UNIVERSITY OF LIVERPOOL

MSc

Clinical Sciences

Study mode	Duration	
Full-time	12 months	Apply by: **29 August 2025**
Part-time	24 months	Starts on: **22 September 2025**

About this course

This master's in Clinical Sciences advances expertise in molecular mechanisms that underpin human health with cutting-edge clinical applications, equipping students with globally relevant skills. The course offers a unique balance of in-depth taught material coupled with a hands-on research project in the final semester. Students will explore advanced techniques like cutting-edge organoid models and ex-vivo techniques, bridging the gap between lab discoveries and clinical innovation.

Introduction

The Clinical Sciences MSc is designed to advance the students' expertise in the molecular and cellular mechanisms that underpin human health, alongside cutting-edge clinical applications. This programme offers an integrative approach that spans fundamental biomedical sciences to advanced translational research, all under the broad theme of Molecules, Cells, Tissues, and Clinical Practice. The programme couples in depth taught material to gain further insight into cellular mechanisms in health and disease, with a final semester, hands-on, independent research project.

The curriculum has been designed to deepen your understanding of how biomedical research drives innovation in clinical settings with research-led approaches embedded throughout. From 2D and 3D cell culture models to in vivo and ex vivo systems, you will explore a wide range of experimental techniques that are currently

at forefront of biomedical science. The programme places a strong emphasis on the translational aspects of clinical research and how it feeds into medical interventions, equipping the students to bridge the gap between laboratory research and clinical implementation.

This programme is designed for students who require an in-depth knowledge of biomedical and clinical sciences, and will equip you with globally-relevant skills to address critical healthcare challenges through cutting-edge research methodologies. You will engage with state-of-the-art techniques in topics such as advanced bioinformatics, organoid and embryonic stem cell model systems, as well as incorporating uniquely-advanced training in the regulatory frameworks that govern translational medicine. Examples of the latter include the application of the 3Rs principles (Replacement, Reduction, Refinement) and the latest discussions on how embryonic stem cell research drives diagnostics and regenerative medicine. Throughout the programme, you will develop comprehensive skills, bringing in research integrity, ethical publishing and scientific communication, all well beyond basic technical proficiency. This comprehensive skillset will enhance your ability to conduct and disseminate research with a clear global impact.

Who is this course for?

- Graduate students from medical, biomedical, developmental biology and biological science disciplines looking to
  a) gain further, and much more advanced concepts in clinical sciences,
  b) gain further research experience
- Undergraduate medical, dental and veterinary students undertaking an intercalated research degree

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What you'll learn

- Recent advances and contemporary/state-of-the-art methodologies in clinical sciences research.
- The ways in which clinical sciences research relates to health, disease and therapeutic interventions.
- A critical understanding of the ‘3Rs’ principles of biomedical research (Replacement, Reduction, and Refinement of animals in research)
- How to formulate a robust research proposal.

- How to critically appraise relevant literature in the field of clinical sciences.
- Important techniques and laboratory skills required for medical research in both clinical and academic environments.
- How to plan and conduct original, independent research.
- How to collect, interpret and analyse data and present your findings.
- Project management and problem-solving skills.
- Communication skills that enable research debate and the sharing of ideas with both scientific and layperson audiences.

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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

ILCMS702 – Molecules, Cells, Tissues

MCMR003 – Research Frontiers in Clinical Sciences 1

LIFE707 – Biological Data Skills

Modules listed are subject to approval – the full module structure for this course will be available soon.

Modules

Compulsory modules	Credits
BIOLOGICAL DATA SKILLS (LIFE707)	15
RESEARCH FRONTIERS IN CLINICAL SCIENCES 1 (MCMR003)	15

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

Semester 2

ILCMS703 – Cells, Tissues, Clinic

MCMR002 – Transferable Skills

MCMR004 – Research Frontiers in Clinical Sciences 2

Modules listed are subject to approval – the full module structure for this course will be available soon.

