

**1. Programme Title(s):**

MRes in Clinical Sciences

**2. Awarding body or institution:**

University of Leicester

**3. a) Mode of study**

Part-time

**b) Type of study**

Campus-based

**4. Registration periods:**

It is recognised that most students will wish to undertake the MRes in an accelerated manner. For these students the following periods of registration apply:

Normal period of registration is 27 months

Maximum period of registration is 48 months

For some students the MRes will be undertaken in a more standard fashion that complements their clinical training pathways:

Normal period of registration is 35 months

Maximum period of registration is 48 months

Students will automatically be started on the accelerated pathway. Students who do not submit their dissertation at 27 months will be switched to the standard pathway.

**5. Typical entry requirements:**

Candidates will normally be registered as an Academic Clinical Fellow with the University of Leicester. The MRes may be offered to other clinical research staff at the University's discretion. These candidates will normally have a relevant first degree (2:1 or higher) or equivalent qualification. Candidates with significant experience and/or qualifications in health or social care research practice or management will also be considered. Where English is not a candidate's first language, applicants will be required to provide evidence of appropriate language skills.

**6. Accreditation of Prior Learning:**

Accreditation of prior learning will be considered on a case by case basis within an overall requirement that, at the time of application, any prior learning which is more than five years old will

not normally be considered current for this purpose. Applications should be made to the course director before commencement of the course.

The maximum accreditation of prior learning is 15 credits (one taught module)

Exemption will be granted on a 'graded' basis.

If a student is admitted to a programme with recognition for prior achievement undertaken at the University, any award previously made to the student on the basis of that prior achievement will be rescinded by the University prior to the commencement of the new period of study.

A formal record will be made of exemptions granted to students when they were admitted and any marks assigned for the purposes of determining progression or the outcome of awards. Students will be notified in writing of all decisions

### 7. Programme aims:

This programme is only routinely available to Academic Clinical Fellows (ACFs) funded through the NIHR scheme, of which Leicester has approximately 6 per year. The NIHR requires these ACFs to undertake generic postgraduate research training as a condition of the fellowship. This programme aims to deliver high caliber inter-disciplinary integrated training in research methodology focusing on the translation of research findings into therapy or clinical practice. It will enable individuals to acquire the expertise necessary for effective clinical research in the context of their own research and practice roles, responsibilities and interests and to participate and contribute to best practice in clinical research at an appropriate level.

On occasion the MRes may be offered to clinical research staff other than ACFs. This is at the discretion of the University.

### 8. Reference points used to inform the programme specification:

QAA: The UK Quality Code for Higher Education

<http://www.qaa.ac.uk/assuring-standards-and-quality/the-quality-code>

[University of Leicester Learning and Teaching Strategy 2011-2016](#)

University of Leicester Periodic Developmental Review Report

External Examiners' reports (annual)

The ACF Research Training Programme Guidelines

<http://www.nihr.ac.uk/documents/funding/Training-Programmes/TCC-IAT-ACF-Research-Training-Programme.pdf> and <http://www.nihr.ac.uk/funding/information-for-current-nihr-acfs.htm>

The QAA Masters Degree Characteristics 2015

<http://www.qaa.ac.uk/en/Publications/Documents/Masters-Degree-Characteristics-15.pdf>

Senate Regulations

<http://www2.le.ac.uk/offices/sas2/regulations/senate-regulations>

### 9. Programme Outcomes:

Intended Learning Outcomes	Teaching and Learning Methods	How Demonstrated?
<i>(a) Discipline specific knowledge and competencies</i>		
<b>Knowledge</b>		
Recognition of the elements of the research process and applying this to a grant or PhD project proposal.	Lectures, directed reading, departmental seminars (optional).	Course work and module assignments, including dissertation.

