# **Regulation XXVI**



# **Higher Degrees by Research**

(Formerly Regulations for Higher Degrees by Research - RHDR)

(Version effective from 1 August 2011 until 25 January 2012)

These Regulations should be read in conjunction with University Code of Practice on Research Degree Programmes.

# 1. The University confers the following higher degrees by research:

- Master of Philosophy M.Phil.
- Doctor of Philosophy Ph.D.
- Engineering Doctorate Eng.D.

# 2. The following persons may submit for higher degrees of the University subject to these Regulations:

- eligible Research Students
- staff of at least five years' standing, subject to the provisions of para 3.1 hereof
- graduates of the University or Diplomates of the former Loughborough College of Technology.

# 3. Research Students - Qualifications

3.1 To be registered as a Research Student a candidate must possess one of the following qualifications:

- a degree of a university in the United Kingdom or the Republic of Ireland;
- a degree awarded by the former C.N.A.A.;
- a Diploma in Technology awarded by the former N.C.T.A.;
- a Diploma with Honours of the former Loughborough College of Technology;
- the academic requirements for corporate membership of a British Chartered professional institution previously approved for this purpose by Senate; an acceptable equivalent degree from an international university.
- any other equivalent qualification approved by Senate

3.2 Candidates must possess an English Language qualification acceptable to the University.

**3.3** Any candidate may be required by an Associate Dean (Research), prior to registration, to pass written and/or oral examinations set at first degree level which may be preceded by a preliminary course of study.

# 4. Research Students - Registration

4.1 Every registration shall be made on the recommendation of the Dean of School or their nominee.

Candidates failing to submit within two years of completing their standard period of registration shall require permission from the Dean of the Graduate School on the recommendation of the Associate Dean (Research) of the

### 10. Examination

**10.1** For a research degree the basis of the assessment shall be submitted work (except as provided for in paragraphs 6 and 7) in conjunction with an oral examination.

**10.2** Attendance at an oral examination by the candidate for a higher degree may be waived only by the Dean of the Graduate School with the advice of the candidate's Supervisor. In the case where attendance at the oral examination is waived a second or third External Examiner shall be appointed as considered appropriate.

#### **11. Recommendations of Examiners**

**11.1** The decision of the Examiners shall be one of the following:

- · Pass (with or without corrections required)
- Refer
- Fail

The Examiners may also decide that work submitted for the degree of Ph.D. has reached the required standard for the award of the degree of Master of Philosophy with or without corrections.

Where the Examiners recommend a pass but require corrections to be made to a thesis prior to the award of a degree, such corrections must be carried out, to the satisfaction of the Examiners, within six months of the candidate being informed of the necessary corrections.

**11.2** In the case of pass with corrections required the Internal Examiner will be responsible for confirming in writing to the Research Student Office that the corrections have been satisfactorily accomplished

**11.3** In any case where the Examiners' decision is "Refer" the same Examiners wherever possible shall conduct the re-examination. Examiners will be required to submit a joint report to the Research Student Office following the re-examination.

**11.4** The decision of the Examiners shall be reported and their report made available to the Faculty Board or Senate who shall award the degree, if any, recommended by the Examiners except as provided in para.11.9 hereof.

**11.5** In any case where the Examiners are unable to agree upon their decision, an additional External Examiner shall be appointed whose decision shall be final. Where that decision is Refer, the examination of the referred thesis shall be conducted wherever possible by all the appointed examiners.

**11.6** A candidate for whom the Examiners' decision is "Refer" may resubmit within a period and subject to any conditions which may be determined by the Examiners. The resubmission period will be within 12 months. The resubmission date will be notified to the student by the Research Student Office.

**11.7** The Examiners may refer a candidate's research degree submission on one occasion only, except where the examination has been made void following an Appeal or exceptionally where new matters have come to the Examiners' attention which they were previously unaware of.

**11.8** In the event that a candidate whose thesis has been referred is required to attend a further oral examination, or where a candidate is required to attend a further oral examination following an appeal in accordance with paragraph 15.9, an independent non-examining chair of the viva panel shall be appointed.

**11.9** In the case of a candidate submitting for the degree of Ph.D. who satisfied the requirements for the degree of Master of Philosophy only, Senate shall not award the degree of Master of Philosophy unless the candidate shall have agreed in writing that such an award is acceptable. If the candidate does not accept the award of the degree of Master of Philosophy he/she shall be held to have failed and the candidate may exercise the right of appeal against the decision of the examiners as provided in paragraph 15 hereof. However, should the Appeal body reject the appeal, the candidate shall still be eligible for the award of the degree of Master of Philosophy should he/she wish to accept it after the outcome of the appeal is known.

