Programme of Study for the degree of Doctor of Philosophy 2021/22 Dual Award

(Leeds University – Lulea Technical University (2020-2024 only: this programme is no longer recruiting)

Horizon 2020: GREENTRIBOS

Entry Requirements

A minimum of a II(i) honours degree, or equivalent qualification

Applicants will normally be required to have obtained a relevant degree of at least equivalent to a UK upper second class honours degree as well as at least 6.5 on IELTS (with no component below 6.0) or an equivalent English language qualification.

1. Candidates may undertake study for the Dual PhD degree under the supervision of a joint supervisory team from the University of Leeds and Lulea Technical University. Supervisors who satisfy the eligibility requirements specified by the relevant committee will be appointed at the commencement of the programme of study. This programme is a collaborative dual PhD offered by the Faculty of Engineering and Physical Sciences.

2. The requirements for the degree, including periods of study and examination requirements are set out in Ordinance X and its associated regulations[1].

3. All candidates for the degree of PhD are expected to undertake appropriate generic training. Candidates may be required to undertake some elements of advanced study and complete written examinations satisfactorily before proceeding to the submission of a thesis.

Dual PhD Candidatures

Full-time

The period of study will be up to a maximum of four years and the method of study will be full-time. The Maximum Time Limit for submission of the thesis is four years. The postgraduate researcher will spend between 1 and 2 years at the University of Leeds as set out in the programme of study for this arrangement.

Progress and Monitoring

4. Candidates will in the first instance be accepted either as a provisional candidate for the degree of PhD. After the initial period of provisional registration, candidates are subject to the process whereby they are formally assessed[2] and, if successful in the assessment, are transferred to the specific degree category of PhD or MPhil.

5. Full-time candidates must undergo assessment by no later than 12 months of study.

6. The decision to transfer will be based on the submission of appropriate material for assessment and all Postgraduate Researchers (PGRs) must undergo an oral examination by an assessment panel which must include at least two independent individuals who have not been involved in the supervisory support of the candidate. The PGR will be interviewed by the assessment panel in the form of a viva voce examination.

[1] The normal standard period of study for a full-time PhD is 3 calendar years, except for certain schemes including some within the Faculty of Biological Sciences and within Centres for Doctoral Training where the normal period of full-time study is 4 calendar years. Special arrangements may also apply to the split-site programmes and to programmes leading to joint awards with other institutions.

[2] For those programmes which have a standard period of study of four years full-time and the assessment for transfer to a specific degree category of either PhD or MPhil normally takes place towards the end of the second year.

7. A case for an extension to the period of provisional registration would have to be made on academic grounds to the relevant committee. In such cases any period of extension will be no more than six months.

8. The arrangements for formal reports on progress by the supervisor(s) are described in the University Code of Practice for Research Degree Candidatures which is published in the Postgraduate Researcher Handbook which is available at: http://ses.leeds.ac.uk/researchdegreepolicies

Examination and Assessment

9. Candidates must present a thesis[3] (100,000 words maximum) on the subject of their research and satisfy the examiners as specified in Ordinance X and its associated Regulations. The viva will also be conducted in English.

10. Except with the special permission[4] of the relevant committee, every candidate is required to submit their thesis for examination for the degree of Doctor of Philosophy by no later than the end of the fourth year after their entry upon an approved course of full-time study.

11. As permitted in Ordinance X (Article 8), when the progress and quality of the candidate's research justify it, the relevant committee is empowered to reduce the required minimum period of study provided that no candidate shall submit for examination of the thesis before the completion of:
    - a total of two calendar years of full-time study
    - a total of three calendar years of part-time study

12. Following examination, the examiners will be asked to make one of the following recommendations
    a) Pass
    b) Pass (subject to the correction of 'editorial and presentational corrections' or 'minor deficiencies'): these corrections must be made within four or twelve weeks respectively from the date of the oral examination. The internal examiner is responsible for ensuring that 'editorial and presentational corrections' or minor deficiencies are corrected by the candidate. The degree will not be awarded until confirmation that the corrections have been completed is received.
    c) Referral (see 16 below)
    d) Recommend award of MPhil[5]: for those candidates who fail to achieve the standard for the award of a PhD but who nevertheless satisfy the criteria for the award of the degree of MPhil.
    e) Recommend award of MPhil[5] (subject to the correction of 'editorial and presentational corrections' or 'minor deficiencies'): These corrections must be made within four or twelve weeks respectively from the date of the oral examination. The internal examiner is responsible for ensuring that 'editorial and presentational corrections' or 'minor deficiencies' are corrected by the candidate. The degree will not be awarded until confirmation that the corrections have been completed is received
    f) Referral for MPhil[1] (see 16 below)
    g) Fail: the candidate has no further opportunity for submission.

