

Programme Regulations 2011/12

Degree of Bachelor of Science with Honours in Computing Science, Computing Science (Software Engineering), Computing Science (Networked Systems and Internet Technologies), Computing Science (Games and Virtual Environments), Degree of Bachelor of Science with Honours in Computing Science with Industrial Placement, Computing Science with Industrial Placement (Networked Systems and Internet Technologies), Computing Science with Industrial Placement (Games and Virtual Environments), Computing Science with Industrial Placement (Software Engineering),

UCAS Code:

Computing Science - G400;

Computing Science (Networked Systems and Internet Technologies) - G420;

Computing Science (Games and Virtual Environments) - G450;

Computing Science (Software Engineering) - G600;

Computing Science with Industrial Placement - G401;

Computing Science with Industrial Placement (Networked Systems and Internet Technologies) – G421;

Computing Science with Industrial Placement (Games and Virtual Environments) – G451;

Computing Science with Industrial Placement (Software Engineering) – G603

Notes

- (i) *These programme regulations should be read in conjunction with the University's Undergraduate Progress Regulations and Examination Conventions.*
- (ii) *All optional modules are offered subject to the constraints of the timetable and to any restrictions on the number of students who may be taught on a particular module. Not all modules may be offered in all years and they are listed subject to availability.*
- (iii) *A compulsory module is a module which a student is required to study.*
- (iv) *A core module is a module which a student must pass, and in which a fail mark may neither be carried nor compensated; such modules are designated by the board of studies as essential for progression to a further stage of the programme or for study in a further module.*

1. Stage 1

(a) Unless otherwise stated modules are not core.

(b) All candidates shall take the following compulsory modules:

<i>Code</i>	<i>Descriptive title</i>	<i>Total Credits</i>	<i>Credits Sem 1</i>	<i>Credits Sem 2</i>	<i>Level</i>	<i>Type</i>
CSC1011	Introduction to Problem Solving and Programming	20	20		4	
CSC1012	Object-oriented Programming	20		20	4	Core
CSC1014	World Wide Web and its Client-side Technologies	20		20	4	
CSC1015	The IT Professional in Today's Society	20	10	10	4	
CSC1016	Computer System Organisation	20	10	10	4	

(c) All candidates shall take **ONE** of the following optional modules:

<i>Code</i>	<i>Descriptive title</i>	<i>Total Credits</i>	<i>Credits Sem 1</i>	<i>Credits Sem 2</i>	<i>Level</i>	<i>Type</i>
CSC1013	Foundation Mathematics for Computing Science	20	20		4	
MAS1404	Mathematics for Computing Science	20	20		4	

2. Stage 2

- (a) Candidates for all degrees must take any deferred compulsory modules from Stage 1.
- (b) Subject to 2(a), candidates for all degrees shall take the following compulsory modules:

<i>Code</i>	<i>Descriptive title</i>	<i>Total Credits</i>	<i>Credits Sem 1</i>	<i>Credits Sem 2</i>	<i>Level</i>	<i>Type</i>
CSC2011	Advanced Programming	20	20		5	
CSC2012	Database Technology	20	20		5	
CSC2013	Computer Networks and System Programming	20		20	5	
CSC2014	Modelling and Computation	20		20	5	
CSC2015	Software Engineering Team Project	20	10	10	5	
CSC2016	Algorithm Design and Analysis	20	10	10	5	

3. Year 3 (Intercalating Year)

- (a) Upon completion of Stage 2 and before entering Stage 3, all candidates for Industrial Placement degrees shall spend the equivalent of one academic year in a placement approved by the Degree Programme Director. The candidate shall spend a year in a placement with an IT related company. If the candidate is not successful in securing an approved placement, or fails the assessment of the placement year, then the candidate will be required to transfer to Stage 3 of the corresponding 'without industry' programme.
- (b) All candidates for G401 Computing Science with Industrial Placement, G421 Computing Science with Industrial Placement (Networked Systems and Internet Technologies), G451 Computing Science with Industrial Placement (Games and Virtual Environments) and G603 Computing Science with Industrial Placement (Software Engineering) degrees shall take the following compulsory module:

<i>Code</i>	<i>Descriptive title</i>	<i>Total Credits</i>	<i>Credits Sem 1</i>	<i>Credits Sem 2</i>	<i>Level</i>	<i>Type</i>
ICM0043	Intercalating module for CS	120	60	60		

4. Stage 3

(a) Candidates for all degrees must take any deferred compulsory modules from Stage 2.

