

Course Information Sheet for entry in 2023-24: DPhil in Condensed Matter Physics



About the course

Research projects available for the DPhil in Condensed Matter Physics include topics in biological physics, quantum materials and semiconductor materials, devices and nanostructures. Research in the department ranges from fundamental physics questions to interdisciplinary research and technological applications.

The DPhil in Condensed Matter Physics (CMP) is a research-based three- to four-year course. You will be supervised throughout the entire duration of the programme and join the research group of your supervisor. There will usually be 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. 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.

You will be assigned to a research group: work on your original research project will start immediately and continue for the duration of your DPhil.

During the first year, 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.

In the following years, you will concentrate on your research work, though PhD students are strongly encouraged to take part in further courses, including a rich palette of transferable skills courses offered by the University, and attend seminars and colloquia in the Department of Physics and elsewhere. Some research themes organise workshops and away days, specifically designed to give DPhil students the opportunity to present their research to a broader audience. Poster and oral presentations are also part of the ongoing student assessment (see below).

In exceptional cases, applicants may apply for a MSc by Research degree (MSc by Research in Condensed Matter Physics), which requires a shorter registration period. Please contact the department for further information and advice about admission to this course.

Further information about this course can be found on the course page on the department website.

Research and Projects

You will be assigned a specific research project, which can evolve during the course of your DPhil. A list of research projects on offer in the three research themes of the Condensed Matter Physics sub-department (Quantum Materials, Biological Physics and Semiconductor Materials, Nanostructures and Devices) can be found on the course pages on the department website. Please note that not all projects may be available at the time of your application.

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 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 (see course page on the department website for details). 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; students should expect to interact with supervisors regularly, eg weekly or, in some cases, monthly. Most supervisors run an extended research group, including several DPhil students and post-docs, who interact very frequently (usually on a daily basis). 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.

You are strongly encouraged to contact potential supervisors for further information.

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 courses

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 registration. These may include significant changes made necessary by a pandemic (including Covid-19), 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>).

Expected length of course

	Full Time Only
Expected length	3 to 4 years

Costs

Annual fees for entry in 2023-24

Fee status	Annual Course fees
Home	£8,960
Overseas	£29,700

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 2023-24 is £572, 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 per term. Please contact your college for more details.

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, 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 2023-24 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	£300	£470
Accommodation	£715	£860
Personal items	£180	£305
Social activities	£40	£90
Study costs	£35	£80
Other	£20	£35
Total	£1,290	£1,840

Likely living costs for nine months

	Lower range	Upper range
Food	£2,700	£4,230
Accommodation	£6,435	£7,740
Personal items	£1,620	£2,745
Social activities	£360	£810
Study costs	£315	£720
Other	£180	£315
Total	£11,610	£16,560

Likely living costs for twelve months

	Lower range	Upper range
Food	£3,600	£5,640
Accommodation	£8,580	£10,320
Personal items	£2,160	£3,660
Social activities	£480	£1,080
Study costs	£420	£960
Other	£240	£420
Total	£15,480	£22,080

When planning your finances for any future years of study at Oxford beyond 2023-24, it is suggested that you allow for potential increases in living expenses of 5% or more each year – although this rate may vary significantly depending on how the national economic situation develops.

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

Document accessibility

If you require an accessible version of the 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>).