UNIVERSITY OF LIVERPOOL

MBiol (Hons)

Biomedical Sciences

UCAS code C133

Study mode	**Duration**	Apply by: **30 June 2026**
Full-time	4 years	Starts on: **28 September 2026**

About this course

This programme provides a broad-based education in biosciences related to medicine and medical research, and offers great flexibility of module choice so that you can tailor elements of your degree to your own particular interests.

Introduction

The Master of Biomedical Sciences (MBiol) is a four-year programme, in which students first follow the three-year BSc in Biomedical Sciences and then continue into a fourth year, subject to performance.

In the first three years, you'll study a broad range of modules including from across the spectrum of the Biomedical Sciences disciplines, which include Biochemistry, Genetics, Immunology, Microbiology, Physiology, and Pharmacology. You will also have the opportunity to specialise and carry out your own research project.

The fourth (Master's) year aims at developing enhanced research and personal skills for students seeking a high-level career in research (e. g. studying for a PhD or working in industry) or those seeking to enhance their qualification. Students will join a research team to undertake a significant research project. Students can also apply for a six-week summer

research internship in the UK or overseas or apply to spend time working in industry or in other enterprises in the final year.

What you'll learn

- Develop practical and theoretical knowledge of the core biomedical sciences disciplines covering elements of both health and disease.
- Develop a range of practical laboratory and research skills commonly used in the Biomedical Sciences.
- Enhance your understanding of contemporary issues, ethical challenges, and professionalism in the sphere of the Biomedical Sciences.
- Develop the skills required to evaluate your own performance and working standards.
- Analyse, evaluate, and place your work in the context of the wider scientific community.
- Become literate in finding, interpreting, evaluating and managing information
- Communicate ideas effectively to a variety of audiences
- Work independently and collaboratively
- Develop critical thinking and problem-solving skills
- Use lab equipment correctly and safely
- Plan, initiate, and carry out projects

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Course content

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

Year one

In your first year, you will commence your transition from learner to student. You'll start by gaining an understanding of core concepts of biology as well as the fundamental principles of immunity, infection, and therapy. You will also study how organisms develop and function, and learn about ecology and the global environment. You will develop practical skills, and you will discover how to utilise quantitative skills and study techniques.

Modules

Compulsory modules	Credits
BIOLOGY CORE CONCEPTS (BIOS101)	30
ORIGINS, SPECIALISATIONS, CHALLENGES AND THERAPEUTICS (BIOS102)	30
INTRODUCTORY PRACTICAL SKILLS IN BIOSCIENCES I (BIOS103)	15
FROM INDIVIDUALS TO ECOSYSTEM (BIOS104)	15
STUDY AND COMMUNICATION SKILLS TUTORIALS (BIOS105)	15
INTRODUCTORY PRACTICAL SKILLS IN BIOSCIENCES 2 (BIOS106)	15

Programme details and modules listed are illustrative only and subject to change. This course has been updated for 2027 entry as part of a review of all our programmes. This review has considered refining study pathways, strengthening links with employers, integrating generative AI, developing students' research skills, and enhancing

alignment with our research strengths. Please note, as at all times, the University reserves the right to make reasonable changes, including to content, entry requirements, or fees, or to discontinue programmes. Applicants will be informed of any significant change.

Year two

In your second year you'll expand your range of knowledge building those essential research skills, experimental design and analysis together with professional skills preparing you for a career within or outside the area of biomedical sciences. You will study in the disciplines of Physiology, Biochemistry, Immunology, and Genetics. In addition, you will start to tailor your degree with optional modules enabling you to follow your interest in Biochemistry, Cancer Biology, Microbiology and Infection, or Pharmacology.

Optional modules

You will choose one practical module from:

- BIOS204: Advanced practical skills ain biomolecular and drug interactions
- BIOS206: Advanced practical skills in microbiology, infection & disease

and one theory module* from:

- BIOS212: Metabolism (Biochemistry)
- BIOS216: Drug Discovery and Development (Pharmacology)
- BIOS218: Molecular microbiology and therapeutics (Microbiology and infection).

