

Course Information Sheet for entry in 2026-27: MSc by Research in Materials



Course facts

Mode of study	Full Time Only
Expected length	2 to 3 years

About the course

The MSc by Research in Materials is a research-based course covering materials science, solid-state physics, and chemistry, with projects in energy storage, quantum devices, biomaterials, nanomaterials, and computational modelling.

The MSc by Research in Materials will provide you with the opportunity to develop knowledge, understanding and expertise in their chosen field of materials science, well beyond the level of a taught master's degree, but without the requirement to complete as much novel research as a doctoral student. Students develop broad skills in relevant areas of materials science, as well as some aspects of solid-state physics and chemistry.

A small number of places are offered on the MSc by Research in Materials each year as the majority of the department's research students are enrolled on the DPhil in Materials (<http://www.ox.ac.uk/admissions/graduate/courses/dphil-materials>). As an MSc student you will work, train and study alongside the DPhil students, together forming a cohort of research students. It may be possible to change from an MSc by Research and pursue a DPhil in Materials.

Research interests of the department extend over most branches of materials science, as well as some aspects of solid state physics and chemistry: they include the study of a wide range of materials of relevance in advanced technological applications, including metals and alloys, composites, semiconductors, superconductors, polymers, biomaterials, ceramics and materials for quantum information processing.

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

Attendance

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

The MSc by Research in Materials is normally carried out in two years of full-time study under the supervision of an experienced member of staff.

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 department has excellent and wide-ranging research resources including:

- a world-class suite of electron microscopy facilities including analytical STEMs and TEMs, three FIBs and two ultrahigh resolution SEMs optimised for EBSD and EDX analysis, together with a number of supporting and training instruments. Much of this equipment is installed in the David Cockayne Centre for Electron Microscopy (<https://www-em.materials.ox.ac.uk/#/>);
- additional electron microscopy facilities are available at the national electron Physical Science Imaging Centre (<https://www.materials.ox.ac.uk/electron-physical-science-imaging-centre-epsic/>);

- extensive further facilities for characterising materials including, for example, AFM, XPS, and Raman microscopy;
- clean room facilities;
- nanomechanical characterisation equipment;
- special processing or manufacturing facilities for polymers, ceramics, carbon nanomaterials, rapidly solidified materials and devices such as novel batteries or superconductors;
- superb facilities for 3-D atom probe analysis (including LEAP 5000XS and LEAP 5000XR);
- an alloy processing and mechanical properties laboratory, for aerospace and nuclear materials; and
- a wide range of specialist modelling software (<https://www.materials.ox.ac.uk/local/it/software.html>), and, if appropriate for your research project, access to Oxford's Advanced Research Computing (<https://www.arc.ox.ac.uk>) facilities.

In addition to the excellent central and college library provision, there is a specialist Materials Science Library housed within the department.

Supervision

The allocation of graduate supervision for this course is the responsibility of the Department of Materials 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 from outside the Department of Materials.

Typically, you will have the opportunity to meet with your supervisor approximately every two to three weeks.

Assessment

All students will be initially admitted to the status of Probationer Research Student (PRS). Normally by the fourth term as a full-time PRS student, you will be expected to apply for transfer of status from Probationer Research Student to full MSc by Research status.

A successful transfer of status from PRS to MSc by Research status will require a report on your research to date on your MSc project and your plans for progressing. This normally involves an interview with at least two assessors (other than your supervisor) and therefore provide important experience for the final oral examination.

You will be expected to submit a substantial thesis after two or, at most, three years from the date of admission. To be successfully awarded a MSc by Research you will need to defend your thesis orally (viva voce) in front of two appointed examiners.

Research areas

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

- characterisation of materials, where there is emphasis on electron microscopy and related techniques
- processing and manufacturing of materials
- modelling of materials, where there is attention to both structures and processes
- properties of materials
- energy materials, including those for batteries, nuclear fusion and photovoltaics
- quantum computing and quantum devices, which includes groups working on experimental studies, theory and modelling.

Much of this world-leading research is carried out in close collaboration with industry.

Each of the department's research groups works within one or more of the following broad themes and research projects available to applicants for the MSc by Research in Materials are listed under these themes:

- energy storage materials
- structural and nuclear materials
- device materials; including semiconductors, superconductors, quantum computing and quantum devices, and NEMS
- polymers and biomaterials
- nanomaterials
- processing and manufacturing; including metals, alloys, ceramics, superconductors and polymers
- characterisation of materials
- computational materials modelling.

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](http://www.ox.ac.uk/admissions/graduate/courses/changes-to-courses) (<http://www.ox.ac.uk/admissions/graduate/courses/changes-to-courses>) and the [provisions of the student contract](http://www.ox.ac.uk/admissions/graduate/after-you-apply/your-offer-and-contract) (<http://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 \(//www.ox.ac.uk/admissions/graduate/fees-and-funding/living-costs\)](https://www.ox.ac.uk/admissions/graduate/fees-and-funding/living-costs) and/or [living costs for family members or other dependants \(//www.ox.ac.uk/admissions/graduate/fees-and-funding/living-costs#field_listing_content_content-item--2\)](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 \(//www.ox.ac.uk/students/visa/before/family\)](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
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 \(//www.ox.ac.uk/admissions/graduate/fees-and-funding/living-costs\)](https://www.ox.ac.uk/admissions/graduate/fees-and-funding/living-costs) page of our website.

Document accessibility

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