# **REVIEW OF RESEARCH-BASED MASTERS**

# DEGREES AT THE UNIVERSITY OF

# MANCHESTER

# **REPORT FOR GEG**

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#### 1. EXECUTIVE SUMMARY

The University of Manchester offers a wide diversity of Masters degree programmes across the institution in order to meet the needs of students, employers, industry bodies and National and European higher education agendas. The Graduate Education Group (GEG) recognised that although there is a wide variety in the provision of Masters-level degrees across the Institution, there is also some evidence to suggest that there are inconsistencies in the way that programmes of a similar type are delivered, structured and assessed. GEG therefore acknowledged a need to examine the variety of provision in Masters-level degrees, with specific focus on those Masters degrees which have a significant research element. The degrees under consideration in this review are the MSc by Research, MEnt, MRes and ChM.

This review therefore aimed to:

- audit practice across the University with a view to identifying inconsistencies in programme management
- gain a better understanding of how Research Masters degrees are structured and assessed across the institution
- identify gaps in the provision of regulatory information and make recommendations for updating programme regulations accordingly
- help define and clarify the distinction between postgraduate taught (PGT) and postgraduate research (PGR) Masters programmes and gain more clarity in relation to the distinctive characteristics of a Research Masters degree
- assess whether the Masters programmes which are under consideration in this review are correctly classified as taught or research programmes at the University of Manchester

The review provides an analysis of current provision at the University of Manchester through a detailed examination of the existing regulations, analysis of a questionnaire sent to programme coordinators for each programme under consideration and an assessment of similar programmes at comparator UK institutions.

Detailed conclusions and recommendations from this review can be found in section 5 of the report, but the following points highlight the main findings:

- (i) There are a small number of instances whereby MSc by Research, MEnt and MRes programmes do not meet the requirements of the Institutional regulations
- (ii) The regulations for the MRes programme are relatively vague and open to interpretation in relation to programme structure. This has enabled significant variation in practice across disciplines, particularly in relation to credit structure which varies from a ratio of 30 taught : 150 research credits to 120 taught: 60 research credits in different schools.
- (iii) There is significant variation in the MRes when comparing programme structure and classification at other Russell Group Institutions. An investigation of information provided on websites at these institutions indicates that approximately 57% of Russell Group Institutions classify the MRes as a taught programme, and 43% classify the MRes as a research programme.
- (iv) The ChM degree differs quite significantly from the other Masters programmes under consideration. It is clearly defined as a research programme and it's structure is more aligned with doctoral and MPhil programmes.
- (v) There is a lack of formal Institutional guidance on the defining factors of research Masters programmes and taught Masters programmes. This has led to a general confusion in relation to how Masters programmes at the University of Manchester are classified.

(vi) There is one instance of a cross-faculty delivered programme (Interdisciplinary Medicine and Engineering) which is being coordinated and marketed as an MRes PGT programme in one faculty and an MSc by Research PGR programme in another faculty. Thus for any particular cohort of students on that programme, some of them will be awarded a PGT MRes and some of them will be awarded a PGR MSc by Research. This situation is currently being reviewed and will be rectified for the September 2010 intake.

## 2. CONTEXT

Following on from recommendations from GEG, this review has been undertaken to explore the key similarities, variations and inconsistencies in Masters degrees with a research focus across the Institution, specifically concentrating on the MSc by Research, MEnt, MRes and ChM degrees. The following degree types have been excluded from this review:

- the MPhil programme is widely acknowledged as a Research degree, well defined in structure by Institutional Regulations and contains limited taught content. On this basis the MPhil programme has therefore been excluded from this review
- MSc and MA degrees are defined by the taught Masters regulations, which clearly stipulate the structure of the programmes and credit accumulation requirements. These programmes have therefore been excluded from this review.

## 2.1 Institutional regulations

Other than what is contained in the regulations and programme handbooks for each individual Masters programme, there is no formal Institutional document which defines the difference between a postgraduate research (PGR) Masters degree and a postgraduate taught (PGT) Masters degree. The table below summarises the key features of each of the types of programmes surveyed according to the Institutional regulations for each of the degrees.

	MEnt	MRes	MSc by Research	ChM
Current Institutional classification (PGT/PGR)	PGR	PGT	PGR	PGR
FT duration	Normally 1 year	Normally 1 year	Normally 1 year	Not less than 2 years
PT duration	< 2 academic years	< 5 years	< 5 years	< 4 years
Total credits	180	180	180 (at least 165 at level 4, M level)	Not specified
Taught credits	30-60, normally four level 4 (M level) 15 credit course units. The degree has two level 4 (M level) core units.	NOT SPECIFIED	No more than 60 credits (normally four 15 credit units)	Not specified
Research credits	120-150	NOT SPECIFIED	120-150	Not specified
Candidates required to successfully complete taught component before continuing to research component?	'normally'	Yes	Yes	Not specified
Extension of dissertation deadline permitted?	At the discretion of the University. Maximum permitted 4 months, register and pay fees for submission pending period	Maximum period for an extension to submit a dissertation will normally be four months for a full-time programme and eight months for a part-time programme	In exceptional circumstances	Up to one year beyond the completion date of the degree

	MEnt	MRes	MSc by Research	ChM
Exit awards	Not specified	PG Diploma (120 credits) PG Certificate (60 credits)	Not specified	MPhil
Exam boards	MSEC board of examiners confirm taught element marks at the end of the second semester. Two exam board meetings per year.	Two per year (1 to assess taught units and one to assess dissertation and make final award recommendation)	School exam board confirm taught marks at the end of first term	Not specified
External examiner (research component)	Two or more examiners of whom at least one shall normally be an external examiner. Appointment in line with the University's nomination of examiners and independent chairs policy	Not specified but implies one external examiner per cohort	Two or more examiners of whom at least one shall normally be an external examiner	Two or more examiners of whom at least one shall normally be an external examiner. Appointment in line with the University's nomination of examiners and independent chairs policy
Viva required	Not normally, but at discretion of examiner	Not normally, but at discretion of examiner	Not normally, but at discretion of examiner	Yes
Pass	> 50%	Average 50%	student to pass each taught course unit and the project/dissertation	Not specified
Merit	Average 60-69% (no unit <50%)	Average 60-69% (no unit <50%)	60-69%	Not specified
Distinction	Average >70% (no unit <50%)	Average >70% (no unit <50%)	>70%	Not specified
Comments	Refers to Guidance Notes for the Presentation of MEnt Dissertations	Refers to Guidance for the Presentation of Taught Masters Dissertations	Refers to Guidance Notes for the Presentation of Dissertations	Refers to thesis rather than dissertation. Regs more aligned with MPhil/PhD regs rather than the other masters programmes
Regulations last reviewed	October 2007	November 2005	September 2009	September 2009

This comparison of regulations as they currently stand therefore highlights the following main differences between programme types:

- The ChM regulations are much more aligned with the MPhil and doctoral programme regulations than the other Masters courses under investigation.
- With the exception of the ChM, the total number of credits (180) is consistent across the other three Masters programmes (MRes, MSc by Research and MEnt). This is also aligned with other taught Masters programmes such as the MSc and MA. However, the way the credit structure is broken down for each of the programmes differs between programmes and in the case of the MRes the credit structure is not specified in the regulations.
- The exit awards for each of the degrees are not consistent. For the MSc by Research and the MEnt, no exit awards are specified. For the MRes a PG Diploma and PG Certificate are permitted and for the CHM an MPhil is permitted if certain criteria are met.
- Details about how examiners are appointed for the research component are a little vague and could be made more explicit

• For the MEnt, MRes and MSc by Research, different guidance documentation is referred to for the presentation of dissertations. This requires updating according to the correct documentation for each programme type.

