

Course Information Sheet for entry in 2026-27: MSc in Modelling for Global Health



Course facts

| | |
|-----------------|----------------|
| Mode of study | Full Time Only |
| Expected length | 12 months |

About the course

The MSc in Modelling for Global Health aims to train a new generation of mathematical modellers with cutting edge multi-disciplinary skills to support global health decision making processes at sub-national, national and international levels.

A strong connection with the Oxford Centre for Tropical Medicine and Global Health, Nuffield Department of Medicine (NDM) ensures that the portfolio of training provided on this MSc retains the ability to bridge tropical medicine research to policy and implementation. Tropical medicine is a major research theme at the Nuffield Department of Medicine, and quantitative methods have been identified by NDM as a key area for expansion and training. This MSc course will enhance the connection between state-of-the-art technical research and frontline clinical and laboratory science in the Global Health arena.

The course will aim to develop your:

- repertoire of skills in mathematical and economic modelling including, for example, scientific programming, global health financing, genetics and evolution, spatial analysis and model fitting, related cutting-edge bioinformatics and analytics
- breadth of knowledge of current challenges and issues in global health
- range of techniques and tools for communication with key stakeholders from policy, implementation, commercial and research sectors.

MSc students can participate fully in the NDM research community. For example, there is a weekly journal club led by NDM DPhil students from the Oxford Centre for Tropical Medicine and Global Health to which all MSc students are invited.

Course structure

An overview of the course structure is provided below. Details of the compulsory and optional elements of the course are provided in the *Course components* section of this page.

The first term will consist of topics on research methods, an overview of major global health challenges and foundations of mathematics required.

During the second term, in addition to some continued core content, you will select three elective modules for further study.

You will also work on a placement project and dissertation.

A series of workshops will be held across the academic year, designed to build skills in academic writing and critical appraisal, and foster competencies to support the successful completion of summative assessment outputs (eg scientific reports, policy pieces, journal articles). These sessions to be designed with the technical and numerical nature of the writing tasks in mind.

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>)

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 have access to the department's IT support, University library services such as the Radcliffe Science Library and the Cairns Library based at the John Radcliffe Hospital. To facilitate teaching of technical material, the course has high specification video conferencing technology and high specification laptops will be provided to all incoming students and access to cloud or cluster computing for computer intensive work whilst they are students on the course.

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. Under exceptional circumstances a supervisor may be found outside the Nuffield Department of Medicine.

You will be assigned an academic advisor who will support you through the duration of the course. You should try and meet with your academic advisor at least twice each term.

You will also have a placement advisor in Hilary term, related to your chosen placement, who you will meet with for an hour each week.

Assessment

You will be assessed in the following ways:

For all elective modules

You will be required to sit three summative assessments in the form of a written report/essay. These will be structured like a scientific paper and must address a series of questions/issues raised in the respective exam question(s).

Based on your completed placement project and subject to agreement by your supervisor

An electronically submitted dissertation, in the form of a draft journal paper, plus supplementary files.

Course components

Compulsory study

Core modules

You will take the following core modules:

- Foundations in Global Health
- Mathematics for Modellers
- Introduction to R for Modellers
- Medical Statistics
- Data Science
- Research Skills and Professional Practice
- Mathematical Modelling of Infectious Diseases
- Introduction to Health Economics
- Model Communication

Placement

During your third term, you will embark on a funded placement (of up to eight weeks) that will involve participation in a global health project in (or related to) a source limited setting. Students will be allocated a placement project based on their preference and in close consultation with the course academic team to ensure it aligns with their desired career trajectory. These placements, which can be carried out in national and international locations, will call upon the skills and topics you will have covered during the first two terms of the course. It is intended you will:

- apply knowledge and skills you have gained in first two terms to a global health research project
- experience the challenges and opportunities for conducting real research
- work as a productive member of a team
- appropriately contextualise your research (ie learn about the context within which the research is conducted).

Dissertation

The research project placement will then form the basis of your dissertation (in the form of a draft publication appropriate for submission to a peer-reviewed journal) to be submitted eight weeks after your return from placement. The learning outcomes of this will be to:

- critically analyse relevant literature
- pose appropriate research questions
- demonstrate sound use of methodology to address questions posed
- appropriately interpret findings
- outline ethical issues involved in the research
- produce a draft publication appropriate for submission to a peer-reviewed journal reporting the placement research findings.

Options

During your second term, you will select three elective modules. Options include:

- Spatial Analysis of Public Health Data
- Global Health Financing
- Pharmacokinetic-Pharmacodynamic Modelling
- Model Fitting and Uncertainty
- Malaria Modelling for Strategy Design
- Introduction to Genetics and Evolution for Infectious Diseases Modellers
- Individual Based Models in C++
- Translational Science and Policy Analysis

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 | £26,820 |
| Overseas | £56,540 |

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).

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); and
- [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).

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 and living costs. As part of the course requirements, you will need to choose a research placement project for your dissertation, which, depending on your choice of topic and the research required to complete it, may require travel and research expenses – these will be covered by the department and students will not incur additional expenses. The amount will be agreed with each placement host in advance (as appropriate for the location) and will include reasonable costs to cover visas, travel to and from the placement host site, accommodation for the duration of the on-site portion of the placement period, and reasonable research-related costs.

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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