

## Course Information Sheet for entry in 2026-27: DPhil in Particle Physics



### Course facts

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

### About the course

The DPhil in Particle Physics is a research-based course investigating fundamental particles and forces via high-energy accelerators and cosmic observations. Topics include neutrinos, dark matter, dark energy, and physics beyond the Standard Model.

The course is hosted by the Particle Physics sub-department, one of six sub-departments of the Department of Physics. The sub-department is one of the largest in the UK and is well equipped to carry out research in a wide range of topics, from the study of particles produced at high energy accelerators to neutrinos, dark matter and dark energy in the Universe. The work of this world-class sub-department is in experimental particle physics, particle astrophysics and accelerator physics.

As a DPhil student, you will join an existing research group which typically consists of academics, postdocs, fellows and current students. Your research work begins on day one and will be underpinned by a taught graduate course in the first year that runs in parallel.

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

Whilst working on your research project you can engage in skills training including workshops and seminars in transferable skills, generic research skills and specific research techniques. There are also numerous seminars and lectures held in the department by local and visiting physicists, and you will be provided with opportunities to meet experts in various fields. There will be routine opportunities for you to present your work at informal collaboration meetings, as well as formal conferences.

### Attendance

The course is full-time and requires attendance in Oxford. Full-time students are subject to the [University's Residence requirements](https://www.ox.ac.uk/admissions/graduate/after-you-apply/accommodation/residence-requirements). (<https://www.ox.ac.uk/admissions/graduate/after-you-apply/accommodation/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.

The sub-department's experiments are carried out at facilities around the world, including facilities in:

- Canada (Sudbury Neutrino Observatory)
- Italy (DarkSide experiment)
- Japan (T2K experiment),
- Switzerland (Large Hadron Collider and the future particle physics facility known as FCC); and
- USA (LZ experiment and DUNE)

Depending on the project, you will often be able to spend significant amounts of time away at the experimental site for your research.

### 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 \(https://www.it.ox.ac.uk/what-to-bring\)](https://www.it.ox.ac.uk/what-to-bring) at Oxford.

You will usually be allocated your own desk in a shared office or laboratory. As a DPhil student, you will be provided with appropriate computing support to conduct your research. You will be given accounts on central Linux and Windows servers and, once you arrive at Oxford, you will be able to select the machine and operating system which works the best in your research group. Additionally, if you are working on a computationally intensive project, you will have appropriate access to the departmental cluster computers and national facilities.

During time spent away at the experimental site (if applicable for your project), a similar level of provision will be available.

## Supervision

The allocation of graduate supervision is the responsibility of the Sub Department. 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 co-supervisor may be found outside the Sub-Department.

## Assessment

All students will be initially admitted to the status of Probationer Research Student (PRS). Within a maximum of six terms as a PRS student and normally by the fourth term you 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 satisfactory attendance and completion of problem sets during your first two terms, and submission of a report and thesis outline. Submission on a report and thesis outline. Students who are successful at transfer will also be expected to apply for and gain confirmation of DPhil status within nine terms of admission, to show that your work continues to be on track.

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

The actual DPhil viva requires you to submit a substantial and original thesis not exceeding 250 pages after three or at most four years from the date of admission. To be successfully awarded a DPhil in particle physics you will need to defend your thesis orally (*viva voce*) in front of two appointed examiners.

## Research areas

The department is involved in many of the world's major particle physics endeavours. At the Large Hadron Collider (LHC), members of the department work on ATLAS experiment studying the Higgs boson in increasing detail. We search for Supersymmetry and others beyond the Standard Model theories and test the fundamentals of quantum mechanics at the highest energy scales possible in the laboratory. Also at the LHC, the LHCb experiment collects and studies huge samples of beauty and charm hadrons.

Neutrino oscillations and neutrino properties are studied at the T2K experiment in Japan, MicroBooNe and DUNE in the USA, and at the Sudbury Neutrino Observatory (SNO+) in Canada.

The sub-department is also involved in the study of neutrino oscillations and neutrino properties at the T2K experiment in Japan, MicroBooNe and DUNE in the USA, and at the Sudbury Neutrino Observatory (SNO+) in Canada. Direct searches for dark matter is undertaken at both the LZ experiment in the US and DarkSide in Italy. And most recently the sub-department has taken leading roles in the development of the future particle physics facility known as FCC.

The future of particle physics relies on the development of new instruments for detecting particles and novel ideas in accelerator physics. The sub-department is heavily involved in the development of these areas. It has outstanding facilities to build the new silicon detectors needed for the luminosity upgrade of the LHC and other applications.

## 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 \(//www.ox.ac.uk/admissions/graduate/courses/changes-to-courses\)](https://www.ox.ac.uk/admissions/graduate/courses/changes-to-courses) and the [provisions of the student contract \(//www.ox.ac.uk/admissions/graduate/after-you-apply/your-offer-and-contract\)](https://www.ox.ac.uk/admissions/graduate/after-you-apply/your-offer-and-contract) regarding changes to courses.

## Costs

### Annual course fees

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

### Fees for the 2026-27 academic year at the University of Oxford

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

### 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 \(//www.ox.ac.uk/students/new/contract\)](https://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 \(//www.ox.ac.uk/admissions/graduate/fees-and-funding/fees-and-other-charges/continuation-charges\)](https://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 \(//www.ox.ac.uk/admissions/graduate/fees-and-funding/fees-and-other-charges\)](https://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 \(//www.ox.ac.uk/admissions/graduate/fees-and-funding/fees-and-other-charges/courses-fees-and-liability\)](https://www.ox.ac.uk/admissions/graduate/fees-and-funding/fees-and-other-charges/courses-fees-and-liability);
- [how your fee status is determined \(//www.ox.ac.uk/admissions/graduate/fees-and-funding/fees-and-other-charges/fee-status\)](https://www.ox.ac.uk/admissions/graduate/fees-and-funding/fees-and-other-charges/fee-status);
- [changes to fees and other charges \(//www.ox.ac.uk/admissions/graduate/fees-and-funding/fees-and-other-charges/changes-to-fees-and-charges\)](https://www.ox.ac.uk/admissions/graduate/fees-and-funding/fees-and-other-charges/changes-to-fees-and-charges);
- [continuation charges \(//www.ox.ac.uk/admissions/graduate/fees-and-funding/fees-and-other-charges/continuation-charges\)](https://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 \(//www.ox.ac.uk/students/new/contract\)](https://www.ox.ac.uk/students/new/contract).

### Additional costs

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.

### 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](https://www.ox.ac.uk/admissions/graduate/fees-and-funding/living-costs) (<https://www.ox.ac.uk/admissions/graduate/fees-and-funding/living-costs>) and/or [living costs for family members or other dependants](https://www.ox.ac.uk/admissions/graduate/fees-and-funding/living-costs#field_listing_content_content-item--2) ([https://www.ox.ac.uk/admissions/graduate/fees-and-funding/living-costs#field\\_listing\\_content\\_content-item--2](https://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](https://www.ox.ac.uk/students/visa/before/family) (<https://www.ox.ac.uk/students/visa/before/family>) 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
<b>Food</b>	£315	£545
<b>Accommodation</b>	£825	£990
<b>Personal items</b>	£160	£310
<b>Social activities</b>	£50	£130
<b>Study costs</b>	£35	£90
<b>Other</b>	£20	£40
<b>Total</b>	£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](https://www.ox.ac.uk/admissions/graduate/fees-and-funding/living-costs) (<https://www.ox.ac.uk/admissions/graduate/fees-and-funding/living-costs>) page of our website.

### Document accessibility

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