(b) Subject to 4(a),

(i) Candidates for all degrees shall take the following compulsory module:

<i>Code</i>	<i>Descriptive title</i>	<i>Total Credits</i>	<i>Credits Sem 1</i>	<i>Credits Sem 2</i>	<i>Level</i>	<i>Type</i>
CSC3095	Project and Dissertation in Computing Science	40	10	30	6	

(ii) Candidates for the degrees of G420 Computing Science (Networked Systems and Internet Technologies) and G421 Computing Science with Industrial Placement (Networked Systems and Internet Technologies) shall take the following compulsory modules:

<i>Code</i>	<i>Descriptive title</i>	<i>Total Credits</i>	<i>Credits Sem 1</i>	<i>Credits Sem 2</i>	<i>Level</i>	<i>Type</i>
CSC3002	Reliability and Fault Tolerance	10		10	6	
CSC3101	Distributed Systems	10	10		6	
CSC3102	System and Network Security	10		10	6	
CSC3103	Internet Technology and Electronic Commerce	10	10		6	

(iii) Candidates for the degrees of G450 Computing Science (Games and Virtual Environments) and G451 Computing Science with Industrial Placement (Games and Virtual Environments) shall take the following compulsory modules:

<i>Code</i>	<i>Descriptive title</i>	<i>Total Credits</i>	<i>Credits Sem 1</i>	<i>Credits Sem 2</i>	<i>Level</i>	<i>Type</i>
CSC3201	Graphics	10	10		6	
CSC3202	Computer Games Development	10		10	6	
CSC3203	Artificial Intelligence for Games	10	10		6	
CSC3204	Advanced Graphics and Virtual Environments	10		10	6	

(iv) Candidates for the degrees of G600 Computing Science (Software Engineering) and G603 Computing Science with Industrial Placement (Software Engineering) shall take the following compulsory modules:

<i>Code</i>	<i>Descriptive title</i>	<i>Total Credits</i>	<i>Credits Sem 1</i>	<i>Credits Sem 2</i>	<i>Level</i>	<i>Type</i>
CSC3004	Understanding Programming Languages	10		10	6	
CSC3005	Real-time Programming in Java	10		10	6	
CSC3303	Software Project Management	10		10	6	

CSC3304	Software Verification Technologies	10	10		6	
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- (c) After considering compulsory modules, all candidates must select optional modules from any of the specialisations outlined in 4(b)(ii), (iii) and (iv), and from the table below, to make the total credits for the year equal to 120:

<i>Code</i>	<i>Descriptive title</i>	<i>Total Credits</i>	<i>Credits Sem 1</i>	<i>Credits Sem 2</i>	<i>Level</i>	<i>Type</i>
CSC3003	Interaction Design	10	10		6	
CSC3006	Evolution of Complex Systems	10	10		6	
CSC3503	Graphical User Interfaces	10	10		6	
CSC3504	Web Site Management and Design	10	10		6	
NCL3007	Career Development for Final Year Students	20	10	10	6	

Note: not all options listed may be offered in any one year; additional modules may be available.

- (d) Candidates may take other modules (e.g. from other Schools) to a value of 20 credits, subject to the approval of the Degree Programme Director.
- (e) Candidates who are eligible for the award of the degree of G420 Computing Science (Networked Systems and Internet Technologies), G450 Computing Science (Games and Virtual Environments) or G600 Computing Science (Software Engineering) may elect to be awarded the degree in G400 Computing Science instead.

Candidates who are eligible for the award of the degree of G421 Computing Science with Industrial Placement (Networked Systems and Internet Technologies), G451 Computing Science with Industrial Placement (Games and Virtual Environments) or G603 Computing Science with Industrial Placement (Software Engineering) may elect to be awarded the degree in G401 Computing Science with Industrial Placement instead.

5. Assessment methods

Details of the assessment pattern for each module are explained in the module outline.

6. Degree classification

Candidates will be assessed for degree classification on the basis of all the modules taken at Stages 2 and 3 with the weighting of the stages being 1:1 for Stage 2 and Stage 3 respectively.