<b>Intended Learning Outcomes</b>	<b>Teaching and Learning Methods</b>	<b>How Demonstrated?</b>
<b>Concepts</b>		
Demonstrate how to interpret and apply concepts inherent in areas including research ethics, sampling, bias and confounding, absolute and relative risk, forms of economic evaluation, discounting and sensitivity analysis, literature searching and systematic reviews, linear and logistical regression, clinical trial or qualitative research methodology.	Lectures, directed reading.	Course work and module assignments
<b>Techniques</b>		
Ability to critically review research studies, literature searching, survey and questionnaire design, using SPSS software, testing statistical significance and association between variables, practicing interview, observation and data coding skills, assessing data quality	Computer exercises, worked examples and related feedback.	Feedback from/evaluation of group exercises and all module assignments.
<b>Critical analysis</b>		
Ability to critically appraise research studies and research data of various kinds	Lectures, worked examples, focused reading.	Course work and assignments.
<b>Presentation</b>		
Ability to present in writing individual and group research work; to present data analyses and critical appraisals of a variety of research design/studies.	Coursework exercises and assignment briefings and worked examples.	Group discussions, assignments, poster and dissertation.
<b>Appraisal of evidence</b>		
Ability to draw conclusions from the available literature and to be able to assess the relevance/strength of these conclusions.	Lectures, departmental seminars	Course work & assignments

Intended Learning Outcomes	Teaching and Learning Methods	How Demonstrated?
<i>(b) Transferable skills</i>		
<b>Research skills</b>		
Acquire skills to undertake and critique research methodologies.	Integral to all modules and all teaching methods.	All module assessment methods.
<b>Communication skills</b>		
Acquire report writing, verbal feedback skills, critical appraisal skills, group communication skills, poster presentation skills.	Coursework, presentation of exercise results, dissertation supervision.	Verbal and written course work; dissertation.
<b>Data presentation</b>		
Acquire general data analysis skills. Specific skills in identifying the strengths and weaknesses of research papers and evidence.	Module exercises (oral and written feedback) and assignments e.g. critical appraisal of published data; dissertation supervision.	Variety of on-going coursework. Feedback from exercises; dissertation.
<b>Working relationships</b>		
Ability to work effectively in groups/teams to problem solve, discuss published studies or quality of research data.	All group work undertaken within modules. Working with dissertation supervisor, and research subjects/other researchers.	Module coursework and supervision.
<b>Managing learning</b>		
Analyse complex written and numerical data, searching and selecting information sources, sifting different types of evidence and assessing validity, reliability.	Delivery of subject knowledge: literature searching and systematic reviews; critical appraisal of published research and numerical datasets; dissertation supervision.	Group exercise performance, research project management for dissertation.
<b>Career management</b>		
Appropriate skills to develop effective clinical research careers producing high quality publications & attaining grant income.	All of the above, together with guidance and mentoring from academic and research supervisors & regular reviews	Attainment of grant to undertake higher degree resulting from research module.

#### 10. Special features:

Students will have a clear and personalised academic training plan that articulates with the clinical training plan. A timetable will be agreed with the degree convenor that establishes protected time for research and taught modules (day and/or block release). This timetable will be devised to balance clinical and academic training periods and to meet overall training goals.

Students will usually be Academic Clinical Fellows and as such will be assigned both a Research Supervisor and an Academic Supervisor from the University by the Clinical Academic Training Operational Group. The Research Supervisor will be designated as the personal tutor for the purposes of the MRes Clinical Sciences. In the case where the student is not an Academic Clinical Fellow a personal tutor will be assigned by the programme director.

### **11. Indications of programme quality:**

Evidence of ACFs to pursue and continue their clinical academic career at the end of their ACF period and their ability to compete nationally for funding opportunities.

External examiner reports

Successful applications for funding

Successful publication of systematic reviews

### **12. Scheme of Assessment**

As defined in [Senate Regulation 6](#): Regulations governing taught postgraduate programmes of study.