*Your choice of theory module for Year 2 Semester 2, impacts your range of choice of theory modules in Year 3 Semester 1. No more than one module can be chosen from a single discipline across Year 2 and 3. For example, you cannot choose a Biochemistry module in year 2 and year 3. We must maintain a spread of discipline content for Biomedical Sciences.

Modules

Compulsory modules	Credits
GENETICS & IMMUNOLOGY FOR BIOSCIENCES (BIOS201)	15

Compulsory modules	Credits
INTERMEDIARY PRACTICAL SKILLS IN BIOSCIENCES (BIOS203)	15
ACADEMIC AND PROFESSIONAL SKILLS TUTORIALS (BIOS205)	15
CELLULAR BASIS OF HEALTH AND DISEASE (BIOS209)	15
CELLULAR AND SYSTEMS PHYSIOLOGY (BIOS214)	15
CHEMISTRY FOR BIOSCIENCES (BIOS215)	15

Optional modules	Credits
ADVANCED PRACTICAL SKILLS IN BIOMOLECULAR AND DRUG INTERACTIONS (BIOS204)	15
ADVANCED PRACTICAL SKILLS IN MICROBIOLOGY, INFECTION & DISEASE (BIOS206)	15
METABOLISM (BIOS212)	15
DRUG DISCOVERY AND DEVELOPMENT (BIOS216)	15
MOLECULAR MICROBIOLOGY AND THERAPEUTICS (BIOS218)	15

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Year three

Year three will provide an unparalleled opportunity for you to learn at the cutting edge of biomedical sciences research and be taught by world-leading academics in the subjects of biochemistry, immunology, microbiology, physiology, and pharmacology. You will also have the opportunity to take a physical or virtual placement. Central to this year is the capstone research project where you will plan and execute your own research, analyse, and critically evaluate data and communicate your research findings in your chosen specialisation.

Optional modules

You will choose two optional modules* from:

- BIOS307: Molecular, Clinical and Translational Cancer (Cancer)
- BIOS309: Molecular Systems Biology (Biochemistry)
- BIOS315: Emerging Therapeutic Modalities (Pharmacology)
- BIOS317: Genomics and evolution of microbes.

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Modules

Compulsory modules	Credits
RESEARCH PROJECT (BIOS301)	30
INTRODUCTION TO THE WORLD OF WORK (BIOS302)	15
RESEARCH METHODS (BIOS303)	15
CONTEMPORARY HEALTH CHALLENGES AND BIOMEDICAL SCIENCES (BIOS310)	15

Compulsory modules	Credits
INFORMATION PROCESSING BY CELL SIGNALLING NETWORKS IN HEALTH AND DISEASE (BIOS331)	15

Optional modules	Credits
MOLECULAR, CLINICAL AND TRANSLATIONAL CANCER (BIOS307)	15
MOLECULAR SYSTEMS BIOLOGY (BIOS309)	15
EMERGING THERAPEUTIC MODALITIES (BIOS315)	15
GENOMICS AND EVOLUTION OF MICROBES (BIOS317)	15

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Year four

The fourth year of study offers great flexibility – students may spend it entirely on campus at Liverpool, but more commonly they take up opportunities to broaden their experiences, for example, a six-week research internship in the UK (in hospitals, industry or research institutes) or abroad (in our partner universities in Thailand or China). Others may elect to spend the entire fourth year on placement in similar host institutions. Students will take core modules in research methods and statistics or informatics, together with a 60-credit research project. Students may replace the optional internship with other optional modules that cover advanced topics of global importance.

Optional module selection in year four must include one of the following combinations:

- LIFE707 Biological Data Skills and LIFE607 Biological Data Skills (off-Campus)
- LIFE721 Informatics for Life Sciences and LIFE621 Informatics for Life Sciences (off-Campus).