In general, there is also a lack of national and international definitive guidance in relation to the factors which characterise a PGR masters degree and a PGT masters degree. The QAA produced a report (<u>http://www.qaa.ac.uk/academicinfrastructure/benchmark/masters/MastersDegreeCharacteristics.pdf</u>) on 'Master's degree characteristics' in March 2010 in response to requests from practitioners in higher education. The report provides a reference point for advice and guidance on the nature of different types of Masters degrees, but acknowledges that there are no nationally-agreed definitions of types of Masters degrees, and awards with similar titles can vary in nature between institutions and within institutions.

Appendix 1 summarises information relating to masters degree definitions which is currently available from various national bodies, but on conducting an internet search, no specific documentation was found which categorises the explicit differences between a PGR Masters and a PGT Masters programme.

## 2.2 Other Russell Group Institutions

An initial investigation has taken place into PGR masters provision at our comparator institutions, focussing on other Russell Group Universities, to assess whether there is any consistency from a national perspective. This has been undertaken through web-based analysis of their regulations and assessment of programmes on offer to prospective students.

Although it proved quite difficult to find some of the information, the main conclusions from this investigation are as follows:

• A number of other Russell Group institutions offer an MA 'by research' or MSc 'by research' as a PGR award, sometimes in place of an MRes programme. In general, these programmes appear to be of 1 year full-time duration (2 year part-time) and clearly research-focussed with a small taught component at the beginning of the programme followed by a research dissertation. They are classified as research programmes and the focus is on independent learning and research. Those 'MSc by Research' programmes which were viewed appear to be comparable in structure to the MSc by Research offered at the University of Manchester. There are, however, no regulations at the University of Manchester for the 'MA by Research' and no evidence to suggest that this programme is offered in any of the schools at this Institution.

• It proved quite difficult to find explicit details of MRes regulations at other Russell Group Institutions. However, through looking at MRes programme descriptions for certain disciplines, and through looking at how the MRes programme is marketed to prospective students, there appears to be a wide degree of variation in terms of how the MRes is structured and classified both between institutions and between disciplines within institutions. In general, there is roughly a 57%: 43% split in terms of those institutions that classify the MRes as a taught programme and those that classify it as a research programme. The analysis of web-based information from other Russell Group institutions can be found in Appendix 2.

• Informal discussions with representatives from other Russell Group Universities suggest that for a number of Institutions the first year of DTC programmes is defined as an MRes, and that it is classified as a research award in order to obtain an extra years research income. At the University of Manchester, the first year of the DTC programmes are classified as taught programmes.

#### 3. METHODOLOGY FOR THE REVIEW

A questionnaire was sent to all MSc by Research, MRes, MEnt and ChM degree programme directors and administrators in April 2009. MHS have since restructured their MRes programmes and the responses to the questionnaire for this faculty have therefore been updated in May 2010. The questionnaire was designed to to collect information about each of the 59 programmes in operation across the Institution, as identified on the University of Manchester website. Despite a number of reminders, and requests for information, there were a small number of programmes (8) for which data was not returned.

The resulting data collected during the review has been analysed, in order to assess the level of consistency in management of programmes of the same type and the level of compliance with Regulatory documents. The questionnaire template can be found in Appendix 3 and a full list of courses surveyed can be found in Appendix 4. Any programmes for which information was not returned are highlighted in blue. The full spreadsheet of responses to the questionnaire is too big to include in this report but copies can be requested from the Graduate Education team in the Research Office if further information is required.

#### 4. ANALYSIS OF RESPONSES AND KEY FINDINGS

The following analysis is based purely on data which was provided in the questionnaires.

#### 4.1 MEnt

The following MEnt programmes were identified across the Institution according to those programmes listed on the University of Manchester website in April 2009 (those rows shaded in blue represent programmes who did not respond to the questionnaire):

Programme Title	Programme Type	Classification according to school	School	Faculty
Chemistry	MEnt	PGR	Chemistry	EPS
Environmental Innovation	MEnt	PGR (on UoM website)	EAES	EPS
Advanced Manufacturing Technology	MEnt	PGR (on UoM website)	MACE	EPS
Mechanical Engineering Design	MEnt	PGR (on UoM website)	MACE	EPS
Textiles and Fashion	MEnt	PGR	Materials	EPS
Physics and Astronomy	MEnt	PGR	Physics	EPS
Management	MEnt	PGR	MBS	FoH

Based on the data returned via the questionnaire the following points represent the key similarities and differences between each MEnt programme.

### (i) <u>SIMILARITIES BETWEEN MEnt PROGRAMMES</u>

- All schools classified the MEnt as PGR
- All programmes are 12 month FT, 24 month PT
- Distance Learning / Blended learning is not currently offered, but is being considered in Physics and MBS
- All programmes are 180 credits in total, split into 60 credits taught, 120 credits research. Of the 60 taught credits, 30 credits are compulsory, 30 credits are to be selected by the student

- For the taught component, tutors are generally assigned per course unit or according to subject area guidelines and meet with students on a weekly basis
- Students are permitted to retake each taught unit
- Students must complete all taught units before they are permitted to submit the dissertation
- External examiners are assigned per cohort/programme for the taught component of the programme. Examiners for the research component are assigned individually per student
- Two supervisors are assigned for the research component, one in the home school and one in MEC, and they meet regularly throughout the year (normally every 2 weeks)
- Students are not required to undertake an oral examination
- Exam boards meet 2-3 times per year

#### (ii) <u>DIFFERENCES BETWEEN MEnt PROGRAMMES</u>

- The research component comprises one dissertation in two schools (Physics and Astronomy and MBS) and one dissertation split into two components in two schools (Materials and Chemistry)
- A mark of zero is awarded for taught coursework that is submitted late without prior formal permission (only granted under exceptional mitigating circumstances) in all schools except Materials, which awards 10% for the unit if it is submitted up to a week late. After a week a mark of zero is awarded.
- Dissertations deadlines are set as 51 weeks after the start of the programme in all schools except Materials which has a submission deadline of early September

#### (iii) VARIATION FROM MEnt REGULATIONS

- For Physics & Astronomy and MBS, the students is allowed to retake each unit on one occasion and can be awarded a compensated pass if the unit mark is 40-50% AND the overall average marks for the taught component are greater than 50%. In Materials and Chemistry, the response does not clarify whether a compensated pass is permitted. There is no reference to compensated passes within the regulations.
- All schools except for Materials allow an extension to the dissertation deadline of up to 4 months at the discretion of the University. Materials do not permit extensions which contradicts the current regulations (section 6).
- The MEnt regulations do not provide any details about exit awards, but the responses to the questionnaire highlight that Chemistry, Physics & Astronomy and MBS all offer a PG Certificate. Materials offer a PG Diploma.

