

Programme Specification (Postgraduate)

Date created: 02/07/2018 Last amended: 13/01/2025 Version no. 1 Date approved by

FOR ENTRY YEAR: 2025/26

EQED: n/a

1. Programme title(s) and code(s):

MSc in Medical Research

*Postgraduate Certificate in Medical Research

Notes

This programme is intended for intercalating medical students

* An award marked with an asterisk is only available as an exit award and is not available for students to register onto.

a) HECOS Code

HECOS Code	%
100473	100

Awarding body or institution: University of Leicester

3. a) Mode of study Full-time

b) Type of study Campus-based

4. Registration periods:

The normal period of registration is: 11 months

The maximum period of registration is: 24 months

Due to the intercalated nature of this course and limitations on UG medical course registration, periods of registration beyond 11 months would need to be discussed in consultation with a student's MBChB/MBBS institution.

5. Typical entry requirements

Successful completion of 3 years of MBChB or MBBS curriculum at a UK medical school, or having a relevant BSc degree in health or life sciences at 2i level or above, and having successful completion of 2 years of MBChB or MBBS curriculum at a UK medical school. In either case, students should be in the upper 8 deciles of their cohort. Applications from students in the 9th decile may be considered after discussion with the course director.

6. Accreditation of Prior Learning

No APL will be accepted.

7. Programme aims

The programme aims to support students to become:

- Confident in assimilating, reviewing and critiquing medical research across a range of methodologies
- Effective communicators of science to a broad range of audiences

- Knowledgeable in the ethical and cultural implications of conducting medical research and recognise and to encourage best practice
- Future clinical academics through providing foundational training in designing, conducting, synthesising and evaluating medical research through the research project module

8. Reference points used to inform the programme specification

- QAA Benchmarking Statement
- General Medical Council: Standards, Guidance, and Curricula [external site]
- Framework for Higher Education Qualifications (FHEQ)
- UK Quality Code for Higher Education
- Education Strategy
- <u>University Assessment Strategy</u> [login required]
- University of Leicester Periodic Developmental Review Report
- External Examiners' reports (annual)
- United Nations Education for Sustainable Development Goals
- Student Destinations Data



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9. Programme Outcomes

Unless otherwise stated, programme outcomes apply to all awards specified in 1. Programme title(s).

a) Discipline specific knowledge and competencies

i) Knowledge

Intended learning Outcome	Teaching methods	Learning Activities	Assessment Type
Students should be able to: Demonstrate high-level knowledge of medical research in general (PG Cert and MSc) and a specific medical scientific research topic, at the forefront of knowledge related to their project.	Lectures, seminars and workshops that form part of the taught course element of this MSc. Furthermore, students will engage in self-directed learning to gain the necessary background knowledge in their chosen topic to allow them to conduct independent research. They will be expected to attend (and contribute to) journal clubs and departmental seminars within their host department.	Attend (and contribute to) journal clubs and departmental seminars within host department.	Students will be assessed by means of coursework (essays, written reports, critical appraisals) as part of the taught modules (PG Cert). They are required to produce two posters (the first is formative only). They will write a dissertation (12,000 words for a quantitative project or 20,000 words for a qualitative project) for their project (MSc).

ii) Concepts

Intended learning Outcome	Teaching methods	Learning Activities	Assessment Type
Students should be able to: Define and critically appraise key concepts and theories underpinning medical research (PG Cert and MSc). Recognise the extent to which these relate to their own research project (MSc).	Lectures, seminars, directed and self- directed reading and study, group work, workshops, consultation with teaching staff.	Guided self-directed learning.	Summative assessments (written reports and essays, oral presentations), all as part of taught modules (PG Cert and MSc). Also demonstrated in their project dissertations (MSc only).

