

LOUGHBOROUGH UNIVERSITY
Regulations for the Curriculum-Based Component of the
Doctor of Engineering (EngD) Research Programme in
Efficient Fossil Energy Technologies

These Regulations refer to the conduct of the curriculum-based component of the EngD Programme in the Session 2009-2010 and must not be construed as relevant to any other Session. Notice of change will be given in subsequent editions of these Regulations. Research Engineers should enquire as to the up-to-date position when required. These Regulations are to be read in conjunction with the Regulations for the Degree of Doctor of Engineering (EngD), the Regulations for Higher Degrees by Research and Regulation XXI.

1. Structure

- 1.1 All Research Engineers who are registered on the Engineering Doctorate (EngD) programme are required to register for and satisfy the regulations for the curriculum-based component of the programme. The purpose of the taught modules is to develop knowledge and understanding of a number of technical, business and management subjects as a pre-requisite to the research element of the EngD award.
- 1.2 The curriculum-based component of the programme will normally require a total modular weight of 180 (including the Postgraduate Research Dissertation and Research Summer Schools, jointly weighted at 60 credits) taken from the range of postgraduate modules offered by the three Universities within the Doctoral Centre in Efficient Fossil Energy Technologies (Nottingham (N), Loughborough (L) and Birmingham (B)).
- 1.3 The curriculum-based component of the EngD programme should normally be completed within the first 2 years of registration.
- 1.4 Candidates who have previously studied appropriate Level 7 (MSc) material, already possess an appropriate MSc or have appropriate industrial experience may be allowed to reduce the curriculum-based component of the programme. Eligibility for a reduced curriculum-based component will be decided on an individual basis by the Efficient Fossil Energy Technologies DTC Management Group.
- 1.5 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 the Regulations for Higher Degrees by Research. Candidates are not eligible to register for modules whilst they remain in debt to the University.
- 1.6 Candidates who have completed part or all of the curriculum based element of their programme but who subsequently do not complete the requirements for the award of EngD may be eligible for the for the award of Postgraduate Certificate (PGCert), Postgraduate Diploma (PGDip) or Master of Science (MSc). The credit for these awards must have been accumulated as part of the curriculum-based component of the programme. Candidates who have, because of their previous study or experience, been allowed to reduce the curriculum-based component of the programme may not qualify for an award. The normal eligibility of candidates on the Programme for these

awards and for distinction where appropriate, will be in accordance with Regulation XXI.

- 1.7 Eligibility for the award of PGCert, PGDip or Degree of MSc may be subject to a waiver of Regulation XXI, on the grounds that different credit weightings within the partner institutions were difficult to accommodate.
- 1.8 The PGCert, PGDip or Degree of MSc shall be awarded in Efficient Fossil Energy Technologies.

2. Content

The programme has a number of special features as a consequence of the multi-university nature of the Efficient Fossil Energy Technologies Doctorate Centre (EFET DC). The Research Engineers (REs) will register at one of the three universities, but in order to maintain the integrity of the Centre all REs in each cohort will attend an initial full-time core training period of one semester duration. The core training semester will also include compulsory but non-assessed activities within the induction period.

The modular credits taken in the core training period will comprise 60 credits of compulsory modules offered by the three universities. The total taught element credits will be made up to 120 by specialist training modules which can be taken at any of the partner universities. There are three themes within the specialist modules, and REs are normally expected to take a minimum of 10 credits from each of these three themes.

Specialist modules can be undertaken at any preferred time during the programme subject to local prerequisite requirements.

The selection of elective modules should be discussed and agreed with the Research Engineer's supervisor(s) and the appropriate Programme Director.

2.1 Core Modules

Semester 1 - (total modular weight 60)

Code	Title	Modular Weight
L34619	Exploring Science and Technology in Society (N)	10
H84PGC	Power Generation and Carbon Capture (N)	10
N1DT15	Innovation and Technology Transfer (N)	10
G54RPS	Research and Professional Skills (N)	10
MPP163	Industrial Case Studies (L)	10
22831	The Energy System (B)	10

2.2 Specialist Modules - (total modular weight 60)

Optional modules may be chosen from the module catalogues of the universities of Nottingham, Loughborough and Birmingham. All module choice is subject to the approval of the Programme Director and the delivering institution(s) and/or department(s). Choice should normally be restricted to postgraduate modules (level 7) and should normally be chosen from the selection listed below. Most modules are delivered either as block-taught modules lasting 3 to 5 days or in Distance Learning format (indicated by * after the module code).

The research engineer is responsible for ensuring that all aspects of optional module choice can be incorporated into their individual timetable. Choice of optional modules is significantly affected by timetabling constraints and is also subject to availability, prerequisite, preclusive and student number restrictions. Any difficulties arising from optional module choice will not normally be considered as the basis of a claim for impaired performance.

REs must choose a minimum of 10 credits from modules typical of each of Themes 1-3.

Theme 1 – Advanced Technical Skills

Code	Title	Modular Weight
-	Combined Heat and Power Systems (N)	10
MPP140 or MPP340*	Materials, Sustainability and the Environment (L)	10
-	Coal Characteristics and Conversion (N)	10
MPP207	Surface Engineering (L)	10
MPP242	Microscopy (L)	10
MPP354	Fracture and Failure Methods (L)	10
-	Industrial Gas Control (B)	10

Theme 2 – Contextual Skills

Code	Title	Modular Weight
-	Energy Policy (B)	10
-	Politics of Climate Change (N)	10
-	Research Design and Practice in China (N)	10
-	Strategies for Corporate Social Responsibility (N)	10
-	Environmental Decision Making (B)	10
ELD531	Sustainability and Energy Systems (L)	10
-	International Law of Trans-Boundary Pollution (N)	10

Theme 3 – Advanced Management Skills

Code	Title	Modular Weight
-	Organisational Development and Change (N)	10
BSP816	Leading People to Influence Performance (L)	10
-	Creative Problem Solving (N)	10
-	Business Ethics (N)	10
-	Strategic Management (N)	10
-	Accounting and Corporate Law (B)	10
BSP759	Financial Management (L)	10

2.3 Project and Research Training - (total modular weight 60)

Code	Title	Modular Weight
MPP801	Research Project Portfolio: Part 1 (L)	20
MPP802	Research Project Portfolio: Part 2 (L)	30
-	Research Summer School (N)	10

The Research Project Portfolio: Part 1 should normally be completed in year 1, and the Research Project Portfolio: Part 2 should normally be completed in year 2.

The subject matter of the Research Project Portfolios should be self-contained and related to, but distinct from, the research embodied in the EngD discourse/thesis.

The module can be considered as the *Masters Project* for purposes of the award of MSc.

3. Assessment

- 3.1 The curriculum-based component of the EngD programme, including the Postgraduate Research Dissertation, shall be assessed in accordance with the procedures set out in Regulation XXI.
- 3.2 Provision will be made in accordance with Regulation XXI for candidates who have the right of re-examination to be reassessed, where suitable modules are available, during the University's Special Assessment Period.
- 3.3 Candidates will be eligible to progress on the EngD programme when they have accumulated 180 credits from the curriculum-based component within the period of time specified in paragraph 1.3 of these Regulations, except where exemption has been granted in accordance with paragraph 1.4 of these Regulations.
- 3.4 Three copies of the Research Project Portfolio (Parts 1 and 2) must be lodged with the Programme Director on or before the second anniversary of registration.