#### 4.2 MRes

The following MRes programmes were identified across the Institution according to those programmes listed on the University of Manchester website in April 2009 (those rows shaded in blue represent programmes who did not respond to the questionnaire):

Programme Title	Programme Type	Classification according to school	School	Faculty
Technical Textiles	MRes	PGT	Materials	EPS
Biological Sciences	MRes	PGT	FLS	FLS
Criminology & Socio-Legal Studies (SLS pathway)	MRes	PGT	Law	FoH
Criminology and Socio-Legal Studies (Criminology pathway)	MRes	PGT	Law	FoH
Management	MRes	PGT	MBS	FoH
Philosophy	MRes	PGT	SoSS	FoH
Cardiovascular Sciences	MRes	PGT	Medicine	MHS
Medical Sciences	MRes	PGT	Medicine	MHS
Primary Care [Web-based Learning]	MRes	PGT	Medicine	MHS

Programme Title	Programme Type	Classification according to school	School	Faculty
Public Health [Web-based Learning]	MRes	PGT	Medicine	MHS
Dental Public Health	MRes	PGT	Dentistry	MHS
Translational Medicine: Interdisciplinary Molecular Medicine	MRes	PGT	Medicine	MHS
Translational Medicine: Pharmaceutical Cancer	MRes	PGT	Medicine	MHS
Psychology	MRes	PGT	Psychology	MHS
Tissue Engineering for Regenerative Medicine	MRes	PGT	Med School	MHS
Interdisciplinary Medicine and Engineering (MIME)	MRes / MSc by Research	PGT/PGR	Med School	MHS/EPS

Based on the data returned via the questionnaire the following points represent the key similarities and differences between MRes programme.

## (i) <u>SIMILARITIES BETWEEN MRes PROGRAMMES</u>

- All MRes programmes are run for 1 year full time
- All MRes programmes comprise 180 credits
- Extensions to dissertation submission deadlines are generally permitted under exceptional or mitigating circumstances
- External examiners are assigned per cohort for all MRes programmes
- All MRes programmes offer the PG Diploma and/or the PG Certificate as exit awards
- Exam boards meet at least twice per year
- Students are not required to undertake an oral examination of the thesis unless requested by the examiner

## (ii) <u>DIFFERENCES BETWEEN MRes PROGRAMMES</u>

- All schools classified the MRes as a PGT award with the exception of the Interdisciplinary Medicine and Engineering (MIME) programme which is a collaborative programme run as an MRes (PGT) programme in MHS and an MSc by Research (PGR) programme in EPS
- All programmes are run in both full time and part time mode apart from MRes Biological Sciences (FLS), MRes Management (MBS), MRes Cardiovascular Sciences (Medicine), MRes Translational Medicine (Medicine), MRes Tissue Engineering for Regenerative Medicine (Medical School) and MRes / MSc by Research Interdisciplinary Medicine and Engineering (Medical School).
- All MRes courses which are available part time are run over 2 years duration except for MRes Medical Sciences (24-36 months), MRes Primary Care (web-based learning) (2-5 years), MRes Dental Public Health (up to 5 years)
- The following MRes courses are offered via distance learning or blended learning; MRes Cardiovascular Sciences, MRes Medical Sciences, MRes Primary Care (web-based learning), MRes Public Health (web-based learning), MRes Dental Public Health, MRes Translational Medicine: Interdisciplinary Molecular Medicine, MRes Tissue Engineering for Regenerative Medicine
- Although all MRes programmes comprise 180 credits in total, the way the credits are broken down into taught and research components differs significantly across the Institution;
  - 30 taught credits : 150 research credits MRes Interdisciplinary Medicine and Engineering (MIME)
  - o 45 taught credits : 135 research credits MRes Biological Sciences
  - 60 taught credits : 120 research credits- MRes Cardiovascular Sciences, MRes Medical Sciences, MRes Translational Medicine, MRes Tissue Engineering for Regenerative Medicine

- 90 taught credits : 90 research credits MRes Philosophy, MRes Primary Care (web-based learning), MRes Public Health (web-based learning), MRes Dental Public Health
- 120 taught credits : 60 research credits MRes Criminology, MRes Management, MRes Psychology
- The ratio of compulsory: optional taught courses varies per MRes programme
- The format of the dissertation varies between programmes and generally takes the form of one single dissertation, a combination of separate reports/journals which are combined to form a dissertation, or a combination of reports, journals and oral presentations.
- Tutors are assigned to students for the taught component of the programme in a number of ways; per unit, per cohort, per group of students, selected by the student. The frequency of meetings with tutors varies from weekly, fortnightly to twice per semester, e-contact or is dependent on the individual unit.
- The dissertation submission deadline is generally 51 weeks after the start of the programme. Some programmes use alternative dates such as 52 weeks after the start of the programme, 1<sup>st</sup> week of September, September 7<sup>th</sup>, around 12<sup>th</sup> September
- Where formal permission has not been granted for late submission, some programmes award a mark of zero, and some schools award a maximum mark of 50% for late submission.
- All schools except for MBS, and all schools in MHS, allow an extension to the dissertation deadline at the discretion of the University. The length of the dissertation is normally 4 months as described in the MRes regulations, with the exception of the schools of Law which allows a 3 month extension.

#### (iii) VARIATION FROM MRes REGULATIONS

• Although there is quite significant variation in the way that MREs programmes are structured, the programme in general fits within the MRes regulations. This is because the regulations are less prescriptive than other degree regulations and are vague in relation to programme structure.

