

# Course Information Sheet for entry in 2022-23: MSc in Modelling for Global Health



## About the course

The MSc in Modelling for Global Health is a full-time one-year programme which will train a new generation of modellers with cutting edge multi-disciplinary skills to support developing global health systems at sub-national, national and international levels.

The course will aim to develop your:

- repertoire of skills in mathematical and economic modelling, scientific programming, global health financing and 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.

## Course Structure

### Core Modules

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

- Mathematics for modellers
- Introduction to R for modellers
- Medical Statistics
- Foundations in Global Health
- Introduction to health economics
- Mathematical modelling of infectious diseases
- Model communication.

### Optional Modules

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

- Spatial analysis of public health data
- Global health financing
- Pharmacokinetic-Pharmacodynamic Modelling
- Model fitting and uncertainty.

### Placement Project and Dissertation

During your third term you will embark on an eight-week funded placement that will involve participation in a global health project in (or related to) a resource limited setting. The placement will be linked to your final dissertation. These placements 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).

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 are as follows:

- 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.

### Training

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.

In addition, there is an opportunity to shadow bespoke elements designed for the MSc in International Health and Tropical Medicine (IHTM) which might also be applicable to the MSc Modelling for Global Health. Relevant sessions currently being delivered to IHTM students cover topics such as: paragraph writing, essay writing, dissertation writing and 'reading into writing'. It is anticipated that a similar embedded approach would be beneficial in preparing MSc Modelling for Global Health students to complete elective module summative assessments and final dissertation projects.

### 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 optional modules

An open-ended question will be set for each, specific to the subject and skill(s) to be tested. You will electronically submit a computer program, piece of mathematical analysis, or app (each of which is the equivalent of 1,000 words), accompanied by a written report of 1,500 to 2,000 words (excluding bibliography, references, tables and figures), in R Markdown format.

#### 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, of 3,500 to 4,000 words (excluding references, tables, figures, bibliography and appendices), plus supplementary files (equivalent of 2,000 words), in R Markdown format.

### Changes to courses

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 registration. These may include significant changes made necessary by a pandemic (including Covid-19), 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>).

### Expected length of course

	Full Time Only
Expected length	12 months

## Costs

### Annual fees for entry in 2022-23

Fee status	Annual Course fees
Home	£19,970
Overseas	£42,120

Further details about fee status eligibility can be found on the fee status webpage (<http://www.graduate.ox.ac.uk/feestatus>).

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. 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, 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 2022-23 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

	Likely living costs for 1 month		Likely living costs for 9 months		Likely living costs for 12 months	
	Lower range	Upper range	Lower range	Upper range	Lower range	Upper range
<b>Food</b>	£290	£410	£2,610	£3,690	£3,480	£4,920
<b>Accommodation</b>	£680	£810	£6,120	£7,290	£8,160	£9,720
<b>Personal items</b>	£135	£260	£1,215	£2,340	£1,620	£3,120
<b>Social activities</b>	£45	£120	£405	£1,080	£540	£1,440
<b>Study costs</b>	£45	£100	£405	£900	£540	£1,200
<b>Other</b>	£20	£55	£180	£495	£240	£660
<b>Total</b>	£1,215	£1,755	£10,935	£15,795	£14,580	£21,060

When planning your finances for any future years of study at Oxford beyond 2022-23, you should allow for an estimated increase in living expenses of 3% each year.

More information about how these figures have been calculated is available at [www.graduate.ox.ac.uk/livingcosts](http://www.graduate.ox.ac.uk/livingcosts).

## Document accessibility

If you require an accessible version of the document please contact Graduate Admissions and Recruitment by email ([graduate.admissions@admin.ox.ac.uk](mailto:graduate.admissions@admin.ox.ac.uk)) or via the online form (<http://www.graduate.ox.ac.uk/ask>).