iii) Techniques

Intended learning Outcome	Teaching methods	Learning Activities	Assessment Type
Students should be able to: Demonstrate a detailed, high-level knowledge of a chosen medical research topic and the appropriate research techniques (wet lab, epidemiological, clinical, qualitative, etc).	The students will be supported by their supervisor	Opportunity to join research group meetings	The precise key techniques will depend on the areas of interest selected by the students. The summative poster presentations and dissertation will be the means of demonstrating that the student has achieved the intended learning outcomes (MSc).
Recognise if and when their research techniques need to be adapted to new or changing experimental situations. (MSc only)	The students will be supported by their supervisory teams	Opportunity to join research group meetings	Supervisors' student project engagement report (MSc)

iv) Critical Analysis

Intended learning Outcome	Teaching methods	Learning Activities	Assessment Type
Students should be able to: Critically appraise data and results, and critically review literature. Evaluate the quality of methods and evidence used in published work	Seminars, directed and self-directed reading and study, group work, team problem solving activities and consultation with teaching staff.	Guided self-directed learning	Summative assessment (written reports and essays, oral presentations) (PG Cert and MSc). The research dissertation (in particular the review of literature, where critical review of existing literature is expected) (MSc only).
Students should be able to: Recognise and acknowledge the strengths and weaknesses of their own research, and suggest solutions to address limitations (MSc only).	Seminars, directed and self-directed reading and study, group work, workshops.	Opportunity to join research group meetings	The research dissertation (in particular the discussion, limitations and conclusions sections) (MSc only). Supervisors' student project engagement report (MSc)

v) Presentation

Intended learning Outcome	Teaching methods	Learning Activities	Assessment Type
Students should be able to: Present knowledge, arguments and evidence relating to medical and scientific research, clearly and critically in a variety of written, visual and oral formats.	Directed and self-directed study, group work and feedback from peers and staff.	Attend lab/group meetings and local journal clubs	Written reports and essays, oral presentations, poster presentations, written assignments (PG Cert), and the dissertation(MSc).

vi) Appraisal of evidence

Intended learning Outcome	Teaching methods	Learning Activities	Assessment Type
Students should be able to: Demonstrate awareness of experimental methods, project design, approach to analysis and possible sources of bias	Seminars, directed and self-directed reading and study. Research project supervision.	Guided self-directed learning	Written reports and essays, oral presentations, poster presentations, written assignments (PG Cert), and (MSc) the dissertation.

b) Transferable Skills

i) Research Skills

Intended learning Outcome	Teaching methods	Learning Activities	Assessment Type
Students should be able to: Demonstrate ability to critique research project design (PG Cert), including that of their own project (MSc).	Workshops (including computer-based classes) and consultation with staff. Independent research and project supervision	Guided self-directed learning	Written reports and oral presentations. Summative assessments (PG Cert) and dissertation (MSc).
Students should be able to: Apply appropriate research methodology; analyse and interpret data; use of statistical techniques where necessary	Workshops including computer-based statistical classes. Independent research and project supervision	In addition to workshops, guided self-directed learning	Written reports and oral presentations. Summative assessments (PG Cert) and dissertation (MSc).

ii) Communication skills

Intended learning Outcome	Teaching methods	Learning Activities	Assessment Type
Students should be able to: Communicate orally and in writing, with clarity and coherence, concepts and arguments relevant in Medical Research.	Seminars, group work, and consultation with teaching staff Feedback from poster sessions. Workshops on writing-up dissertation and long documents	Guided self-directed learning	Written reports, poster presentations, and oral presentations. Summative assessments (PG Cert) and dissertation (MSc).

iii) Data Presentation

Intended learning Outcome	Teaching methods	Learning Activities	Assessment Type
Students should be able to: Present methods, findings and conclusions from data analysis in a variety of formats (written, visual and oral)	Seminars, workshops, and feedback on oral and written work and poster presentations	Local research group meeting preparation and guided study.	Written reports, poster presentations, and oral presentations (PG Cert). Project dissertation (MSc).