Modules

Compulsory modules	Credits
TRANSFERABLE SKILLS (MCMR002)	15
RESEARCH FRONTIERS IN CLINICAL SCIENCES 2 (MCMR004)	15

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

Final project

ILCMS701 – Research Project

Modules listed are subject to approval – the full module structure for this course will be available soon.

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

Teaching and assessment

How you'll learn

This programme aims to equip students with:

1. Advanced knowledge, skills, and research expertise required to contribute to evidence-based practice and pursue further academic study or leadership roles in industry and academia. Graduates will develop the confidence and critical thinking necessary to drive innovation in clinical sciences.
2. The ability to communicate complex scientific concepts effectively to both professional and non-specialist audiences, ensuring clarity and impact across diverse contexts.
3. A comprehensive understanding of advanced research methodologies in clinical sciences, developed through engagement with leading experts, professionals, and peers in the field.
4. In-depth knowledge and critical insight into the relationship between clinical sciences, health, disease, and therapeutic interventions, preparing students to address global healthcare challenges through research and practice.

How you're assessed

All assessments will mirror activities you may undertake as a professional scientist or healthcare professional e.g. paper reviews and referee reports, writing a grant proposal, business proposal, report writing, producing a visual abstract, presentations (oral, poster) either online or in person.

The project module assessment is designed to support student learning by being distributed throughout the module. For example, a summative preliminary report in semester one, encourages students to demonstrate understanding of the background and rationale of the project, whilst also providing clear aims and a project plan.

Formative assessments in the form of an oral presentation will provide you an opportunity to reflect and evaluate your progress, including the project design, results and strengths and limitations of your project.

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

Graduates will emerge with the skills to pursue careers in advanced clinical research, biotechnology, and translational medicine across diverse international contexts. The programme fosters high-level analytical abilities and ethical decision-making, positioning you to contribute to the global advancement of healthcare as a leading researcher, clinician-scientist, or industry expert.

As the programme places an emphasis on practical, transferrable skills and ethical scientific practice, it is envisaged that students will emerge as future leaders ready to contribute to the advancement of global healthcare solutions as well as other relevant career paths.

By the end of the course, you will be well-prepared to pursue further academic studies at the PhD level, or to transition directly into research-focused roles within industries such as biotechnology, pharmaceuticals, and clinical sciences.

The advanced research skills acquired through this programme will enable graduates to contribute to cutting-edge scientific developments and innovations, making them highly competitive candidates in a variety of international research environments.

It is also envisioned that outside academia, graduates will have the necessary expertise to pursue careers in the public sector, as they are in demand within research institutes, government bodies, healthcare organisations, and environmental agencies. Moreover, the broad analytical and problem-solving skills gained during the programme are highly transferable, equipping you for roles in management, teaching, accountancy, human resources, and other professional areas that value critical thinking and research capabilities.

This programme also serves as excellent preparation for those seeking to apply to graduate-entry medical school, the NHS Scientific Training Programme, and the Physician Associate Studies programmes, or other specialized postgraduate courses. Its strong focus on research integrity, ethical practice, and scientific communication ensures graduates are well-positioned to pursue leadership roles in both academic and industry settings

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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 - £13,300
Part-time place, per year - £6,650

International fees

Full-time place, per year - £28,300
Part-time place, per year - £14,150

Fees stated are for the 2025-26 academic year.

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. This degree should be in a medical, biomedical or relevant biological science discipline. Previous MRes or MSc study or a medicine, veterinary or dental qualification may also be accepted.

International qualifications

Select your country or region to view specific entry requirements.

Many countries have a different education system to that of the UK, meaning your qualifications may not meet our entry requirements. Completing your Foundation Certificate, such as that offered by the University of Liverpool International College, means you're guaranteed a place on your chosen course.

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

Duolingo English Test

125 overall, with writing not less than 125, speaking and reading not less than 115, and listening not below 110

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

Your most recent IELTS score	Pre-sessional English course length	On campus or online
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 component below 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 6.0, for further details.

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