4.1.1.2 Degree Requirements

Coursework element**

The research degree programme includes an element of coursework in the same or related fields. This provides a graduate-level foundation and prepares the student for research. The coursework component comprises not less than 24 MCs (typically six graduate modules) for PhD students and 16 MCs (typically four graduate modules) for MEng students. Students of some departments may be required to read additional modules.

All coursework modules and English language requirements (for international students) are to be taken and passed at an expected level of proficiency.

**Specific coursework requirements for research programmes in Department of Electrical & Computer Engineering only

PhD coursework requirements:
- EE6990 Research Attachment
- 2 EE5xxx modules
- 2 EE6xxx modules
- 2 "unrestricted" modules from any of the following: (i) EE5xxx/ EE6xxx; (ii) EE5666 IA module; (iii) Level 5xxx/6xxx module from other Departments/Faculties; or (iv) EE4xxx module (subject to approval by Department on a case by case basis).
- EE6999 Doctoral Seminars

MEng coursework requirements:
- 2 EE5xxx modules
- 1 EE6xxx module
- 1 "unrestricted" module from any of the following: (i) EE5xxx/ EE6xxx; (ii) EE5666 IA module; (iii) Level 5xxx/6xxx module from other Departments/Faculties; or (iv) EE4xxx module (subject to approval by Department on a case by case basis).
- EE5999 Graduate Seminars

Compulsory ES5101 Technical Communication for Engineers for both PhD and MEng programmes.

Graduate Seminar

To cultivate a strong research culture among graduate students, the required coursework includes a "graduate/doctoral seminar" in which faculty members, graduate students and visitors present current research. All research students are also expected to obtain a satisfactory grade for the Graduate Seminar module.
Research Methodology & Ethics module

This module is relevant for engineering research students. It provides an insight into good practices of research methods abiding by scientific ethics. It aims to inculcate students with the knowledge to practice conducting good research methodology, bearing in mind ethical issues. Doctoral students are expected to obtain a satisfactory grade for this module.

PhD Qualifying Examination

A doctoral candidate must complete a prescribed set of modules before proceeding to the PhD Qualifying examination (QE). The QE comprises a comprehensive examination and a presentation of the PhD thesis proposal. The comprehensive examination tests the general competence of the candidate in his/her discipline(s), while the presentation ensures that the candidate is prepared to embark on his/her thesis research. The QE should usually be taken 12 to 24 months from the start of the PhD candidature.

Doctoral students are expected to pass both the comprehensive examination and the oral defence.

Thesis component

The Master’s programme requires the completion of a thesis not exceeding 30,000 words and the PhD programme requires a 40,000 word thesis. In both instances, the thesis is not measured by MCs. The thesis will be examined by internal/external examiners.

Oral Defence Examination

Doctoral candidates are required to undergo and pass an oral examination before a panel chaired by the candidates’ Head of Department and two examiners of the PhD thesis. Doctoral students are required to pass their oral defence thesis examination before they are conferred their doctoral degree.