry in 2025-26: DPhil in Condensed Matter Physics

Course facts

Mode of study	Full Time Only
Expected length	3 to 4 years



About the course

The DPhil in Condensed Matter Physics (CMP) is a research-based course of three to four years in duration. Research in the department ranges from fundamental physics questions to interdisciplinary research and technological applications.

The course is hosted by the Condensed Matter Physics sub-department, one of six sub-departments of the Department of Physics, with most facilities and offices located in the Clarendon laboratory. Research projects available for the DPhil in Condensed Matter Physics include topics in:

- biological physics
- · quantum materials and semiconductor materials
- · devices and nanostructures

Your research work begins on day one and will be underpinned by a taught graduate course in the first year that runs in parallel. You will be required to attend lectures and courses to increase your basic and specialist physics knowledge and in preparation for the research you will carry out. This taught element is tailor-made for the individual student, and will be agreed between you and your supervisor, with the approval of the Director of Graduate Studies. You will also have the opportunity to follow courses taught at other departments across the Maths, Physics and Life Sciences division.

In the following years, you will concentrate on your research work. Alongside this, you will be strongly encouraged to take part in further courses, including a rich palette of transferable skills courses offered by the University, and to attend seminars and colloquia in the Department of Physics and elsewhere.

Some research themes organise workshops and away days, specifically designed to give you the opportunity to present your research to a broader audience. Poster and oral presentations are also part of the ongoing student assessment.

Attendance

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

There will usually be the opportunity to attend conferences or conduct experiments, both in the extensive research facilities of the Clarendon Laboratory and at other institutions inside or outside the UK.

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.

Academic resources

The Clarendon Laboratory has extensive experimental facilities for research in Condensed Matter Physics and most students will have the opportunity to access the appropriate facilities for research in their field. These include the:

- nanofabrication facility
- · crystal growth laboratory
- Centre for Applied Superconductivity laboratory
- magnetic characterisation suite
- · MBE facility for epitaxial thin films and multilayers
- X-ray diffraction laboratory
- · Nicholas Kurti High Magnetic Field Laboratory
- Atomic Force Microscopy Laboratory
- · facilities for protein expression, cell culture and biophysical measurements.

DPhil students also have access to the Radcliffe Science Library, which also provides extensive on-line services, including access to most relevant journals in the field of Condensed Matter Physics.

Non-Academic Resources

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

- Oxford Physics Gender Equity Network (OPGEN), which is run by a committee drawn from across the students, academics and staff
 in the Department of Physics and organises events and campaigns to promote gender equity in the department.
- The Graduate Liaison Committee (GLC). The GLC's purpose is to discuss issues that may concern graduate students in the
 department such as the quality of graduate courses, availability of skills training, accessibility to library and IT services, and general
 student welfare.
- . The Graduate Peer Support Network, which is a subgroup of the informal mentoring network Physics Thrive

Mental health first aiders are an initial point of contact for students experiencing a mental health issue or emotional distress. They are members of staff of our department, and have completed a two-day mental health first-aid training course, accredited by Mental Health England. They are trained to recognise the symptoms of mental ill health, provide initial help and guide a person towards appropriate professional help. Mental Health First Aiders are not trained to be therapists, but they are taught how to respond in a crisis.

Supervision

The allocation of graduate supervision for this course is the responsibility of the Department of Physics 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 Physics.

Many DPhil students are co-supervised by a University member of staff, usually from the Department of Physics or another Department within the University. Some schemes, such as the Joint Max Planck Training Programme in Quantum Materials or the Large-Scale facility studentships (eg the Diamond Doctoral Studentship Programme) require a co-supervisor from outside the University. In all these cases, your main University supervisor will at all times 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 the project. Most supervisors run an extended research group, including several DPhil students and post-docs, who interact often. New students will also be welcome in the wider Oxford Physics community, currently hosting over 350 DPhil students, with multiple opportunities of mutual support and social interactions.

Assessment

At the end of the first year you are expected to submit a report on your research and to defend it in an interview with the Graduate Studies Panel and a specialist reader. The panel will determine whether you can transfer status from Probationer Research Student (PRS) to DPhil student.

Towards the end of the second year, you will present a poster in an open session, attended by the Graduate Studies Panel and many members of the Condensed Matter Physics sub-department. Discussion of your research project with panel members and others at the poster session will contribute to the decision whether to confirm your status as DPhil student the following year. This decision will be usually taken at the beginning of the third year, following an interview with the Graduate Studies Panel, focussing on your current results and your thesis plans.

At the end of the third year, you are expected to give a talk, attended the Graduate Studies Panel and many members of the Condensed Matter Physics sub-department, and to answer questions following your presentation.

You will be expected to submit a substantial original thesis after three or, at most, four years from the date of admission. To be successfully awarded a DPhil you will need to defend your thesis orally (*viva voce*) in front of two appointed examiners (one internal and one external). Most students would have published one or more original research paper by the time they are awarded a DPhil.

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

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 and/or college 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.

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).