### 12 .Unsuccessful Candidates

**12.1** Any candidate submitting for a higher degree for whom the Examiners' decision is "Fail" shall not thereby be prevented from registering anew under these Regulations, except where significant academic misconduct has been proven, in which case registering anew will not be permitted. Any candidate submitting under para. 6 or para. 7 of

- Dean of the Graduate School or a Pro-Vice-Chancellor or an Associate Dean (Research) (Chair) The Chair of the Appeal Panel shall be from a School other than the one in which the student is registered.
- 2 members of the academic staff who shall be an Associate Dean (Research) from a School other than the appellant's own and one member of Senate.

**15.5** No member of the University shall be appointed to membership of the Appeal Committee who has been involved in the examination or had any supervisory relationship with the student, nor is a member of the School in which the student is registered. No School may have more than one of its members on the appeal body.

**15.6** An appellant shall have the right to appear in person before the Appeal Committee and may be accompanied by a person of his/her own choosing.

**15.7** The Appeal Committee shall determine its own procedure within the framework set out in the Code of Practice on Appeals and may take such advice as it considers appropriate.

15.8 In the event of an appeal against a fail outcome the Appeal Committee shall have power either to reject the

**16.7** All candidates shall register at the beginning of their programme and subsequently at the beginning of each academic year for the modules which they are taking in that year, subject to their satisfactory progress in research and the extension of their registration for the Degree of EngD in accordance with para. 4.4 of the Regulation XXVI.

**16.19.6** be required to withdraw from the EngD but be encouraged to register for the degree of Master of Philosophy.

**16.20** For the degree of EngD the basis of assessment, following satisfactory completion of the curriculum-based element, shall be a collection of published papers and a discourse of no more than 20,000 words setting out the aims, objectives, findings and industrial relevance/impact of the research work undertaken. The submission shall include a minimum of 3 published (peer reviewed) papers or papers accepted for publication, of which at least one should be in an appropriate engineering journal. Where the research programme is subject to a confidentiality agreement entered into by the participating company at the outset of the programme, technical reports should be included in lieu of published papers. Such technical reports shall have been subject to external assessment.

**16.21** When an eligible candidate has notified his/her intention to make a submission the Dean of the Graduate School shall appoint examiners. There shall be a least two external examiners in addition to the internal examiner.

**16.22** In order to be eligible for the award of the degree of Doctor of Engineering, candidates must demonstrate innovation in the application of knowledge to the engineering business environment. In addition they must demonstrate the following competences:

- i. Expert knowledge of an engineering area;
- ii. The appreciation of industrial engineering and development culture;
- iii. Project and programme management skills;
- iv. Teamwork and leadership skills;
- v. Oral and written communication skills;
- vi. Technical organisational skills;
- vii. Financial engineering project planning and control;
- viii. The ability to apply their skills to new and unusual situations;
- ix. The ability to seek optimal, viable solutions to multi-faceted engineering problems and to search out relevant information sources.

For all candidates registered for the award of EngD competences iii-ix will be demonstrated by successful completion

**17.10** There shall be a Programme Board for the curriculum-based element of the EngD programme which shall meet for the purpose of awarding the Degree of Master or the Postgraduate Diploma or the Postgraduate Certificate and which shall exercise the other powers of a Programme Board described in Regulation XXI.

**17.11** Candidates will be eligible to progress on the EngD programme when they have accumulated 180 credits from the curriculum-based element within the maximum period of time specified in the Programme Regulations, except where exemption has been granted in accordance with paragraph 17.2 of these Regulations.

**17.12** Subject to the provisions of paragraph 17.2, candidates who accumulate sufficient credit in accordance with the requirements of Regulation XXI and the appropriate Programme Regulations shall also be eligible for the award of MSc.

**17.13** Subject to the provisions of paragraph 17.2, candidates not meeting the above requirements, or whose registration for the Degree of EngD has not been extended because of unsatisfactory progress in research, but who accumulate 100 credits and obtain marks of 40% in further modules with a weight of 20 shall be eligible for the award of the Postgraduate Diploma. Candidates who accumulate 60 credits shall be eligible for the award of Postgraduate Certificate.

**17.14** The Degree of Master of Science, Postgraduate Diploma and Postgraduate Certificate shall be awarded in a named subject listed in the Programme Regulations. In each instance, the subject shall be determined by the Programme Board in the light of the selection of modules taken by the individual candidate.

**17.15** Candidates who have satisfied the requirements for the award of the Degree of Master of Science may be awarded the degree with Distinction in accordance with the scheme set out in Regulation XXI.

**17.16** The School shall appoint for each candidate an industrial supervisor and an industry-based project Co-ordinator in addition to a supervisor who is a member of the academic staff at the University and a Director of Research Degree Programme.

**17.17** Candidates shall re-register annually. Re-registration will depend upon satisfactory performance in research and taught modules. In research satisfactory progress will depend upon the assessment of annual research reports

17.20.3 a research thesis.