#### 4.3 MSc by Research

The following MSc by Research programmes were identified across the Institution according to those programmes listed on the University of Manchester website in April 2009 (those rows shaded in blue represent programmes who did not respond to the questionnaire):

Programme Title	Programme Type	Classification according to school	School	Faculty
Chemistry	MSc by Research	PGR	Chemistry	EPS
Atmospheric Sciences	MSc by Research	PGR	EAES	EPS
Basin Studies and Petroleum Geoscience (previously Dynamic Sedimentology and Petroleum Geoscience Studies)	MSc by Research	PGR	EAES	EPS
Environmental Geochemistry and Geomicrobiology	MSc by Research	PGR	EAES	EPS
Isotope Geochemistry and Cosmochemistry	MSc by Research	PGR	EAES	EPS
Palaeontology and Palaeobotany	MSc by Research	PGR	EAES	EPS
Physics and Chemistry of Minerals and Fluids	MSc by Research	PGR	EAES	EPS
Structural and Petrological Geoscience	MSc by Research	PGR	EAES	EPS
Aerospace Engineering	MSc by Research	PGR	MACE	EPS
Civil Engineering	MSc by Research	PGR	MACE	EPS
Management of Projects	MSc by Research	PGR	MACE	EPS
Mechanical Engineering	MSc by Research	PGR	MACE	EPS
Advanced Aerospace Materials Engineering	MSc by Research	PGR	Materials	EPS
Biomedical Materials	MSc by Research	PGR	Materials	EPS

Programme Title	Programme Type	Classification according to school	School	Faculty
Ceramics & Glasses	MSc by Research	PGR	Materials	EPS
Composite Materials	MSc by Research	PGR	Materials	EPS
Corrosion & Protection	MSc by Research	PGR	Materials	EPS
Metallic Materials	MSc by Research	PGR	Materials	EPS
Nanostructured Materials	MSc by Research	PGR	Materials	EPS
Paper Science	MSc by Research	PGR	Materials	EPS
Polymer Science & Engineering	MSc by Research	PGR	Materials	EPS
Technical Textiles	MSc by Research	PGR	Materials	EPS
Textile Design, Fashion & Management	MSc by Research	PGR	Materials	EPS
Textile Science & Technology	MSc by Research	PGR	Materials	EPS
Astronomy and Astrophysics	MSc by Research	PGR	Physics	EPS
Condensed Matter Physics	MSc by Research	PGR	Physics	EPS
Nonlinear and Liquid Crystals Physics	MSc by Research	PGR	Physics	EPS
Nuclear Physics	MSc by Research	PGR	Physics	EPS
Particle Physics	MSc by Research	PGR	Physics	EPS
Photon Physics	MSc by Research	PGR	Physics	EPS
Physics	MSc by Research	PGR	Physics	EPS
Theoretical Physics	MSc by Research	PGR	Physics	EPS
Biological Physics	MSc by Research	PGR	Physics	EPS
Interdisciplinary Medicine and Engineering	MRes / MSc by Research	PGT/PGR	Med School	MHS/EPS

Based on the data returned via the questionnaire the following points represent the key similarities and differences between the MSc by Research programme.

## (i) <u>SIMILARITIES BETWEEN MSc by Research PROGRAMMES</u>

- All programmes are offered in full time and part time mode
- All programmes are 12 month FT and 24 months PT
- None of the programmes are offered as distance learning courses
- All programmes are 180 credits in total, split into 30-60 credits taught, 120-150 credits research. Of the 60 taught credits, 30 credits are compulsory, 30 credits are to be selected by the student
- The frequency of meetings with tutors for the taught components varies according to the taught unit
- Late submission for both the taught component and the dissertation is permitted under mitigating or exceptional circumstances
- Supervisors are assigned per student for the research component of the programme, and in general meet weekly, although there is some variation depending on the programme

## (ii) <u>DIFFERENCES BETWEEN MSc by Research PROGRAMMES</u>

- All schools classified the MSc by Research as a PGR award with the exception of the Interdisciplinary Medicine and Engineering (MIME) programme which is a collaborative programme run as an MRes (PGT) programme in MHS and an MSc by Research (PGR) programme in EPS
- The MSc by Research programmes in the medical school and EAES have compulsory taught units, whereas those in Chemistry, Materials and Physics & Astronomy are all optional taught modules.
- All programmes have a single dissertation except for the Interdisciplinary Medicine and Engineering programme (MIME) which has a dissertation which is made up of two separate reports from two research placements

- Tutors are assigned per module for the taught components in Chemistry, EAES, Physics & Astronomy, and the Medical School but assigned per student in Materials.
- The number of taught credits that a student is permitted to retake varies between schools as follows:
  - All units Chemistry, Physics & Astronomy
  - 30 credits Materials
  - None Interdisciplinary Medicine and Engineering
- The dissertation submission deadline is generally 51 weeks after the start of the programme. Some programmes use alternative dates such as end of year one (EAES), 1<sup>st</sup> week of September (Interdisciplinary Medicine and Engineering programme)
- Where formal permission hasn't been given for late submission of the dissertation, most schools apply the late submission fee, with the exception of the Medical School which applies zero marks for the Interdisciplinary Medicine and Engineering programme (MIME)
- The submission pending period is not permitted in most schools with the exception of Chemistry (permits 4 months submission pending) and Physics & Astronomy where it is dealt with by the Faculty Office.
- All MSc by Research programmes assign an external examiner per cohort, with the exception of the Interdisciplinary Medicine and Engineering programme (MIME) which assigns examiners per cohort.
- In general, a viva examination is not required for MSc by Research Programmes with the exception of those programmes run in EAES.

## (iii) VARIATION FROM MSc by Research REGULATIONS

- All schools award a zero mark for late submission that does not have formal approval with the exception of EAES whereby students lose 10% per working day. This contradicts the regulations which state that all students will be awarded a mark of zero if any piece of work is submitted late without formal permission (regulation 4f)
- All schools with the exception of Chemistry stipulate that students must successfully complete their taught component before they progress to their dissertation. In Chemistry students must complete the taught component before they 'submit' their dissertation which contradicts regulation 4c
- Although exit awards are not specified in the regulations, the PG Diploma/PG Certificate is offered as an exit point in the School of Materials and the PG Diploma is offered as an exit for the Interdisciplinary Medicine and Engineering programme (MIME) programme

## 4.4 ChM

There was only one instance of the ChM being run in the School of Medicine. According to the comments returned in the questionnaire, MHS does not actively promote the ChM degree and has not had a student registered on the programme in the last 4-5 years. Most applicants are expected to register via the MD route.

The responses to the questionnaire do suggest, however, that the programme is run in line with the ChM Regulations which draws more parallels with the MPhil and Doctoral programmes than the Masters programmes under consideration in this review. A proposal is also currently being prepared in MHS to create a separate taught Masters programme, MCh in Clinical Orthopaedics, but the final proposal for this Masters programme has not yet been agreed. No further analysis has therefore been conducted regarding the CHM as part of this review.