iv) Information Technology

Intended learning Outcome	Teaching methods	Learning Activities	Assessment Type
Students should be able to: Demonstrate the effective use of IT for accessing databases and scientific literature; manipulating, processing and presenting data; use of word processing packages to produce, format and present written work professionally.	Workshop on using word processor packages for long documents. Project- specific supervision on relevant databases and data analysis software	Additional self-directed resources from library services	Use of referencing and word processing in project dissertation (MSc). Powerpoint skills by poster presentation. Databases and analysis in project dissertation (MSc).

v) Problem Solving

Intended learning Outcome	Teaching methods	Learning Activities	Assessment Type
Students should be able to: Demonstrate ability to identify specific problems (practical, theoretical, logistical) common to medical research (PG Cert), and problems specific to individual project (MSc).	Lectures, seminars, workshops and clinics on statistical methods. Research project supervision.	Guided self-directed learning	Written presentations (PG Cert), and (MSc) supervisor's report.

vi) Working relationships

Intended learning Outcome	Teaching methods	Learning Activities	Assessment Type
Students should be able to: Demonstrate the ability to work as part of a group	Group tasks as part of taught modules. Working in a shared laboratory or clinical environment	Local research group training and group meetings	Contribution to seminars and workshops(PG Cert). Project supervisor's report (MSc).

vii) Managing learning

Intended learning Outcome	Teaching methods	Learning Activities	Assessment Type
Students should be able to: Demonstrate the acquisition of the skills and attributes necessary for lifelong learning, including: intellectual independence, effective time management, planning and organisation, knowing when to ask for help, professional attitude to colleagues, research honesty, ethical frameworks	Feedback on presentations, which feature in all branches. Skills developed within the research project by interaction with supervisor.	Structured reflection and personal tutoring	Successful performance in assessments (PG Cert). Supervisor's report (MSc).

viii) Career Management

Intended learning Outcome	Teaching methods	Learning Activities	Assessment Type
Students should be able to: Demonstrate career advancement, e.g., by networking, and by dissemination of research findings	Interaction with staff and other students at different points on their career. Encouragement (where appropriate) to present research findings, both by publication and by conference attendance, with the chance to network.	through personal tutors and access to the university careers service and will meet a range of researchers and clinical academics who will provide mentorship and guidance during the course	Not formally assessed.



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10. Progression points

This programme follows the standard Scheme of Progression set out in <u>Senate Regulations</u> – see the version of *Senate Regulation 6 governing postgraduate programmes* relevant to the year of entry.

If a student should fail the research project component of the course they will be recommended for a Postgraduate Certificate (Medical Research) if they meet the criteria set out in Senate Regulation 6.

In cases where a student has failed to meet a requirement to progress they will be required to withdraw from the course and may qualify for a lower award (PGCert)

a) Course transfers

n/a

11. Criteria for award and classification

This programme follows the standard scheme of postgraduate award and classification set out in <u>Senate Regulations</u> – see the version of <u>Senate Regulation governing postgraduate programmes</u> relevant to the year of entry.

12. Special features

The programme is unique in that it provides you with an opportunity to engage with a research project the duration of the course. Comparable intercalated Masters' courses at other institutions tend to provide medical students with a smaller, shorter research component. Our experience indicates that students value the chance to develop their skills over time, and a more substantial project provides potential opportunities of presenting their work at national or international conferences. The taught modules that are integral to the programme, provide a broad research training in qualitative and quantitative methods, and enable you to see medical scientific research in a wide context. This will provide you with foundations if you continue to pursue research later in your career.

12a. Research-inspired Education

Students on this programme will advance through the four quadrants of the University of Leicester Research-inspired Education Framework as follows:

RiE Quadrant	Narrative
	The programme provides a breadth of training in research methodologies and approaches to conducting and reporting medical research, drawing upon international expertise from across the College of Life Sciences. Implementing this training whilst conducting their own research projects, graduates will acquire the foundational skills to become clinical academics of the future.
Research- briefed Bringing staff research content	 Research-briefed - Utilising their own research activity, staff will provide inspiring teaching through seminars and group activities to exemplify approaches to design and refinement of research methodologies and where they are appropriately used. Fundamental concepts will be discussed through real world examples that have significance in health research.

into the curriculum.

