

LOUGHBOROUGH UNIVERSITY

REGULATIONS FOR THE HONOURS DEGREE PROGRAMMES IN INFORMATION TECHNOLOGY AND PHYSICS

These Programme Regulations refer to the conduct of this programme in the Session 2010/2011 and should be read in conjunction with University Regulation XX and the relevant Module Specifications. Notice of change will be given by the Department responsible for the programme.

1 STRUCTURE

- 1.1** Administrative responsibility for the programmes rests with the Department of Physics.
- 1.2** The programmes lead to the degree of BSc.
- 1.3** The duration of the programmes is a) 6 semesters full-time b) 8 semesters full-time or c) an 8 semester sandwich programme. Students on the 8 semester full-time and sandwich programmes are required to spend the year following Part B either (i) on an approved course of study at a University abroad or (ii) undertaking professional training respectively leading to the award of the Diploma in International Studies or the Diploma in Industrial Studies in accordance with Senate Regulation XI.

2 CONTENT

2.1 Part A - Introductory Modules

2.1.1 Semester 1

- (i) COMPULSORY MODULES (total modular weight 60)

Code	Title	Modular Weight
MAA108	Mathematics for Physics 1	10
PHA101	Mechanics	10
PHA102	Electricity & Magnetism	10
COA122	Programming for the WWW	20
COA101	Essential Skills for Computing	10

- (ii) OPTIONAL MODULES (none)

2.1.2 Semester 2

(i) COMPULSORY MODULES (total modular weight 60)

Code	Title	Modular Weight
PHA201	Atomic & Thermal Physics	10
PHA202	Light	10
MAA208	Mathematics for Physics 2	10
COA124	Computer Architectures	10
COA123	Server Side programming	10
COA201	Databases	10

(ii) OPTIONAL MODULES (none)

2.2 Part B - Degree Modules

2.2.1 Semester 1

(i) COMPULSORY MODULES (total modular weight 60)

Code	Title	Modular Weight
PHB182	Physics Laboratory	10
PHB110	Solid State Physics	10
PHB101	Waves	10
COB101	Requirements Analysis	10
COB231	Operating Systems, Networks and the Internet 1	10
COB290	Team Project (continues into semester 2)	10 (of 20)

(ii) OPTIONAL MODULES (none)

2.2.2 Semester 2

(i) COMPULSORY MODULES (total modular weight 50)

Code	Title	Modular Weight
PHB280	Electrical Measurements Laboratory	10
PHB201	Fields	10
PHB207	Electronics	10
COB132	Object Oriented Systems Design and HCI	10
COB290	Team Project (<i>continued from semester 1</i>)	10 (of 20)
ISB403	Legal and Professional Issues in Computing	10

(ii) OPTIONAL MODULES (none)

2.3 Part I

Candidates on the four year full-time programme must undertake an approved course of study at a University abroad. Candidates on the four year sandwich programme must undertake professional training.

2.4 Part C - Degree Modules

2.4.1 Semester 1

(i) COMPULSORY MODULES

Code	Title	Modular Weight
PHC388	Project (<i>Physics Department, continued in semester 2</i>)	30
MAB108	Mathematics for Physics 3	10
PHB106	Nuclear Physics	10
COC281	Software Project Management	10

(ii) OPTIONAL MODULES

Code	Title	Modular Weight
PHC118	Electromagnetism	10
PHC120	Surfaces, Thin Films and High Vacuum	10
PHC130	Fundamentals of Quantum Information	10
COC107	Knowledge-based Decision Support	10
COC170	Advanced Human Computer Interaction	10

2.4.2 Semester 2

(i) COMPULSORY MODULES

Code	Title	Modular Weight
PHB202	Quantum Mechanics 1	10
PHB203	Thermal Physics	10
PHC388	Project (<i>continued from semester 1</i>)	

(ii) OPTIONAL MODULES

Code	Title	Modular Weight
PHD230	Quantum Computing	10
COB120	2D Computer Graphics	10
COB232	Operating Systems, Networks and the Internet 2	10
COC003	E-business Planning and Marketing	10
COC131	Data Mining	10
COC140	E-Commerce Security	10
COC201	International Computing	10

In Part C candidates must choose optional Physics modules of total weight at least 10, and optional Computer Science modules of total weight at least 30 to make up a total modular weight of 120.

2.5 Total Modular Weighting per Semester

Students normally study modules with a total weight of 60 in each semester. In this context, the modular weight of the project PHC388 is assumed to be split 10:20 over the two semesters. However, students may be allowed to study modules up to a total weight of 70 in a semester, 120 in a Part, subject to the consent of the Head of Department.

3 ASSESSMENT

3.1 Criteria for Progression and Degree Award

Candidates must achieve the minimum credit requirements set out in Regulation XX in order to progress through the programmes and qualify for the award of the degree.

In order to progress from Part A to Part B, candidates must obtain a mark of at least 30% in all PH and MA code modules.

3.2 Relative Weighting of Parts of the Programmes for the Purpose of the Final Degree Classification

Candidates' final degree classification will be determined on the basis of their performance in degree level Module Assessments in Parts B and C in accordance with the scheme set out in Regulation XX. The average percentage marks for each Part will be combined in the ratio

$$\text{Part B: Part C} = 40:60$$

to determine the overall percentage mark for the Programme (the Percentage Mark).

3.3 Re-assessment

Provision will be made in accordance with Regulation XX for candidates who have the right of re-assessment in Parts A and B of the programme to undergo re-assessment in the University's special assessment period.