## 4.5 Key variations between the MEnt, MRes and MSc by Research

In addition to there being a number of differences in the way in which each individual type of programme is coordinated in different schools, there are also a number of variations between programme types that have been identified as a result of the questionnaire. This comparison of the

degree types could help inform any classifications used to define the distinction between taught and research Masters programmes in operation across the Institution.

The main variations are as follows:

- (i) The credit structure in relation to the ratio of taught credits and research credits varies between programmes. In general, the MEnt and MSc by Research allow no more than 60 taught credits. The MRes regulations don't specify the number of taught credits and the ratio of taught:research credits varies significantly between disciplines across the institution
- (ii) The way in which examiners are appointed for the research/dissertation component is in line with research degrees for the MEnt and MSc by Research but is vague within the MRes regulations. In general, examiners are nominated by the supervisor for the MSc by Research and MEnt programmes which implies that there is a clear process whereby examiners are nominated on a student-by-student basis. In contrast, although the regulations are vague, the questionnaire responses and anecdotal evidence suggests that examiners are appointed per cohort for the MRes programme.
- (iii) There are variations in exit awards between programmes. The MRes regulations are clear in relation to exit award requirements (PG Certificate or PG Diploma), but the MSc by Research and the MEnt do not stipulate whether exit awards are possible. In addition, for these programmes there is variation in practice between schools in terms of whether exit awards are offered.

## 5. CONCLUSIONS AND RECOMMENDATIONS

A number of key conclusions can be drawn from the analysis of the questionnaire and a detailed examination of Institutional regulations in addition to an initial assessment of practice at other Russell Group Universities. The main conclusions from this review are detailed below with associated recommendations for further work.

(i) Generally, at a high level, there is consistency across the Institution in the way the MSc by Research and the MEnt programme types are structured, but there is some level of variation in the minor details of each of the programmes and the way in which they are coordinated within the schools (section 4.1(ii) and section 4.3(ii)). In addition to variations across schools, there are a small number of areas whereby the way the programmes are coordinated in practice contradicts University regulations (sections 4.1(iii) and 4.3(iii)).

**RECOMMENDATION 1:** For the MSc by Research and the MEnt, a decision is needed as to whether minor school-level variations are acceptable at the programme level to allow flexibility in how the programme is run within each school, or whether these details should be more explicitly defined within the regulations to ensure greater consistency across the Institution. Where more consistency is necessary, the MSc by Research regulations and MEnt regulations should be updated to reflect requirements.

**RECOMMENDATION 2:** There are a small number of instances whereby the MSc by Research and the MEnt are not being coordinated in line with regulations. These instances require consideration and a decision is required on whether the regulations need changing to reflect practice or whether the programmes need to change the way they are coordinated to meet the requirements of the current regulations.

(ii) In practice, there is a relatively high level of variation in the way that MRes programmes are structured across the Institution. In general they are being run within the framework of the regulations, but this is primarily because the regulations are vague in a number of places and therefore allow a wider degree of flexibility in programme structure. Although there is consistency in the total number of credits allocated to the MRes programmes (180 credits), there appears to be quite significant variation in relation to how the credit structure is defined for the taught and research components within each programme and there is no reference in relation to how the credits should be split between the taught and research components within the Regulations. The variation across the Institution spans from 30 taught : 150 research (MRes Interdisciplinary Medicine and Engineering (MIME)) to 120 taught credits : 60 research credits (MRes Criminology, MRes Management, MRes Psychology).

**RECOMMENDATION 3:** The MRes regulations should undergo a thorough review and be updated in line with findings contained in this report. Where necessary the MRes regulations should be made more explicit (eg: credit structure) in order to reduce the level of variation in practice across the Institution. This recommendation ties in with Recommendation 7 and responsibility for this set of regulations, which currently lies with the Teaching and Learning Support Office (TLSO), may also need to be reconsidered depending on decisions about PGT/PGR classification of the programme.

**RECOMMENDATION 4:** Following a review and update of the MRes regulations, the programme structure in schools should be revisited to ensure that it is being run in accordance with regulations

(iii) Generally there are inconsistencies in relation to the type of information which is presented within the Regulations. For example, what happens if a piece of coursework is submitted late without permission, are compensated passes allowed, what exit awards (if any) should be permitted, do students need to successfully complete the taught component of the programme before 'starting' or 'submitting' their dissertation.

**RECOMMENDATION 5:** There should be more consistency in the type of information contained within the MSc by Research, MRes and MEnt regulations. Based on the comparisons highlighted in section 2.1 the categories and type of information within the regulations for these programmes could be standardised.

(iv) There appears to be confusion as to what constitutes a research (PGR) Masters degree and what constitutes a taught (PGT) Masters degree and a lack of formal definition of these terms across the Institution. Currently at the University of Manchester, the MSc by Research and the MEnt programmes are considered to be research masters programmes, whereas the MRes is considered to be a taught Masters programme. However, based on significant variation in the programme credit structure of the MRes across schools and discrepancies in the way the MRes is classified at other Russell Group Institutions, a review of the current classification may be required at this University. In addition, the 'MA by Research' is not currently offered as a research masters programme at this Institution but is offered at a number of other Russell Group Institutions. Informal discussions with other Russell Group Institutions has also identified that the MRes is classified as a research programme within some Doctoral Training Centres in order to gain an additional years research income.

**RECOMMENDATION 6:** A formal Institutional definition for research masters degrees and taught masters degrees should be agreed by GEG and TLG. This should be made available on the Gradate Education website and the appropriate website within TLSO. This could incorporate the following definitions:

- A Research Masters degree must have a **majority research component** ie: greater than 50% of the credits accumulated in a research masters degree must come from independent research undertaken by the student. In contrast a taught masters degree should comprise greater than 50% taught units
- The research component of a research masters degree must be examined on an individual basis ie: a separate external examiner must be assigned per student in a particular cohort. In contrast, a taught masters degree will have one external examiner per cohort.

**RECOMMENDATION 7:** Based on the variety in structure of the MRes programmes across the Institution, and any outcomes from Recommendation 6, consideration should be given to the classification of the MRes programme in terms of whether it fits best within a taught masters programme structure or a research masters programme structure. This should also take into consideration anecdotal evidence which suggests that other Russell Group Institutions define the MRes as a research programme within Centres for Doctoral Training in order to gain an additional years research income.

**RECOMMENDATION 8:** In order to be comparable with other Russell Group Institutions consideration should be given as to whether there is a requirement for the University of Manchester to offer an 'MA by Research' programme

- (v) There is a discrepancy in the way that the MIME masters programme is coordinated across two faculties (MHS and EPS) in that the award given to the student varies according to which faculty the student is registered in. The programme has been coordinated in MHS where it is run as an MRes and considered to be a PGT award, but students who register on the programme in EPS register on the MSc by Research where the programme is considered to be a PGR award. Thus students in one cohort will be awarded a different degree under different classifications depending on where they registered. Since this review was undertaken, a meeting to discuss this programme has subsequently taken place with representatives from both faculties and it has been decided that this programme will close in 2010. Any students applying to this programme which has a stream that will allow the students to do a similar research project to those offered on MIME. There were a number of problems with management and recruitment to the MIME programme as well as the cross-faculty issues and for this reason the school took the decision to end recruitment.
- (vi)The ChM programme structure is more aligned with the MPhil and PhD regulations and was therefore not considered in great detail as part of this review. However, through assessing the current regulations a number of minor errors were identified.

