

UCL Academic Manual 2024-25

Chapter 5: Research Degrees Framework

Part C: Doctor in Engineering (EngD) Additional Regulations

These are additional regulations for EngD programmes. EngD students should also refer to:

Chapter 5, Part A: Research Degree Regulations

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# 1 EngD in Biochemical Engineering and Bioprocess Leadership

# 1.1 Standard Entrance Qualifications

- The normal minimum entrance qualifications for registration for the degree of Doctor in Engineering in the field of Biochemical Engineering and Bioprocess Leadership is the award of a first or an upper second class Honours degree or equivalent overseas qualification in biological sciences, chemistry, chemical engineering, biochemical engineering, biotechnology, mechanical engineering, electronics and electrical engineering or any related discipline.
- Relevant postgraduate or industrial experience (especially as gained in the Bioprocessing industry) may be acceptable where the first degree is a lower second-class Honours degree or equivalent overseas qualification.

#### MRes Progression to the EngD

- 3. Students holding the MRes in Bioprocessing from UCL will be exempted from the first year of the EngD programme. Students holding an MRes or an equivalent qualification from an external institute may be admitted up to a year after the commencement of the taught element of the EngD programme and be exempted from part or the entire taught element of the MRes programme with the permission of the Programme Director.
- 4. A student holding an MRes or an equivalent qualification from an external institute, who has been exempted from part or the entire taught element of the MRes programme, cannot then be awarded the MRes if they withdraw from or fail the EngD.

#### Further guidance

- 1. For automatic progression from MRes to PhD/EngD, students should achieve an average mark of not less than 60% in the independent, original research components of the programme, and not less than 50% in the taught elements.
  - This regulation relates to automatic progression from MRes to MPhil/PhD or EngD programmes.
  - ii) However, in cases where a student did not meet these requirements, but who has the support of the MPhil/PhD or EngD programme organisers, a case in writing can be made to the Chair of the Research Degree Committee for the consideration of suspension of regulations on a case-by-case basis.
- 2. The length of the MRes programme should be extended to one calendar year and one month to allow Boards of Examiners time to determine awards prior to students registering on the associated EngD or MPhil/PhD programme.
- 3. MRes students who fail the taught components examined in and before June should be offered their resit opportunity before or in August of the same year.
- MRes students who are not awarded the degree after the first attempt and the resit attempt should not progress to the associated EngD programme and would be required to leave UCL.
- 5. MRes students who fail the dissertation should not register on the EngD programme in the following academic year but remain on the MRes and resubmit the dissertation by the end of the first term in the following academic year. The Board would then consider the award for these students in January, when they would be allowed to register on the EngD if they passed. If, as a result, they missed taught components which formed part of the EngD registration, these should be followed at the point when they are next available.

# 1.2 Duration of Programme of Study

1. Full-time: four calendar years or three calendar years for students holding the MRes (Chapter 5, Part A, Section 1.3: MRes Progression to the EngD).

### 1.3 Curriculum

1. The programme of study for the degree of Doctor in Engineering in the field of Biochemical Engineering and Bioprocess Leadership includes formally taught elements which provide academic underpinning for the research undertaken. Candidates are required to complete modules from each of three main elements and undertake substantial research work resulting in a thesis and will be given an oral examination in accordance with <a href="Chapter 5">Chapter 5</a>, Part A, Section 5: Final Examination.

#### Further guidance

i) Students who have progressed from an MRes to the EngD are not required to take the year one formally taught elements.

#### Formally Taught Elements (four-year EngD students)

2. The formal taught part of the EngD programme is comprised of four elements which provide (i) the underlying fundamental skills for research studies in bioprocessing and biochemical engineering (ii) the methodology for the translation of such skills into real engineering outcomes (iii) skills underlying the management and delivery of a research programme and (iv) evidence of original research via submission of research thesis. They must have passed modules to a minimum value of 120 credits in order to quality for submission of the thesis. The modules passed in order to qualify for submission of the thesis must include modules to prescribed credit values taken from each of the three elements (i)-(iii). Normally, students registered on the EngD will have satisfied the requirements for the MRes in the first year of the EngD programme. However, there may be instances where the full requirements are not satisfied until later in the programme. Provided that all the requirements are satisfied by the time they exit the programme, such students may be awarded the MRes if they should then fail to meet the requirements of the EngD.

#### **Thesis**

3. The thesis shall be submitted in accordance with <u>Chapter 5, Part A, Section 5: Final Examination</u>.

# 1.4 Assessment and Final Examination

- Assessments qualifying a candidate for submission of a thesis shall take place within the period of the overall programme and shall be by written examination or coursework, as prescribed for each individual module.
- 2. All assessments will be overseen by an examiner external to UCL. A candidate failing any assessment (whether by written paper or by coursework) will be permitted to re-enter the examination for the module in question on one occasion only.
- 3. The award of the degree shall be dependent on the thesis, which a candidate may not submit until he/she has successfully completed all the other elements of the programme as detailed above, and the oral examination. The thesis must meet the same requirements as those prescribed in <a href="Chapter 5">Chapter 5</a>, <a href="Part A">Part A</a>, <a href="Section 5">Section 5</a>: <a href="Final Examination">Final Examination</a>.
- 4. The oral examination shall be conducted by at least two examiners, at least one of whom shall be external to UCL. The examination will be designed to test the thesis against the criteria above and will further examine the candidate's conception and understanding of the integration of all elements of the programme and their related assessment.
- Students who register as MRes students and subsequently decide to continue to EngD may do so at the end of the first year, provided that they have satisfied the requirements for the MRes degree (as stated above).

- 6. Students who register on the EngD and are unable to fulfil the requirements of the EngD will be awarded the MRes degree provided that they have satisfied the requirements of the MRes degree.
- 7. An EngD student who fails the thesis and fails on resubmission may still be awarded an MRes subject to the requirements for MRes as stated (above) being met. Such an award would be at the recommendation of the EngD Board of Examiners. The award would be made by the whole Board of Examiners and would not be something recommended by the examiners of the thesis in any way.

# 1.5 Dates of Assessment and Final Examination

- 1. Modules for the taught part of the programme for four year EngD students will be assessed by the methods and at the dates indicated for the module in question.
- 2. Submission of the thesis shall be by the end of the final year of the programme or normally within a calendar year of the date of completion of the programme of study.