

Course Information Sheet for entry in 2025-26: MSc by Research in Materials



Course facts

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

About the course

The Oxford MSc by Research in Materials is a master's level research degree, typically two years in duration. Research projects in this leading department are available in most branches of materials science, as well as some aspects of solid state physics and chemistry.

Only a very 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. As an MSc student you will work, train and study alongside the DPhil students, together forming a cohort of research students 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.

Much of the research is carried out in close collaboration with industry. World-leading research takes place on:

- 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.

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.

Attendance

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

The department has excellent and wide-ranging research resources including:

- a world-class suite of electron microscopy facilities including a JEOL ARM analytical STEM and two Zeiss Merlin 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;
- additional electron microscopy facilities are available at the national electron Physical Science Imaging Centre;
- extensive further facilities for characterising materials including, for example, AFM, XPS, and Raman microscopy;
- advanced sample preparation and micromachining facilities including a Zeiss NVision 40 FIB/SEM and three other FIB instruments;
- clean room facilities;
- microhardness measurement facilities (at high temperatures and at the nm scale);
- special processing or manufacturing facilities for ceramics, carbon nanomaterials, rapidly solidified materials and devices such as novel batteries. The department also has 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 and, if appropriate for your research project, access to Oxford's Advanced Research Computing facilities.

The department's Institute for Industrial Materials and Manufacturing, provides pilot scale facilities for the manufacture of alloys, polymer and ceramic coatings, prototype optoelectronic, semiconductor, superconductor and sensor devices and novel metallurgical nano-scale materials.

The Oxford Materials Characterisation Service provides a major suite of equipment for the characterisation of materials used in microtechnology and nanotechnology.

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 should expect to have meetings with your supervisor or a member of the supervisory team with a frequency of at least once every two weeks averaged across the year. The regularity of these meetings may be subject to variations according to the time of the year, and the stage you are at in your research programme.

Assessment

In common with other UK universities the first year is a probationary year, soon after which, subject to satisfactory progress, students normally transfer to full MSc by Research status. The Transfer of Status assessment is conducted by two members of staff other than the student's supervisor(s) or advisors.

The MSc by Research in Materials is examined at the end of the programme by means of a written thesis and an oral examination.

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>).