### **13. Progression points**

As defined in [Senate Regulation 6](#): Regulations governing taught postgraduate programmes of study. In cases where a student has failed to meet a requirement to progress he or she will be required to withdraw from the course and a recommendation will be made to the Board of Examiners for an intermediate award where appropriate.

Students will be required to complete the taught modules successfully before progressing to the dissertation.

Upon completion of the written Research Proposal component the complete dissertation comprising work from the Research Proposal and the Systematic Review will be submitted and assessed by the examiners. An oral examination will be conducted by the examiners during which both of the Research Proposal and Systematic Review components of the dissertation will be assessed (viva).

### **14. Rules relating to re-sits or re-submissions:**

As defined in [Senate Regulation 6](#): Regulations governing taught postgraduate programmes of study.

## 15. Appendix 1: Programme structure (programme regulations)

### Updates to the programme

Academic year affected	Module Code(s)	Update

### MRES IN CLINICAL SCIENCES

	October year 1 to end April year 1 (Months 1 to 7)	Credits
MD7432	Quantitative Methods in Applied Health Research	15
MD7433	Qualitative Methods in Applied Health Research	15
	<b>Year</b>	<b>30</b>

Students will be required to complete the taught modules successfully before progressing to MD7469 (Dissertation).

The dissertation module is comprised of two components, the systematic review and the research proposal (150 credits).

#### May year 1 to end December year 2 (Months 8 to 15)

Core Module (Dissertation)	Credits
	150 credits
MD7469	Dissertation: part A (Systematic Review: 40% of the dissertation)

Students will be required to complete the written components of the Systematic Review before progressing to the Research Proposal. Completion will be assessed by their research supervisor.

#### January year 2 to December year 3 (Months 16 to 27)

Core Module (Dissertation)	Total
MD7469	Dissertation: part B (Research proposal: 60% of the dissertation)
	<b>180</b>

### Details of programme structure

Between October and April in year 1, students will undertake the following two 15 credit taught modules from the MRes in Applied Health Research:

- Quantitative Methods in Applied Health Research MD7432
- Qualitative Methods in Applied Health Research MD7433

The Systematic Review component of the Dissertation (MD7469) will be undertaken between May of the first year and finish in December of the second year. The module will be supervised by their research supervisor and the systematic review will be of publishable quality and be similar in

structure and format to a Cochrane Review. The review will also include an introduction to the subject area and a reflective commentary on the process of conducting the review.

From January of the second year to December of the final year students will undertake the Research Proposal component of the dissertation module , in which a comprehensive research proposal comprising *either* a complete research project proposal and funding application *or* a complete research proposal for a PhD fellowship. The proposal will be of a standard that would be competitive if submitted to an appropriate funder and preferably will have been submitted to a funder at the time of assessment. The research proposal must identify the funder and scheme to which it would be submitted and include all essential items for submission. It will be based upon the topic of the literature search conducted for the Systematic Review component of the dissertation and will include the research project proposal, presentation of pilot data a justification of costs, a statement of potential impact, ethical considerations, justification of any animal work and a lay summary. The research proposal will also include an introduction to the background work performed to inform the funding proposal and a reflective commentary on the process of the generation and revision of the funding application, with particular reference to the changes made in response to an internal peer-review of the application.

The expected structure of the final 10,000 word maximum dissertation will consist of the following:

- 1) Fundamentals of the subject area.  
(Dissertation: Systematic Review)
- 2) Systematic Review  
(Dissertation: Systematic Review)
- 3) Reflective commentary on conduct of systematic review.  
(Dissertation: Systematic Review)
- 4) Introduction to Research proposal  
(Dissertation: Research Proposal)
- 5) Research Proposal  
(Dissertation: Research Proposal)
- 6) Reflective commentary on conduct of the Research Proposal  
(Dissertation: Research Proposal)

## **16. Appendix 2: Module Specifications**

See module specification database <http://www.le.ac.uk/sas/courses/documentation>