

Course Information Sheet for entry in 2024-25: MSc in Genomic Medicine



Course facts

Mode of study	Full Time Only
Expected length	12 months

About the course

The MSc in Genomic Medicine is a full-time, one-year cross-disciplinary course, which benefits from world-leading expertise in genomic science across the University of Oxford coupled with direct links to clinical and translational medicine.

The course is designed to equip students from diverse academic and workplace backgrounds with knowledge of the fundamental principles, technologies and basis of genomic science and how this can be translated for the benefit of human health, economics and broader society.

The course seeks to promote:

- rigorous scientific training to understand the complexities of genomic data;
- the concept of 'gene to patient' in its broadest sense, encompassing fundamental genomics research, bioinformatics pipelines, clinical trials, drug development, translational genomics, education and training for healthcare practitioners, patients and the wider public; and
- a multi-disciplinary approach providing the awareness and skill sets needed to engage with relevant specialists and technologies for the future development and delivery of genomic medicine.

Course structure

Core modules

The following four modules are taken by all students in the first term:

- Fundamentals in Human Genetics and Genomics
- Genomics of Common and Rare Inherited Diseases
- Omic Technologies and their Application to Genomic Medicine
- Bioinformatics, Statistics and Data Interpretation in Genomic Analysis

Elective modules

In the second term, you will take three elective modules from the following six options, with the option to attend further modules that are not formally assessed.

You will select two modules from set A:

- A1 Molecular Pathology and Precision Medicine
- A2 Advanced Quantitative Methods (Bioinformatics and Statistics)
- A3 Genome Engineering and Gene-based Therapeutics
- A4 Single Cell Application of –Omic Approaches

You will select one module from set B:

- B1 Genomics in Clinical Practice
- B2 Application of Genomics for Therapeutics, Vaccinology and Industry

Research project

The final term will focus on a research project undertaken for a twelve to fourteen week period. Approximately 30 projects will be offered by academic research groups and affiliated clinical supervisors in Oxford, as well as industry placements where possible. You will have a named supervisor with experience in supervision of postgraduate students. You will produce a written dissertation based on your research project of 10,000-12,000 words.

Academic and research skills

This module will run throughout the course helping you develop skills in academic writing, scientific communication and good research practice, alongside topics such as career support. It will also include bespoke computational and statistics training as a foundation for the core module 'Bioinformatics, Statistics and Data Interpretation in Genomic Analysis'.

Teaching format

Modules will comprise a mix of lectures, small-group tutorials, structured learning, individual and group-based assignments, practical wet-lab and computational sessions and independent learning. You will be expected to spend approximately 30-40 hours studying per week, with the balance of contact teaching hours and self-directed learning being approximately equal. In the first term, a student-focussed seminar series will feature expert guest speakers discussing cutting-edge research in genomic medicine and its clinical application.

Supervision

The allocation of graduate supervision for this course is the responsibility of the Nuffield Department of Medicine and it is not always possible to accommodate the preferences of incoming graduate students to work with a particular member of staff. A supervisor may be found outside the Nuffield Department of Medicine.

All MSc students will have an individual named Academic Advisor assigned on enrolment who will provide guidance in choice of research project and plans, support any specific training needs and also provide pastoral support. They will usually meet with you at least twice per term. In addition, you will have formal and informal supervision from your host group during your research project.

Termly graduate supervision reporting will be completed in Michaelmas and Hilary term by the Academic Advisor and in Trinity term by the research project supervisor.

Assessment**Summative assessment of the course**

Core module content is assessed by written assessments with a mix of question types, taken at the start of the second term and contributing 30% of the final course mark. Towards the end of the second term, elective modules are assessed by written assessments or oral presentations, with each chosen module (three in total) contributing 10% of the final mark. The research project is assessed by a dissertation contributing 40% of the final mark.

You will be required to pass the summative assessment elements for both core and elective modules, and you will have one opportunity to retake/revise each component if needed.

Formative assessment of the course

All modules will include formative assignments devised to test the ability to understand, apply and extend the learning from the module in a variety of formats and through a mix of group/individual work. Formative assessment in the first term will be carefully designed to prepare students for the core module exam papers. Successful completion of these will ensure all students have attained a sufficient level of understanding of fundamental material to complete the elective and research elements of the course. Formative assessment of the research project will include submission of a project proposal during the second term and an oral presentation reporting on progress eight weeks after starting the project.

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 2024-25

Fee status	Annual Course fees
Home	£20,800
Overseas	£45,590

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.

Additional cost information

There are no compulsory elements of this course that entail additional costs beyond fees 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 2024-25 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	£315	£495
Accommodation	£745	£925
Personal items	£190	£320
Social activities	£40	£95
Study costs	£35	£85
Other	£20	£35
Total	£1,345	£1,955

Likely living costs for nine months

	Lower range	Upper range
Food	£2,835	£4,445
Accommodation	£6,705	£8,325
Personal items	£1,710	£2,880
Social activities	£360	£855
Study costs	£315	£765
Other	£180	£315
Total	£12,105	£17,595

Likely living costs for twelve months

	Lower range	Upper range
Food	£3,780	£5,940
Accommodation	£8,940	£11,100
Personal items	£2,280	£3,840
Social activities	£480	£1,140
Study costs	£420	£1,020
Other	£240	£420
Total	£16,140	£23,460

When planning your finances for any future years of study at Oxford beyond 2024-25, it is suggested that you allow for potential increases in living expenses of 5% or more 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 an 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>).