**RECOMMENDATION 9:** The ChM regulations should be update in line with the minor errors identified in this review

(vii) The University has a policy on the examination of doctoral degrees and the examination of MPHil degrees, but has nothing in place for the examination of other research masters degrees (eg: MSc by Research and MEnt). Research Masters degrees are referred to in the nomination of examiners policy, but the process for examining students on these programmes is not formally defined by the University.

**RECOMMENDATION 10:** To assess whether the University's 'Examination of doctoral degrees policy' or 'Examination of Master of Philosophy (MPhil) policy' can be reviewed to include any additional research Masters programmes (eg: Masters by Research, MEnt). If not alternative policy documentation should be considered for the examination of these programmes

# APPENDIX 1 – EXTERNAL DEFINITIONS OF RESEARCH AND TAUGHT MASTERS DEGREES

QAA	QAA Master's degree characteristics report, March 2010 http://www.gaa.ac.uk/academicinfrastructure/benchmark/masters/MastersDegreeCharacteristics.pdf
	http://www.qu.de.we/deddemicini dstructure/benefiniarity/mdsters/Mdstersbegreeenardeteristics.pur
	Extract from the Code of practice for the assurance of academic quality and standards in higher education
	Research Programmes "Specifically, it covers the PhD (including the New Route PhD and PhDs awarded on the basis of published work), all forms of taught or professional doctorate, and <i>research master's degrees where the research</i> <i>component (including a requirement to produce original work), is larger than the taught component when</i> <i>measured by student effort.</i> " <u>http://www.qaa.ac.uk/academicinfrastructure/codeofpractice/section1/default.asp</u>
	QAA Higher Education Framework for England (Aug 08) Research master's degrees (eg MPhil, MLitt) –not typically credit rated Taught MPhil – 360 credits Taught master's degrees (eg MA, MSc, MRes) – 180 credits <u>http://www.qaa.ac.uk/England/credit/creditframework.asp#p1.3</u>
HEFCE	Masters degree (MA/MSc/MPhil/MEd) MA/MSc degrees are awarded to graduates who have undertaken a further course of study, after an honours degree, either full-time or part-time. Masters degrees may be taken following a period of work experience and some courses take the form of company training programmes. MPhil degrees may be awarded following a period of research rather than a course of study
	http://www.hefce.ac.uk/aboutUs/glossary/glossary.htm
HESA	Masters degree mainly by research (LOO) Masters degree obtained primarily through advanced supervised research written up as a thesis/dissertation (typically two years of supervised work or the equivalent, typical title MPhil, possibly MSc, MA, MLitt but excluding a taught Masters as usually understood)
	Masters degree not mainly by research (M00) Masters degree obtained typically by a combination of coursework and thesis/dissertation, and NOT primarily through advanced supervised research written up as a thesis/dissertation (use this code for taught Masters degrees, typical title MSc or MA). Post-experience Masters degrees should be coded below
	Masters degree not mainly by research (M01) Taught Masters degree designed specifically as a training in research methods and intended as a preparation for advanced supervised research (use this code only for MRes degrees and similar)
	<b>Masters degree not mainly by research (M10)</b> Post-experience taught Masters degree (MEd, for example 'Post-experience' implies a period of at least two years' relevant work experience as a pre-requisite for entry to the programme leading to the qualification. Do not use this category simply because a qualification is being taken post-experience).
	Masters degree not mainly by research (M11) Master of Business Administration (use this code rather than M10 for post-experience MBA)
	http://www.hesa.ac.uk/index.php/component/option.com_studrec/task.show_file/Itemid,233/mnl,07051 /href,MappingQUALAIM.html/
The framework for higher education qualification s in England,	Much of the study undertaken for master's degrees will have been at, or informed by, the forefront of an academic or professional discipline. Students will have shown originality in the application of knowledge, and they will understand how the boundaries of knowledge are advanced through research. They will be able to deal with complex issues both systematically and creatively, and they will show originality in tackling and solving problems. They will have the qualities needed for employment in circumstances requiring sound judgement, personal responsibility and initiative in complex and unpredictable professional environments.
Wales and Northern Ireland	Master's degrees are awarded after completion of taught courses, programmes of research or a mixture of both. Longer, research-based programmes may lead to the degree of MPhil. The learning outcomes of most master's degree courses are achieved on the basis of study equivalent to at least one full-time calendar year and are taken by graduates with a

	bachelor's degree with honours (or equivalent achievement) http://www.qaa.ac.uk/academicinfrastructure/FHEQ/EWNI08/default.asp#p4.4
Council	<b>Postgraduate</b> programmes of study are those leading to higher degrees, diplomas and certificates (including Postgraduate Certificate of Education (PGCE) and professional qualifications) and usually require that entrants are already qualified to degree level (i.e. already qualified at level 6 of the National Qualifications Framework).
	In analyses where postgraduate level of study is disaggregated into <b>postgraduate research</b> and <b>postgraduate taught</b> , the following groupings are used:
	<b>Postgraduate research</b> , where the qualification aim is a research-based higher degree. These programmes of study include Doctorates, Master's, postgraduate Bachelor's degrees and postgraduate diplomas or certificates (not PGCE) studied mainly by research.
	<b>Postgraduate taught</b> , where the qualification aim is a taught higher degree. These programmes of study include Doctorates, Master's, postgraduate Bachelor's degrees and postgraduate diplomas or certificates studied not mainly by research, including PGCE and professional qualifications.
	http://www.britishcouncil.org/eumd-information-data-definitions.htm#level
	There are a number of different taught programmes in the UK, covering a full range of subjects. Masters programme (e.g. MA, MBA, MSc, MRes):
	<ul> <li>Masters of Arts (MA) courses cover arts, business and social sciences, as well as some science subjects.</li> <li>The MBA is the most well-known Masters qualification for business, but tuition fees are expensive. Masters courses in project management are becoming very popular as an alternative (sometimes taken as an MA or MSc).</li> </ul>
	Masters of Science (MSc) and Masters of Research (MRes) are awarded for science and social science courses. Although the two types are very similar, the MRes course must guarantee that at least 60% of its content is individual research project work, as it is more geared to those wishing to pursue a research career afterwards. The MRes may sometimes attract more funding
Wikipedia	In the <u>UK</u> and <u>Ireland</u> , the <u>Master of Research</u> degree is an <u>advanced postgraduate</u> degree available in a range of academic disciplines. Although a relatively new degree, the MRes is becoming increasingly popular with a number of the <u>Russell Group</u> Universities such as <u>Manchester University</u> , <u>Liverpool University</u> and the <u>University of London</u> who are offering this degree programme. The MRes is designed to prepare students for doctoral research. <sup>[1]</sup> MRes can also stand for <b>Master's by Research</b> , or <b>Master's in Research</b> . Many MRes courses are advanced postgraduate degrees which differ from taught Masters degrees by placing particular emphasis on a large dissertation (typically between 35-40,000 words) in addition to fewer taught modules. MRes courses in the UK must guarantee that at least 70% of the content is project based as it is "geared to those wishing to pursue a research career afterwards." <sup>(Prospects)</sup>
	<i>Differences Between MRes and MPhil</i> The main difference between an MRes and an MPhil is that an MRes has taught components although the main focus is still on research. An MPhil can simply be regarded as the first year of a PhD and consists purely of research.
	http://en.wikipedia.org/wiki/Master_of_Research