An Annex to the Programme Specification for the curriculum-based component shall specify which of the above routes are available to candidates for the EngD and the procedure for clarifying the route to be pursued.

**17.21** When an eligible candidate has notified his/her intention to make a submission the Dean of the Graduate School shall appoint examiners. There shall be a least two external examiners in addition to the internal examiner.

**17.22** In order to be eligible for the award of the degree of Doctor of Engineering, candidates must demonstrate innovation in the application of knowledge to the engineering business environment. In addition they must demonstrate the following competences:

- i. Expert knowledge of an engineering area;
- ii. The appreciation of industrial engineering and development culture;
- iii. Project and programme management skills;
- iv. Teamwork and leadership skills;
- v. Oral and written communication skills;
- vi. Technical organisational skills;
- vii. Financial engineering project planning and control;
- viii. The ability to apply their skills to new and unusual situations;
- ix. The ability to seek optimal, viable solutions to multi-faceted engineering problems and to search out relevant information sources.

For all candidates registered for the award of EngD competences iii-ix will be demonstrated by successful completion of compulsory taught modules in Management and Professional Development or equivalent modules identified in Programme Regulations undertaken during the curriculum-based component of the programme.

**17.23** The term research student shall be taken to apply to all Research Engineers registered on the EngD programme. The provisions of the Regulation XXVI shall apply to all candidates except as provided for in the foregoing paragraphs.

### 18.Regulations for the New Route PhD

18. Regulations for the PhD Programme in Hydrogen, Fuel Cells and their Applications

**18.1**. Candidates registering for the research degree programme in Hydrogen, Fuel Cells and Their Applications shall normally possess at least an upper second class honours degree

18.2. Candidates shall be required to pursue an approved full time programme of postgraduate taught modules and

**18.12.** Candidates not meeting the above requirements, or whose registration for the Degree of MPhil or PhD has not been extended because of unsatisfactory progress in research, but who accumulate 100 credits and obtain marks of 40% in further modules with a weight of 20 shall be eligible for the award of the Postgraduate Diploma. Candidates who accumulate 60 credits shall be eligible for the award of Postgraduate Certificate.

**18.13.** Candidates shall re-register annually .Re-registration will depend upon satisfactory performance in research and taught modules. In research satisfactory progress will depend upon the assessment of annual research reports submitted by the candidate of not less than 5000 words or its adjudged equivalent. Assessment shall be undertaken by someone other than the candidate's Supervisor or Director of Research Degree Programme and shall include an oral examination.

**18.14.** Lack of satisfactory progress in either the curriculum based element of the programme or the research project will mean that the candidate will not be permitted to continue to pursue the programme of study. At the end of year 2 the Progress Board shall consider the progress of candidates on the basis of their performance in the taught element and research element of the programme and the candidates shall either:

18.14.1 transfer from MPhil to PhD and be permitted to continue with the programme;

OR

18.14.2 be required to withdraw from the reso(aw-3.621(aw)42)6. 2

### 20. Regulations for Higher Doctorates

**20.1** The Degree of Doctor of Technology (DTech), Doctor of Science (DSc) or Doctor of Letters (DLitt) may be conferred by the University in Recognition of published work constituting a sustained, substantial and original contribution to knowledge. The degree is conferred on the recommendation of the Examiners.

### 20.2 Eligibility

To be eligible to submit for a Higher Doctorate a candidate must be a graduate of the University or a Diplomate of the former Loughborough College of Technology or a member or former member of the Academic Staff of the University. Graduates of the University may submit after not less than nine years after having had conferred the degree of Bachelor, or not less than six years after having conferred the degree of Doctor of Philosophy, Academic Staff must have been in post not less than seven years.

# 20.3 Application

A candidate must apply in writing to the Academic Registrar or nominee, stipulating the Degree for which he/she is applying and enclosing such examination fees as may be determined by Council from time to time.

#### 20.4 Presentation

The Degree is awarded solely on the basis of published work of high merit in fields of research in which the candidate is engaged. The publications should indicate command over a field of study and a sustained contribution to understanding within that field. Three copies must be submitted of books or work published in journals which the candidate wishes to be taken into consideration. Exceptionally, and at the discretion of the Pro-Vice Chancellor (Research), work of more limited circulation may be taken into consideration.

There must also be submitted a statement containing:

- 1. a list of the candidate's publications in which are marked those which contain the main substance of the submission;
- 2. a synopsis of not less than 1000 words which describe how the sustained contribution to the field of study has been made with due reference to the marked publications;
- a declaration of the nature and extent of the candidate's own contribution, and that of co-authors and collaborators, to each of the publications submitted;
- 4. a declaration of what part of the publications, if any, has been submitted by the candidate, or collaborators, for a degree of this or any other university, or of any professional body or learned society.

On the basis of items 1-4 the the Pro-Vice-Chancellor (Research) in consultation with the Dean of the appropriate