

2021-14-TPT

Medical Sciences Divisional Board

Course approved on behalf of Education Committee 22 December 2020

Regulations approved by officers on behalf of Education Committee 9 July 2021

Title of Programme/ Name of Regulation

Master of Science by Coursework in Modelling for Global Health

Brief note about nature of change: new programme

Location of change

In the Examination Regulations 2020, <https://examregs.admin.ox.ac.uk/>, after the regulations for the MSc in Migration Studies.

Effective date

For students starting from MT 2021

And

For first examination from 2021-22

1. The Medical Sciences Divisional Board will appoint an Organising Committee for the supervision of the course. The Organising Committee will arrange lectures and other teaching.
2. The Organising Committee will appoint an academic adviser for each candidate.
3. Each candidate will follow a course of study in Modelling for Global Health for at least three terms and for a substantial part of the three subsequent vacations, as determined by the course timetable.
4. Candidates will be expected to complete the core modules in the Schedule but there will be no separate summative assessment associated with the core modules
5. Candidates must complete the following assessment:

- i. For each of three elective modules selected by the candidate: 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 an R compatible format. An open-ended question will be set for each elective module, specific to the subject and skill(s) to be tested, as set out in the Schedule.
 - ii. A dissertation, in the form of a draft journal paper, of 3,500 to 4,000 words (excluding references, tables, figures, bibliography and appendices) on the research project as set out in the Schedule below, plus supplementary files (equivalent of 2,000 to 2,500 words), in R compatible format. This should be accompanied by an explanatory narrative document (500 words) describing the candidate's considerations in selecting a target journal, how they worked individually or as part of their placement teams to make the selection and how they prepared their manuscript for submission according to the criteria for the journal in question. The research project and the subject of the dissertation must have been approved by the Organising Committee.
6. Candidates must complete a research placement as set out in the Schedule.
 7. Candidates will submit their three elective assignments and dissertations online via the University approved online submission system, by dates to be specified by the Organising Committee and published in the course handbook. Each submission must be accompanied by a declaration of the candidate's authorship.
 8. Candidates must pass each assessment in order to pass the examination overall.

Schedule

A. *Core Modules*

- I. Introduction to R for Modellers
- II. Mathematics for Modellers
- III. Medical Statistics
- IV. Foundations in Global Health
- V. Research Skills and Professional Practice
- VI. Mathematical Modelling of Infectious Diseases
- VII. Introduction to Health Economics
- VIII. Model Communication

B. *Elective Modules*

- I. Spatial Analysis of Public Health Data
- II. Global Health Financing
- III. Translational Science and Policy Analysis
- IV. Pharmacokinetic-pharmacodynamic Modelling
- V. Model Fitting and Uncertainty
- VI. Malaria Modelling for Strategy Design
- VII. Introduction to C++ for Modellers
- IX. Data Science in Python
- X. Introduction to Genetics and Evolution for Infectious Diseases Modellers

Elective modules may not be available every year.

C. *Research Placement*

Students will produce a dissertation based on a research placement either in the UK or in international locations. A research placement supervisor will be assigned to each student in addition to their academic adviser. The subject of each student's dissertation, the research placement, and the supervision arrangements for each student must be approved by the Organising Committee

Explanatory Notes

Set of Examination Regulations for the MSc Modelling for Global Health which admits its first cohort in October 2021.