

LOUGHBOROUGH UNIVERSITY

Regulations for the Postgraduate Programme in Research Studies (in Physics)

These programme regulations apply to the conduct of this programmes in the 2011-12 session and should be read in conjunction with University Regulation XX and the relevant Module Specifications. These Programme Regulations may be subject to change from time to time. Notice of change will be given by the School responsible for the programme.

All of the Postgraduate Programmes in Research Studies in Physics may be taken by full-time or part-time study.

1 Structure

- 1.1 Administrative responsibility for the programme rests with the Department of Physics.
- 1.2 The award available is either the Master of Science (MSc) or Postgraduate Diploma (PGDip) or Postgraduate Certificate (PGCert).
- 1.3 The MSc programme in Research Studies (in Physics) is either 1 year by full-time study or 2 years by part-time study with the possibility of extending part-time study in accordance with Regulation XXI.
- 1.4

2 Content

2.1 Semester 1

2.1.1 Compulsory Modules (total Modular Weight 40)

Code	Title	Modular Weight
PHP180	Context of experimental research	20
<i>Or</i>		
PHP181	Context of theoretical research	20
PHP 100	Mathematical Methods for Interdisciplinary Sciences	20

2.1.2 Optional Modules (total Modular Weight 20)

Code	Title	Modular Weight
PHC 102	Cosmology (continues in Semester 2)	10 of 20

PHC130	Fundamentals of Quantum Information	10
PHD105	Classical Mechanics	10
PHD175	Econophysics	10
PHD401	Applied Superconductivity and Nanoscience	10
PHP105	Quantum Phenomena	20
MPP353	Electronic Materials	10
MPP242	Microscopy	10

Or other modules from the University's catalogue by agreement with the Programme Tutor.

2.2 Semester 2

2.2.1 Compulsory Modules (total Modular Weight 30)

Code	Title	Modular Weight
<i>Either</i>		
PHP380	Experimental Research Project (Continues in summer period)	30 (of 90)
<i>Or</i>		
PHP381	Theoretical Research Project (Continues in summer period)	30 (of 90)

2.2.2 Optional Modules (total Modular Weight 30)

Code	Title	Modular Weight
PHC102	Cosmology (continued from Semester 1)	10 of 20
PHD204	Superconductivity & Colossal Magnetoresistance Materials	10
PHD230	Quantum Computing	10
PHD205	Elementary Particle Physics	10

Or other modules from the University's catalogue by agreement with the Programme Tutor

2.3 Summer

2.3.1 Compulsory Modules (total Modular Weight 60)

Code	Title	Modular Weight
<i>Either</i>		
PHP380	Experimental Research Project (Continued from Semester 2)	60 (of 90)
<i>Or</i>		
PHP381	Theoretical Research Project (Continued from Semester 2)	60 (of 90)

2.4 Optional Modules

Not every optional module may be available in any one year. Some optional modules may require pre-requisite modules to be taken.

3 Assessment

- 3.1 Each module in the programme will be assessed, and credit awarded, in accordance with the levels of achievement specified in Regulation XXI.
- 3.2 The normal eligibility of candidates on the programme for the award of the Degree of Master, for the award of PGDip, for the award of PGCert, and for distinction where appropriate, will be in accordance with Regulation XXI.
- 3.3 Provision will be made, in accordance with Regulation XXI, for candidates who have the right for re-assessment to undergo re-assessment in the University's special assessment period where appropriate (not appropriate for PHP380 or PHP381).

4 Awards

- 4.1 Successful study will normally lead to a postgraduate award in Research Studies.
- 4.2 The title of the award will be suffixed by that specialization appropriate to the selection of topic for modules PHP180 or PHP181, PHP380 or PHP381, and optional modules as follows.
 - 4.2.1 Research Studies: Experimental Condensed Matter Physics
 - 4.2.2 Research Studies: Theoretical Condensed Matter Physics
 - 4.2.3 Research Studies: Surface Physics
 - 4.2.4 Research Studies: Materials Physics and Applications
 - 4.2.5 Research Studies: Quantum Information and Computing
 - 4.2.6 Research Studies: Security and Cryptography
 - 4.2.7 Research Studies: Nanoscience
 - 4.2.8 Research Studies: Quantum Structures and Phase Transitions
 - 4.2.9 Research Studies: Cosmology and Astrophysics
 - 4.2.10 Research Studies: Science of the Internet
 - 4.2.11 Research Studies: Psychophysics

5.0 Assessment

Candidates' final award will be determined in accordance with the scheme set out in Regulation XX1

Re-assessment

Provision will be made in accordance with Regulation XXI for candidates who have the right of re-assessment, to undergo re-assessment in the University's special assessment period. This provision may apply only to PH modules, excluding PHP180 and PHP181.