PROGRAMME SPECIFICATION

1. Overview

Programme Title	Master of Science in Infection Biology for Global Health (with specialisms)
Academic Year	2027-28
Cohort Entry Points	Annually in September
Programme Director/s	Khalid Beshir, Victoria Miari
Awarding Body	London School of Hygiene & Tropical Medicine
Teaching Institution	London School of Hygiene & Tropical Medicine
Faculty	Infectious and Tropical Diseases
Length of Programme	Full-time: 12 months Split study: 24 months
Mode of Delivery	In-person intensive
Maximum period of registration	Full-time: 3 years Split study: 5 years
Language of Study	English
Entry Requirements	Please refer to the specific programme entry requirements here
Award Titles	Master of Science in Infection Biology for Global Health Alternatively, based on their choice of modules and project, students can opt for one of four specialisms, resulting in one of the following award titles: • Master of Science in Infection Biology for Global Health (Parasitology) • Master of Science in Infection Biology for Global Health (Medical Entomology) • Master of Science in Infection Biology for Global Health (Drug Discovery & Diagnostics) • Master of Science in Infection Biology for Global Health (Microbial Pathogenesis)

	The conditions for each specialism are detailed within Section 3 of this programme specification. Exit Awards: Postgraduate Diploma in Infection Biology for Global Health (120 credits) Postgraduate Certificate in Infection Biology for Global Health (60 credits)
Total Credits	**CATS:** 180 **ECTS:** 90
Accreditation by Professional Statutory and Regulatory Body	N/A
Relevant PGT QAA Benchmark Statement and/or other external/internal reference points	There is no relevant QAA benchmark for this MSc programme
Framework for Higher Education Qualifications Level (FHEQ)	Level 7
Re-sit Policy	https://www.lshtm.ac.uk/sites/default/files/academic-manual-chapter-08a.pdf
Extenuating Circumstances Policy	https://www.lshtm.ac.uk/sites/default/files/academic-manual-chapter-07.pdf
Date of Introduction of Programme	2027-28

2. Programme Description, Aims & Learning Outcomes

Programme Description
The MSc Infection Biology for Global Health programme is designed to provide advanced training in the theoretical and practical aspects of the biological mechanisms of infectious diseases and their impact on human health

worldwide. Drawing on examples from bacterial, viral, fungal and parasitic diseases, and integrating molecular, cellular, and immunological perspectives, the programme aims to provide a systematic understanding of how pathogens interact with their hosts, how vectors contribute to the emergence and spread of infectious diseases, and how the latest technologies and translational research can be applied to the diagnosis, treatment and prevention of disease. Building on the taught components, the culmination of the MSc programme will be an original research project undertaken within a relevant sub-discipline of infectious diseases.

The MSc programme also offers students the opportunity to specialise within one of four subject areas: Parasitology; Medical Entomology; Drug Discovery and Diagnostics; Microbial Pathogenesis.

Educational aims of the programme

The MSc programme aims to provide students with an advanced, systematic and critical understanding of the biology of infectious disease agents, encompassing their pathogenic mechanisms, interactions with hosts, the vectors responsible for their spread, and modern approaches for their diagnosis, treatment and control. Students will also develop independence in the application of advanced practical laboratory techniques, alongside a critical understanding of the relevance and limitations of those techniques when applied to the study of infectious diseases.

Throughout the programme, critical engagement with (and effective communication of) complex scientific literature, data and research will promote a systematic understanding and equip students with extensive discipline-specific and transferable skills and knowledge. This will culminate in the student conducting an original piece of research that will equip the student with advanced specialist skills required to prepare them for doctoral-level study or for future research-led and evidence-informed careers in the field of infectious diseases.

Programme Learning Outcomes

By the end of the programme, students will be expected to achieve the following learning outcomes:

1. Demonstrate a comprehensive and critical understanding of the biology of infectious agents, their vectors and the nature of host–pathogen interactions, and their relevance to global health challenges.
2. Critically evaluate, synthesise and apply current research literature and emerging evidence in infection biology in the context of global health.