# APPENDIX 2 – MRes CLASSIFICATION AT OTHER RUSSELL GROUP INSTITUTIONS

University	PGT/PGR?	URL	Details / comments
Birmingham	Research	http://www.as.bham.ac.uk/legislation/docs/r egulations_part6.pdf	One year Master of Research (MRes). The programme comprises between 30 and 70 credits of taught modules from a notional 180 credits for the programme, together with one or more research report(s) or a thesis.
Bristol	Taught	http://www.bristol.ac.uk/esu/pg/pgtcodeonli ne.html	Refers to MRes in Taught CoP
Cambridge	Taught?	http://www.admin.cam.ac.uk/univ/gsprospe ctus/study/taught/mres.html	Not clear whether classified as taught or research. Its listed under courses with taught elements, and isn't listed under their research programmes.
Cardiff	Research	http://courses.cf.ac.uk/postgraduate/search /index.html?search=mres&type=research& mode=fulltime	Only one course available for MRes (Biosciences) http://courses.cf.ac.uk/postgraduate/course/detail/961.html Stage 1 (October - January): students complete taught modules totalling 60 credits, which can lead to the award of a Postgraduate Certificate in Biosciences. All modules are compulsory. Stage 2 (February - September): students complete a practical project (120 credits), selected by the student in combination with academic staff in one of the Schools research groups.
Edinburgh	Research	http://www.ed.ac.uk/studying/postgraduate/ research-degrees	Appears to offer an MSc by Research rather than an MRes (a search for MRes returns a few results but when you click on most of them it takes you to an MSc by Research page)
Glasgow	Taught?	http://dcs.gla.ac.uk/courses/masters/mres/ structure.html	The following degrees are offered as 'Masters by Research' ; Master of Laws by Research; Master of Music; Master of Philosophy by Research; Master of Science by Research; Master of Theology by Research ; and Master of Veterinary Medicine. Eg: MRes Sociology and Research Methods (120 credits taught; 60 credits dissertation)
Imperial	Taught	http://www3.imperial.ac.uk/pgprospectus/w hatcanyoustudy/postgraduatequalifications	Looks like MRes listed under taught degree but they do offer other masters courses 'by research'. States the following: "The MSc, MRes, MEd, MPH and MBA degrees are awarded on the results of examinations (usually consisting of both written papers and the submission of a dissertation or report) following a course of advanced study"
Kings College	Taught	http://www.kcl.ac.uk/graduate/progs/qual/ta ught.html http://www.kcl.ac.uk/college/policyzone/ass ets/files/governance_and_legal/Academic %20Regulations%202009-10%20- %20A1.pdf	
UCL	Taught	http://www.ucl.ac.uk/prospective- students/graduate-study/degree- types/taught-programmes	Listed under their taught programmes

Leeds	Taught?	http://www.leeds.ac.uk/site/custom_scripts/ course_index.php?PGTviewSearch=&PGT type=PGT&PGTterm=201011&PGTcatego ryID=&PGTquery=mres	Generally MRes programmes listed under taught masters but there is one research MRes listed (The molecular basis of biological mechanisms)
Liverpool	Research	http://www.ljmu.ac.uk/RGSO/69746.htm http://www.liv.ac.uk/study/postgraduate/res earch_opportunities/	Listed under their postgraduate research programmes
LSE	Taught?	http://www2.lse.ac.uk/graduateProspectus 2010/taughtProgrammes/Home.aspx	Only found one MRes programme in MRes/PhD Political Science which was listed under taught programmes
Manchester	Taught (both)	http://www.manchester.ac.uk/postgraduate /	generally listed as taught but MRes is under both taught and research programmes
Newcastle	Research	http://www.ncl.ac.uk/postgraduate/research /degreeoptions/mres.htm	Listed as a research programme
Nottingham	Both	http://pgstudy.nottingham.ac.uk/postgradua te-courses/courses-a-z.aspx http://pgstudy.nottingham.ac.uk/postgradua te-research/opportunities-a-z.aspx	Listed under both taught and research programmes. A number of disciplines offer research programmes as a 'masters by research'
Queen's Belfast	Taught	http://www.qub.ac.uk/schools/SchoolofPolit icsInternationalStudiesandPhilosophy/Pros pectiveStudents/PostgraduateTaughtDegre es/MResPolitics/	
Oxford	MRes not available	http://www.ox.ac.uk/admissions/postgradu ate_courses/course_guide/about_our_prog rammes.html	Don't appear to offer an MRes course - offer an MSc -taught and MSc (R) - research
Sheffield	?		Very little information about MRes. Offer a few MSc (Res) programmes which are listed as taught programmes but contain a larger project than a standard MSc.
Southampton	Taught (both)	http://www.southampton.ac.uk/postgraduat e/pgstudy/programmes/index.html	Taught programmes with the exception of MRes English (listed under research)
Warwick	Research	http://www2.warwick.ac.uk/study/postgradu ate/courses/researcha2z/	Only one MRes listed (History of Art) and its listed under research degrees http://www2.warwick.ac.uk/study/postgraduate/courses/depts/ historyart

