UNIVERSITY OF LIVERPOOL

MSc

Infection and Immunity

Study mode	Duration	
Full-time	12 months	Apply by: **11 September 2026** Starts on: **28 September 2026**

About this course

Infectious diseases and antimicrobial resistance are among the most urgent global health challenges today. The growing threat of virulence evolution and increasing treatment resistance of pathogens highlights the need for skilled scientists who can drive innovative research to find solutions that tackle these threats, combining cutting-edge microbiology research with practical knowledge of epidemiology, public health measures, immune responses to pathogens, therapeutics and vaccines.

Introduction

Our MSc Infection & Immunity programme is designed for you to develop a comprehensive understanding of infectious diseases, immunology, and therapeutic/vaccine development, all while connecting you to our world-leading research in clinical, veterinary and global health. You will gain in-depth knowledge from internationally renowned bioscientists and clinicians, developing your scientific expertise and critical thinking with essential training in digital and bioinformatics techniques.

The MSc equips you with career-ready skills for PhD study, biomedical and clinical research, laboratory diagnostics roles, public health, or positions in the pharmaceutical and biotechnology sectors. Liverpool is situated in a region with one of the UK's largest and fastest-growing life sciences sectors, with an array of biomedical research and clinical-facing companies, making it an ideal location to study and work in the life sciences field.

This programme is suitable for intercalating medicine and veterinary students with appropriate clinical-facing research opportunities.

What you'll learn

This MSc offers an integrated programme that explores a wide spectrum of topics across infection biology and immunology:

- Theoretical knowledge in the fundamentals of microbial pathogenesis at the molecular and cellular levels. How the immune system protects the body, and explore how modern immunotherapies and vaccines are designed, tested, and used
- Develop core skills in critically evaluating the design and implementation of diagnostics, therapeutics and vaccines in clinical settings
- Conduct a substantial, independent research project under the supervision of an expert, contributing to real-world infection and immunity research
- Develop principal skills in statistical techniques in the design of experiments in medical microbiology, sequence analysis, and epidemiology
- Communicate new advances in emergent infections and immunology through workshops, posters, graphics and presentations to enhance your skills portfolio.

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Course content

Discover what you'll learn, what you'll study, and how you'll be taught and assessed.

Semester one

Modules

Compulsory modules	Credits
INTRODUCTION TO IVES RESEARCH (IVES701)	30
EMERGING INFECTIONS AND PANDEMICS (IVES711)	15
INTRODUCTION TO EPIDEMIOLOGY (IVES714)	15
BIOLOGICAL DATA SKILLS (LIFE707)	15
INFORMATICS FOR LIFE SCIENCES (LIFE721)	15

Optional modules	Credits
CODING FOR LIFE SCIENCES (LIFE733)	15

Programme details and modules listed are illustrative only and subject to change.

Semester two

Modules

Compulsory modules	Credits
INTRODUCTION TO IVES RESEARCH (IVES701)	30
IMMUNOLOGY (IVES721)	15
DIAGNOSTICS, THERAPEUTICS AND VACCINES (IVES722)	15

Programme details and modules listed are illustrative only and subject to change.

Final project

Modules

Compulsory modules	Credits
IVES RESEARCH PROJECT (IVES702)	60

Programme details and modules listed are illustrative only and subject to change.

Teaching and assessment

How you'll learn

You will experience a range of teaching and learning methods, including lectures, seminars, workshops, group discussion and e-learning.

Programme modules encourage individual and group work where you will tackle problems by developing ideas and hypotheses, design learning strategies to solve problems, and then analyse and interpret your findings.

Course material is available 24-hours a day on Canvas, our online learning platform. One-to-one meetings with your research supervisor will allow you to discuss science, develop your critical thinking and creativity through an ongoing feedback model.

Your master research project provides a full academic research experience, including the planning, execution and communication of scientific research.

How you're assessed

Assessment of knowledge and understanding, practical skills and transferrable skills is through a blended mix of coursework that may include practical and project reports, essays, completion of workbooks, talks, data handling sessions and posters.

All modules will provide you with feedback on your learning progress and allow for adjustment of your learning. Electronic resources available on the University virtual learning environment support learning and teaching.

Liverpool Hallmarks

We have a distinctive approach to education, the Liverpool Curriculum Framework, which focuses on research-connected teaching, active learning, and authentic assessment to ensure our students graduate as digitally fluent and confident global citizens.

The Liverpool Curriculum framework sets out our distinctive approach to education. Our teaching staff support our students to develop academic knowledge, skills, and understanding alongside our **graduate attributes**:

- Digital fluency
- Confidence
- Global citizenship

Our curriculum is characterised by the three **Liverpool Hallmarks**:

- Research-connected teaching
- Active learning
- Authentic assessment

All this is underpinned by our core value of **inclusivity** and commitment to providing a curriculum that is accessible to all students.