Modules

Compulsory modules	Credits
GLOBAL PERSPECTIVES (BIOS776)	15
RESEARCH PROJECT (LIFE700)	60

Optional modules	Credits
BIOLOGICAL DATA SKILLS (LIFE707)	15
BIOLOGICAL DATA SKILLS (OFF-CAMPUS) (LIFE607)	15
INFORMATICS FOR LIFE SCIENCES (LIFE721)	15
INFORMATICS FOR LIFE SCIENCES (OFF-CAMPUS) (LIFE621)	15
RESEARCH INTERNSHIP (LIFE701)	30

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Teaching and assessment

How you'll learn

You will experience a range of learning environments during your studies at Liverpool. These will include student-centred activities as well as lectures, tutorials, laboratory practicals, data handling sessions and computer workshops. Some of these activities will be performed individually, such as personal research projects, and others in small tutorial or project groups, in addition to formal lectures and workshops. You will have research staff as well as your own academic adviser for individual tuition on our acclaimed tutorial programme.

How you're assessed

As well as factual knowledge and understanding, biologists need practical and organisational skills, and an ability to work both alone and with other people. We record the development of these abilities through continuous assessment during each semester and by the final examination.

Liverpool Learning Framework

At Liverpool, we take a distinctive approach to education through the Liverpool Learning Framework. This means teaching that is engaging, inclusive and designed to help you succeed during your studies and beyond.

You'll develop specialist subject knowledge alongside the skills employers value most, including:

- Digital fluency
- Confidence
- Global citizenship

Our curriculum is characterised by the three Liverpool Hallmarks:

- Research-connected teaching - learning informed by the latest ideas and discoveries
- Active learning - taking part, applying knowledge and learning by doing
- Authentic assessment - assessments designed around real-world tasks and challenges

We also embed key priorities across our curriculum, including AI literacy, employability, and sustainability, helping you prepare for the future and make a positive impact in the world.

We’re committed to creating a supportive and inclusive learning environment where every student can thrive.

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Careers and employability

As a Biosciences graduate from the University of Liverpool, you will have an excellent set of career options ahead of you.

Typical types of roles/routes our graduates have gone on include:

- Postgraduate study: (MBiolSci, MSc, MRes, MPhil or PhD)
- Public sector – research institutes, government departments, the National Health Service, forensic science and the Environment Agency.
- Commercial sectors – pharmaceutical, food, biotechnology, water and agriculture industries.
- Journalists and information/liaison officers – by developments in molecular biology and biotechnology.
- Teaching profession by taking a postgraduate qualification (PGCE).
- Routes to postgraduate Medicine, Dentistry or Veterinary Science.

Recent employers and sectors:

- Pharmaceutical sector: Eli-Lilly, AstraZeneca, Glaxo SmithKline, NHS, Red X Pharma;
- Tourism/Conservation sector: Blue Planet Aquarium, Chester Zoo, RSPCA;
- Government/Legal sector: Crown Prosecution Service, The Environment Agency, Public Health England, Home Affairs, Ministry of Defence, Security and International Development;
- Media/Entertainment Sector: BBC;
- Corporate and Utilities sector: United Utilities, Vodafone, Unilever.

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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 - £9,790
Year in industry fee - £1,955
Year abroad fee - £1,465 (applies to year in China)

International fees

Full-time place, per year - £32,000
Year in industry fee - £1,955
Year abroad fee - £16,000 (applies to year in China)

The fees shown are for the academic year 2026/27. Please be advised that tuition fees may increase each year for both UK and international students. For UK students, this will be subject to the government's regulated fee limits.

Tuition fees cover the cost of your teaching and assessment, operating facilities such as libraries, IT equipment, and access to academic and personal support. 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. You can find information on the general and subject-specific costs you could expect to incur on our study costs webpage.

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Entry requirements

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

A levels

ABB
Biology and Chemistry at A level.

Applicants with the Extended Project Qualification (EPQ) are eligible for a reduction in grade requirements. For this course, the offer is **BBB** from A levels, with **A** in the EPQ.

You may automatically qualify for reduced entry requirements through our contextual offers scheme. Based on your personal circumstances, you may automatically qualify for up to a two-grade reduction in the entry requirements needed for this course. When you apply, we consider a range of factors – such as where you live – to assess if you're eligible for a grade reduction. You don't have to make an application for a grade reduction – we'll do all the work.