3. Independently manage, analyse and interpret complex biological data, drawing evidence-based conclusions relevant to the study, prevention, diagnosis, and/or treatment of infectious diseases.
4. Design, conduct, and communicate original and rigorous research that advances knowledge and understanding within the field of infectious diseases.
5. Demonstrate advanced competency and independence in the application of a range of advanced microbiological and molecular techniques, and an associated critical understanding of their application, limitations and relevance to the study of infection biology.

Teaching and Learning Strategy

This intensive programme will be for London-based learners with (primarily) face-to-face delivery. Students will learn through a combination of lectures, interactive seminars and practicals. Learning activities will be supported by resources on the VLE (Moodle). All modules will have a reading list to promote directed self-study and will also include an expected element of self-directed learning.

Lectures will be used to introduce core topics, frame debates, and provide a shared foundation that students can interrogate and build on through more interactive seminars or practicals, and through self-study. A central feature of the programme will be laboratory-based practicals that will provide students with extensive hands-on training in relevant laboratory techniques. These practicals provide opportunities for active learning and groupwork activities and provide a strong foundation of laboratory expertise that will underpin the student's subsequent project work (for those that go on to a laboratory-based project). Practical skills will be further developed through a compulsory non-credit-bearing residential field trip that will integrate hands-on training in field- and laboratory-based methods. Where relevant, modules will also include computer-based practicals that will develop skills relating to data management, analysis and statistics, as well as build general digital literacy.

Assessment Strategy

Assessment methods will vary across the programme, reflecting the breadth of subject learning and enabling students to demonstrate achievement of intended learning outcomes through different methods of assessment. The programme is assessed through individual module assessments, many of which will integrate theoretical and practical knowledge. Assessment formats include oral presentations, scientific posters and a range of authentic written coursework tasks, including project reports and scenario-based portfolio or

strategy documents. Some assessment tasks will include elements of groupwork. Assessment methods are selected to align with module learning outcomes and to support progressive development of understanding and skills over the course of the programme.

3. Programme Structure and features, modules, credit assignment and award requirements:

Full-time Masters	Term 1	Term 2	Term 3	Total credits
Compulsory modules	2			60
Recommended modules		3		60
Project			1	60

Module information is correct at the time of publication, but minor amendments may be made subject to approval as detailed in Chapter 3 of the LSHTM Academic Manual. Recommended elective modules listed are indicative and may change from year to year.
https://www.lshtm.ac.uk/study/courses/changes-courses

The compulsory and recommended modules are detailed in the table below. Following a compulsory core in Term 1, students take *either* Clinical Microbiology *or* Clinical Parasitology in the C1/C2 timetable slots of Term 2, prior to one module from each of the D1 and D2 timetable slots.

Term	Slot	Module Code	Module Title	Module Type	Credits (CATS)
1	AB1	3xxx	Microbial Pathogenesis and Vectors of Disease	Compulsory	45
1	AB1	3xxx	Research Skills for Infection Biology	Compulsory	15
2	C1/C2	3xxx	Clinical Microbiology	Recommended	30
2	C1/C2	3xxx	Clinical Parasitology	Recommended	30
2	D1	3xxx	Antimicrobial Drug Discovery in the Era of Artificial Intelligence	Recommended	15
2	D1	3xxx	Application of Genomics in Infectious Diseases	Recommended	15
2	D1	3xxx	Sampling and Incrimination of Disease Vectors	Recommended	15

2	D2	3xxx	Antimicrobial Resistance & One Health	Recommended	15
2	D2	3xxx	Emerging Infections & Diagnostic Design	Recommended	15
2	D2	3xxx	Vector Management for Global Health	Recommended	15
3	E	3xxx	Research Project (ITD-60)	Compulsory	60