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Careers and employability

Commercial sectors such as the pharmaceutical, biotechnology and agriculture industries are employers of our graduates, especially with the increase of next-generation sequencing and the corresponding data analysis that is required. Graduates have also developed careers in conservation or qualified to immediately go into industries.

Past graduates of the School of Biosciences have continued their academic careers as research assistants or pursued further study leading to a PhD.

There is also a current demand for science teachers and following the completion of a PGCE, this master's is suitable for those interested in a career in teaching.
In fact, many of our graduates pursue careers in a wide range of fields, including management, where the skills obtained through this degree are of considerable benefit.

Career support from day one to graduation and beyond

Career planning

From education to employment

Networking events

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Fees and funding

Your tuition fees, funding your studies, and other costs to consider.

Tuition fees

UK fees (applies to Channel Islands, Isle of Man and Republic of Ireland)

Full-time place, per year - £14,000

International fees

Full-time place, per year - £32,000

Tuition fees are for the academic year 2026/27.

Tuition fees cover the cost of your teaching and assessment, operating facilities such as libraries, IT equipment, and access to academic and personal support.

- You can pay your tuition fees in instalments.
- All or part of your tuition fees can be funded by external sponsorship.
- International applicants who accept an offer of a place will need to pay a tuition fee deposit.

If you're a UK national, or have settled status in the UK, you may be eligible to apply for a Postgraduate Loan worth up to £12,167 to help with course fees and living costs. **Learn more about paying for your studies**.

Additional costs

We understand that budgeting for your time at university is important, and we want to make sure you understand any course-related costs that are not covered by your tuition fee. This could include buying a laptop, books, or stationery.

Find out more about the additional study costs that may apply to this course.

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Entry requirements

The qualifications and exam results you'll need to apply for this course.

Postgraduate entry requirements

We accept a 2:2 honours degree from a UK university, or an equivalent academic qualification from a similar non-UK institution. Applicants should have a strong undergraduate background in a relevant life science or medical subject (e.g. biology, biomedical sciences, microbiology, immunology, medicine). A personal statement outlining your motivation and goals is required. International students must meet English language requirements.

International qualifications

Select your country or region to view specific entry requirements.

If you hold a bachelor's degree or equivalent, but don't meet our entry requirements, a Pre-Master's can help you gain a place. This specialist preparation course for postgraduate study is offered on campus at the **University of Liverpool International College**, in partnership with Kaplan International Pathways. Although there's no direct Pre-Master's route to this MSc, completing a Pre-Master's pathway can guarantee you a place on many other postgraduate courses at The University of Liverpool.

English language requirements

You'll need to demonstrate competence in the use of English language, unless you're from a majority English speaking country.

We accept a variety of international language tests and country-specific qualifications.

International applicants who do not meet the minimum required standard of English language can complete one of our Pre-Sessional English courses to achieve the required level.

IELTS

6.5 overall, with no component below 6.0

TOEFL iBT

88 overall, with minimum scores of listening 19, writing 19, reading 19 and speaking 20. TOEFL Home Edition not accepted.

Duolingo English Test

125 overall, with writing not less than 125, speaking and reading not less than 115, and listening not below 110. For academic year 2025/26 only, we will also accept the production, literacy, comprehension and conversation score set: 120 overall, with no component below 105.

Pearson PTE Academic

61 overall, with no component below 59

LanguageCert Academic

70 overall, with no skill below 65

PSI Skills for English

B2 Pass with Merit in all bands

INDIA Standard XII

National Curriculum (CBSE/ISC) - 75% and above in English. Accepted State Boards - 80% and above in English.

WAEC

C6 or above

Pre-sessional English

Do you need to complete a Pre-sessional English course to meet the English language requirements for this course?

The length of Pre-sessional English course you'll need to take depends on your current level of English language ability.

Pre-sessional English in detail

If you don't meet our English language requirements, we can use your most recent IELTS score, or the equivalent score in selected other English language tests, to determine the length of Pre-sessional English course you require.

Use the table below to check the course length you're likely to require for your current English language ability and see whether the course is available on campus or online.

Your most recent IELTS score	Pre-sessional English course length	On campus or online
6.0 overall, with no component below 6.0	6 weeks	On campus
6.0 overall, with no component below 5.5	10 weeks	On campus and online options available
6.0 overall, with no more than one component below 5.5, and no component below 5.0	12 weeks	On campus and online options available
5.5 overall, with no more than one component below 5.5, and no component below 5.0	20 weeks	On campus
5.0 overall, with no more than one component below 5.0, and no component below 4.5	30 weeks	On campus
4.5 overall, with no more than one component below 4.5, and no	40 weeks	On campus

Your most recent IELTS score	Pre-sessional English course length	On campus or online
component below 4.0		

If you've completed an alternative English language test to IELTS, we may be able to use this to assess your English language ability and determine the Pre-sessional English course length you require.

Please see our guide to Pre-sessional English entry requirements for IELTS 6.5 overall, with no component below 6.0, for further details.

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