Researchbased

Framed enquiry for exploring existing knowledge. Research-based - Taught sessions, seminars and assessments are centred around exploring different types of medical research, their published outputs and impact, providing students with the opportunity to learn by guided example.

Researchoriented

Students critique published research content and process.

 Research-oriented - Students will be supported to develop confidence in seeking out, reviewing and critiquing current literature through appraisal and reflection in the context of their own research interests. These skills will be honed whilst contextualising and refining about their own research questions.

Researchapprenticed

Experiencing the research process and methods; building new knowledge.

 Research-apprenticed - Through their individual yearlong research projects, students will refine methodologies and collect and interpret medical research data. They will contribute to the wider research efforts of their supervisory team, contextualising and presenting their findings within the wider discipline.

As part of studying at a research-intensive university, students on this programme have the following extra or co-curricular opportunities available to them to gain exposure to research culture:

Students will have access to the wider departmental research group and seminar meetings. Here they will be able to anchor their own work within the wider university and national disciplines. The medical school has an active student research society (LUMRS) that offers further research, journal club and student conference opportunities. The long standing and successful LINK scheme, supported by the INSPIRE programme, continues to offer smaller research activity, supervised by college and UHL academics/clinicians that students can contribute to as an extra-curricular activity.

Teaching on this programme will be research-informed (it draws consciously on systematic inquiry into the teaching and learning process itself) in the following way:

Contributors to this programme from across the college attend and participate in educational seminars which provides a supportive environment to share best practice. The School of Medicine has a breadth of pedagogical research scholars that present educational theory developments both informally and formally, including at programme and module review sessions.

The School supports all staff involved in teaching to gain an accredited Higher Education teaching qualification, in which they demonstrate their use of teaching theory to support their own practice and reflect on their current teaching and continuing professional development.

13. Indications of programme quality

- The programme will be subject to standard University of Leicester procedures for quality assessment, including the Annual Programme Review process
- External examiners will be appointed in line with Senate regulations
- The programme's teaching staff will engage with University procedures for peer assessment of teaching and marking, and will be encouraged to engage with relevant staff development opportunities and the HEA fellowship scheme.
- A student representative will be a member of the Intercalated Degrees committee and attend meetings for discussion of the unreserved portion of the agenda.
- School Periodic Developmental Enhancement Review will ensure the course continues to deliver a relevant worthwhile and fulfilling opportunity for the students.

14. External Examiner(s) reports

The details of the External Examiner(s) for this programme and the most recent External Examiners' reports for this programme can be found at exampapers@Leicester [log-in required].



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Appendix 1: Programme structure (programme regulations)

The University regularly reviews its programmes and modules to ensure that they reflect the current status of the discipline and offer the best learning experience to students. On occasion, it may be necessary to alter particular aspects of a course or module.

MSc in Medical Research (designed for intercalating students)

Level 7/Year Final Delivery Year 2025/26 Intake Month September Mode of Study Full Time Structure

Credit breakdown (taught modules)

Status	Year long	Semester 1	Semester 2
Core	15 credits	30 credits	15 credits
Optional	n/a	n/a	n/a

120 credits in total

Core modules

Delivery period	Code	Title	Credits
Semester 1	MD7431	Fundamentals of Applied Health Research	15 credits
Semester 1	MD7432	Quantitative Methods in Applied Health Research	15 credits
Semester 2	MD7433	Qualitative Methods in Applied Health Research	15 credits
Year long	MD7438	Science, Society and Responsible Research	15 credits
Year long	MD7437	Research Project	120 credits

Notes

n/a

Appendix 2: Module specifications

See postgraduate module specification database (Note - modules are organized by year of delivery) [login-required]