By default, students on the programme will graduate with the award title MSc Infection Biology for Global Health. However, students also have the opportunity to specialise, in which case they can choose to graduate with one of four specialist named variants of the standard programme. The four specialist named variants are Infection Biology for Global Health (Parasitology), Infection Biology for Global Health (Medical Entomology), Infection Biology for Global Health (Drug Discovery & Diagnostics), and Infection Biology for Global Health (Microbial Pathogenesis). The conditions for graduating with each of these named specialism are as follows:

MSc Infection Biology for Global Health (Parasitology)

The programme comprises the same compulsory modules as for MSc Infection Biology for Global Health. However, to be eligible for the 'parasitology' specialism, students must take the following specialist module in the C1/C2 timetable slot:

Term	Slot	Module Code	Module Title	Credits (CATS)
2	C1/C2	3xxx	Clinical Parasitology	30

In addition, the Research Project must be one that has been designated as suitable for the 'parasitology' specialism.

Students on the 'parasitology' specialism can select any modules from the D1 and D2 timetable slots.

MSc Infection Biology for Global Health (Medical Entomology)

The programme comprises the same compulsory modules as for MSc Infection Biology for Global Health, and students can select either of the two options in the C1/C2 timetable slots (Clinical Microbiology or Clinical Parasitology). However, to be eligible for the 'medical entomology' specialism, students must take the following specialist modules in the D1 and D2 timetable slots:

Term	Slot	Module Code	Module Title	Credits (CATS)
2	D1	3xxx	Sampling & Incrimination of Disease Vectors	15
2	D2	3xxx	Vector Management for Global Health	15

In addition, the Research Project must be one that has been designated as suitable for the 'medical entomology' specialism.

MSc Infection Biology for Global Health (Drug Discovery & Diagnostics)

The programme comprises the same compulsory modules as for MSc Infection Biology for Global Health, and students can select either of the two options in the C1/C2 timetable slots (Clinical Microbiology or Clinical Parasitology). However, to be eligible for the 'drug discovery & diagnostics' specialism, students must take the following specialist modules in the D1 and D2 timetable slots:

Term	Slot	Module Code	Module Title	Credits (CATS)
2	D1	3xxx	Antimicrobial Drug Discovery in the Era of Artificial Intelligence	15
2	D2	3xxx	Emerging Infections & Diagnostic Design	15

In addition, the Research Project must be one that has been designated as suitable for the 'drug discovery and diagnostics' specialism.

MSc Infection Biology for Global Health (Microbial Pathogenesis)

The programme comprises the same compulsory modules as for MSc Infection Biology for Global Health. However, to be eligible for the 'microbial pathogenesis' specialism, students must take the following specialist module in the C1/C2 timetable slot:

Term	Slot	Module Code	Module Title	Credits (CATS)
2	C1/C2	3xxx	Clinical Microbiology	30

In addition, the Research Project must be one that has been designated as suitable for the 'microbial pathogenesis' specialism.

Students on the ‘microbial pathogenesis’ specialism can select any modules from the D1 and D2 timetable slots.

For all four specialisms, the specialist designation of projects will be confirmed by the Programme Director. When deciding eligibility for an individual specialism on MSc Infection Biology for Global Health, the decision of the programme’s Exam Board is final.

Contact time

Student contact time refers to the tutor-mediated time allocated to teaching, provision of guidance and feedback to students. This time includes activities that take place in face-to-face contexts such as on-campus lectures, seminars, demonstrations, tutorials, supervised laboratory workshops, practical classes, project supervision and external fieldwork or visits, as well as where tutors are available for one-to-one discussions and interaction by email. Module contact time will be defined in the individual module specifications and provided to students at the start of their programme.

This definition of contact time is based on the one provided by the Quality Assurance Agency for Higher Education (QAA) Explaining contact hours (2011). Student contact time, together with time allocated for independent study and assessment, determines the total student study hours for a module or programme. Although there are separate hours allocated for each of these activities, they should always be clearly linked together to support effective learning.

The London School of Hygiene and Tropical Medicine (LSHTM) define high-quality contact time as structured, focused, purposeful and interactive.