# APPENDIX 3 - MASTERS REVIEW QUESTIONNAIRE TEMPLATE

YOUR NAME:	
SCHOOL:	
Course Details	
Course Title	
Award (eg: MRes, MEnt, MSc by Research, ChM)	
Classification (PGR/PGT)	
Programme handbook web address/URL (please supply electronic copy or hard copy if URL not available)	
Mode of Study	
Is the course offered FT, PT or both?	
What is the full time duration of the course?	
What is the part time duration of the course?	
Is the course offered in Distance Learning mode? If Yes, please provide details	
Is the course offered in Blended Learning mode (i.e.: some electronic learning, some sessions delivered face to face?). If yes, please provide details	
Credit structure	
What are the total number of credits allocated to the course?	
How many credits are assigned to the taught component?	
What is the ratio of compulsory : optional taught credits?	
How many credits are assigned to the research/dissertation component?	
What is the structure for the research component (eg: one dissertation, 2 research reports etc)	
Taught Component	
How are tutors allocated for the taught component (eg: per student / per cohort / groups / per module / other?)	
How often do students meet with tutors? (eg: weekly / fortnightly / monthly / dependent on module?)	
Under what circumstances, if any, do you allow late submission of coursework?	
What penalty, if any, do you incur for late submission of coursework (eg: late submission fee, zero mark etc)	

What happens if a student fails a taught component (eg: allowed to retake the module / awarded zero marks / fail the course / resubmission fee? )	
How many modules are students allowed to retake if they fail on first attempt?	
Are students required to complete all taught components of the degree before they start their dissertation? Please state arrangements if this is not the case.	
How are examiners assigned for the taught component (eg: per student / per cohort?)	
Research Component	
How are supervisors allocated for the research component (eg: per student / per cohort / groups / other)	
How often do students meet with supervisors?	
When are students required to submit their dissertation? (eg: 51 weeks after the start of the programme / August 31st etc)	
Under what circumstances, if any, do you allow late submission of the dissertation?	
What penalty, if any, do you incur for late submission of the dissertation? (eg: late submission fee / zero mark etc)	
Do you permit a submission pending period for the dissertation? If not, please detail any other systems you have in place for students that aren't able to complete their dissertation by the submission deadline	
What is the maximum period you allow for submission pending?	
How are examiners assigned for the research component (eg: per student / per cohort?)	
Are students required to take part in an oral examination of the dissertation?	
General	
What are the minimum entry requirements for the degree?	
What exit points are offered on the degree (eg: PG Diploma / PG Certificate)	
How often does the examination board meet?	
Comments	
Please provide any additional comments you feel would be useful for consideration in the Masters review.	

# APPENDIX 4: LIST OF PROGRAMMES REVIEWED AT THE UNIVERSITY OF MANCHESTER

Those schools highlighted in blue did not provide responses to the questionnaire.

Title	Programme	PGR/PGT	School	Faculty
Chemistry	MEnt	PGR	Chemistry	EPS
Chemistry	MSc by Research	PGR	Chemistry	EPS
Environmental Innovation	MEnt	PGT	EAES	EPS
Atmospheric Sciences	MSc by Research	PGR	EAES	EPS
Basin Studies and Petroleum Geoscience (previously Dynamic Sedimentology and Petroleum Geoscience Studies)	MSc by Research	PGR	EAES	EPS
Environmental Geochemistry and Geomicrobiology	MSc by Research	PGR	EAES	EPS
Isotope Geochemistry and Cosmochemistry	MSc by Research	PGR	EAES	EPS
Palaeontology and Palaeobotany	MSc by Research	PGR	EAES	EPS
Physics and Chemistry of Minerals and Fluids	MSc by Research	PGR	EAES	EPS
Structural and Petrological Geoscience	MSc by Research	PGR	EAES	EPS
Advanced Manufacturing Technology	MEnt	PGR	MACE	EPS
Mechanical Engineering Design	MEnt	PGR	MACE	EPS
Aerospace Engineering	MSc by Research	PGR	MACE	EPS
Civil Engineering	MSc by Research	PGR	MACE	EPS
Management of Projects	MSc by Research	PGR	MACE	EPS
Mechanical Engineering	MSc by Research	PGR	MACE	EPS
Textiles and Fashion	MEnt	PGR	Materials	EPS
Advanced Aerospace Materials Engineering	MSc by Research	PGR	Materials	EPS
Biomedical Materials	MSc by Research	PGR	Materials	EPS
Ceramics & Glasses	MSc by Research	PGR	Materials	EPS
Composite Materials	MSc by Research	PGR	Materials	EPS
Corrosion & Protection	MSc by Research	PGR	Materials	EPS
Metallic Materials	MSc by Research	PGR	Materials	EPS
Nanostructured Materials	MSc by Research	PGR	Materials	EPS
Paper Science	MSc by Research	PGR	Materials	EPS
Polymer Science & Engineering	MSc by Research	PGR	Materials	EPS
Technical Textiles	MSc by Research	PGR	Materials	EPS
Textile Design, Fashion & Management	MSc by Research	PGR	Materials	EPS
Textile Science & Technology	MSc by Research	PGR	Materials	EPS
Technical Textiles	MRes	PGT	Materials	EPS
Physics and Astronomy	MEnt	PGR	Physics	EPS
Astronomy and Astrophysics	MSc by Research	PGR	Physics	EPS
Condensed Matter Physics	MSc by Research	PGR	Physics	EPS
Nonlinear and Liquid Crystals Physics	MSc by Research	PGR	Physics	EPS
Nuclear Physics	MSc by Research	PGR	Physics	EPS

Particle Physics	MSc by Research	PGR	Physics	EPS
Photon Physics	MSc by Research	PGR	Physics	EPS
Physics	MSc by Research	PGR	Physics	EPS
Theoretical Physics	MSc by Research	PGR	Physics	EPS
Biological Physics	MSc by Research	PGR	Physics	EPS
Biological Sciences	MRes	PGT	FLS	FLS
Criminology & Socio-Legal Studies (SLS pathway)	MRes	PGT	Law	FoH
Criminology and Socio-Legal Studies (Criminology pathway)	MRes	PGT	Law	FoH
Management	MRes	PGT	MBS	FoH
Management	MEnt	PGR	MBS	FoH
Philosophy	MRes	PGT	SoSS	FoH
Master of Surgery	ChM	PGR	Medicine	MHS
Cardiovascular Sciences	MRes	PGT	Medicine	MHS
Medical Sciences	MRes	PGT	Medicine	MHS
Primary Care [Web-based Learning]	MRes	PGT	Medicine	MHS
Public Health [Web-based Learning]	MRes	PGT	Medicine	MHS
Dental Public Health	MDPH	PGT	Dentistry	MHS
Dental Public Health	MRes	PGT	Dentistry	MHS
MClin Res	MClin Res	PGT	Nursing	MHS
Translational Medicine: Interdisciplinary Molecular Medicine	MRes	PGT	Medicine	MHS
Translational Medicine: Pharmaceutical Cancer	MRes	PGT	Medicine	MHS
Psychology	MRes	PGT	Psychology	MHS
Tissue Engineering for Regenerative Medicine	MRes	PGT	Med School	MHS
Interdisciplinary Medicine and Engineering	MRes / MSc by Research	PGT/PGR	Med School	MHS/EPS