13. If the thesis is not considered to be of sufficiently high standard to recommend the award of the degree of Doctor of Philosophy but there is evidence of the potential of a successful PhD or MPhil submission, then on the recommendation of the examiners either:
    a) The candidate will be granted permission to resubmit the work in a revised form for the degree of PhD within a period of eighteen months, on one occasion only and on payment of an additional fee.
    b) The candidate will be granted permission to resubmit the work in a revised form for the degree of MPhil within a period of twelve months, on one occasion only and on payment of an additional fee.

14. Any candidate whose thesis has been referred for the degree of PhD may, subject to approval by the Head of their School, exercise the option of resubmitting a revised thesis for consideration for the award of

[3] Except where an alternative method of submission is stipulated in the Regulations for Ordinance X. In Schools where an alternative form of submission is permitted, specific regulations for the binding and presentation of the work are published.
[4] The 4 year Biological Sciences PhD has a maximum period of study of 48 months
[5] In these circumstances the degree of MPhil may not be awarded with distinction

the degree of Master of Philosophy.

15. The recommendation of the examiners is subject to confirmation by the Graduate Board's Examinations Group which will consider the examiners' report. In the case of joint awards with another institution the recommendation of the Examiners is also subject to confirmation by the other institution.

16. The Learning Outcomes for the degree of Doctor of Philosophy are published below.

Learning Outcomes / Transferable Key Skills / Learning Context / Assessment for PhD

1. Learning Outcomes

On completion of the research programme PGRs should have shown evidence of being able:

- to discover, interpret and communicate new knowledge through original research and/or scholarship of publishable quality which satisfies peer review
- to present and defend original research outcomes which extend the forefront of a discipline or relevant area of professional/clinical practice
- to demonstrate systematic and extensive knowledge of the subject area and expertise in generic and subject/professional skills
- to take a proactive and self-reflective role in working and to develop professional relationships with others where appropriate
- to independently and proactively formulate ideas and hypotheses and to design, develop, implement and execute plans by which to evaluate these
- to critically and creatively evaluate current issues, research and advanced scholarship in the discipline
- to demonstrate systematic knowledge of and be able to critically assess, analyse and engage with the ethical and legal context of their research and any ethical and legal implications of their research.

2. Transferable (Key) Skills

PGRs will have had the opportunity to acquire the following abilities through the research training and research specified for the programme

- the skills necessary for a career as a researcher and/or for employment in a senior and leading capacity in a relevant area of professional/clinical practice or industry
- evaluating their own achievement and that of others
- self-direction and effective decision making in complex and unpredictable situations
- independent learning and the ability to work in a way which ensures continuing professional development

3. Learning Context

This will include the critical analysis of, and decision making in, complex and unpredictable professional and/or clinical situations. The structure of the programme will provide research and/or professional training, breadth and depth of study and opportunities for drawing upon appropriate resources and techniques. Opportunities will be provided for PGRs to:

- develop to a high level interests and informed opinions
- develop to a high level their design and management of their learning activities
- develop to a high level their communication of their conclusions
- make an original contribution to the field

PGRs will be expected to engage in the exercise of autonomous initiative in their study and work in professional environments.

4. Assessment

Achievement will be assessed by the examination of the candidate's thesis[6] and performance under oral examination. Assessment will involve the achievement of the candidate in:

- evidencing an ability to conduct original and independent broad and in-depth enquiry within the discipline or within different aspects of the area of professional/clinical practice normally leading to published work
- drawing on and/or developing a range of research techniques and methodologies appropriate to enquiries into the discipline/area of professional practice
- demonstrating independent critical ability in the application of breadth and depth of knowledge to complex issues within the discipline or specialist area of professional/clinical practice
- drawing on a range of perspectives on the area of study
- evaluating and criticising received opinion
- making reasoned and well-informed judgements on complex issues within the specialism whilst understanding the limitations on judgements made in the absence of complete data
- the written style and overall presentation of the thesis

[6] or alternative form of thesis