Find out more about how we make reduced grade offers.

If you don't meet the entry requirements, you may be able to complete a foundation year which would allow you to progress to this course.

Available foundation years:

- Biological Sciences (with a Foundation Year) BSc (Hons)

GCSE

4/C in English and 4/C in Mathematics

Subject requirements

For applicants from England: Where a science has been taken at A level (Chemistry, Biology or Physics), a pass in the Science practical of each subject will be required.

BTEC Level 3 National Extended Diploma

D*DD in Applied Science with a selection of preferred units in Biology and Chemistry, to include Distinction in Units 1 or 5 (Principles and Applications of Science I and II).

For previous BTEC (QCF) qualification:

D*DD in Applied Science with a selection of preferred units in Biology and Chemistry, with at least 120 Level 3 credits at Distinction.

Please note alternative BTEC subjects are not acceptable for this programme.

International Baccalaureate

32 points overall with no score less than 4 including 6 in Higher Level Biology and 5 in Higher Level Chemistry or pass the IB Diploma plus 6,5,5 in 3 HL subjects with 6 in Higher Level Biology and 5 in Higher Level Chemistry

Irish Leaving Certificate

H1, H2, H2, H2, H3, H3

Scottish Higher/Advanced Higher

Not accepted without Advanced Highers at grades ABB

Welsh Baccalaureate Advanced

B in the Welsh Baccalaureate, plus AB at A level to include Biology at grade A and Chemistry at grade B.

Access

Pass relevant Access to HE Diploma with 45 Level 3 credits with 33 at Distinction and 12 at Merit. 15 Distinctions are required in each of Biology and Chemistry. GCSE Mathematics and English grade C/4 also required.

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, you could be eligible for a Pre-Master's course. This is offered on campus at the University of Liverpool International College, in partnership with Kaplan International Pathways. It's a specialist preparation course for postgraduate study, and when you pass the Pre-Master's at the required level with good attendance, you're guaranteed entry to a University of Liverpool master's degree.

Alternative entry requirements

- If your qualification isn't listed here, or you're taking a combination of qualifications, contact us for advice
- Applications from mature students are welcome.

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 5.5

TOEFL iBT

If you took a TOEFL test on or before 20 January 2026, you'll need 88 overall, with minimum scores of listening 17, writing 17, reading 17 and speaking 19. If you took a TOEFL test from 21 January 2026 onwards, when a new scoring system was introduced, you'll need 4.5 overall, with 4 or above in all components. TOEFL Home Edition not accepted.

Duolingo English Test

125 overall, with speaking, reading and writing not less than 105, and listening not below 100

Pearson PTE Academic

61 overall, with no component below 59

LanguageCert Academic

70 overall, with no skill below 60

Cambridge IGCSE First Language English 0500

Grade C overall, with a minimum of grade 2 in speaking and listening. Speaking and listening must be separately endorsed on the certificate.

Cambridge IGCSE First Language English 0990

Grade 4 overall, with Merit in speaking and listening

Cambridge IGCSE Second Language English 0510/0511

0510: Grade B overall, with a minimum of grade 2 in speaking. Speaking must be separately endorsed on the certificate. 0511: Grade B overall.

Cambridge IGCSE Second Language English 0993/0991

0993: Grade 6 overall, with a minimum of grade 2 in speaking. Speaking must be separately endorsed on the certificate. 0991: Grade 6 overall.

Cambridge ESOL Level 2/3 Advanced

176 overall, with no paper below 162

International Baccalaureate English A: Literature or Language & Literature

Grade 5 at Standard Level or grade 5 at Higher Level

International Baccalaureate English B

Grade 7 at Standard Level or grade 6 at Higher Level

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 5.5	6 weeks	On campus or online
5.5 overall, with no more than one component at 5.0	10 weeks	On campus or online
5.5 overall, with no component below 5.0	12 weeks	Online
5.0 overall, with no component below 5.0	20 weeks	On campus
5.0 overall, with no component below 4.5	30 weeks	On campus
4.5 overall, with no more than one component at 4.0	40 weeks	On campus

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 5.5, for further details.

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