

## Programme Regulations 2009/10

### Degree of Master of Engineering with Honours in Electronics and Computer Engineering

UCAS Code: H654

#### 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.*

See also:

Stage 0 (Foundation Year) for all Degrees of Bachelor of Engineering with Honours and Master of Engineering with Honours

#### 1. Stage 0

Candidates who do not meet the requirements for entry into Stage 1 may with approval of the Degree Programme Director commence this degree programme at Stage 0 and shall proceed under the regulations relating to Stage 0.

#### 2. Stage 1

(a) 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 Program	20		20	4	
EEE1002	Electronics I	20	20		4	
EEE1003	Circuit Theory	20	20		4	
EEE1005	Signals and Communications I	20		20	4	
ENG1001	Engineering Mathematics I	20	10	10	4	

#### 3. Stage 2

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

<i>Code</i>	<i>Descriptive title</i>	<i>Total</i>	<i>Credits</i>	<i>Credits</i>	<i>Level</i>	<i>Type</i>
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		<i>Credits</i>	<i>Sem 1</i>	<i>Sem 2</i>		
CSC2011	Advanced Programming	20	20		5	
CSC2013	Computer Networks and Systems Programming	20		20	5	
EEE2004	Information Theory and Coding	10		10	5	
EEE2006	Electronics II	20	20		5	
EEE2007	Computer Systems and Microprocessors	20		20	5	
EEE2008	Project and Professional Issues	20		20	5	
EEE2011	Discrete Mathematics for Computing Science	10	10		5	

In order to progress to Stage 3 of the programme, candidates must pass Stage 2 at their first attempt with an overall average of 55%.

#### 4. Stage 3

(a) 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>
EEE2009	Signals and Communications II	20	20		5	
ENG2001	Introduction to Business Management	10	5	5	6	
EEE3007	Design and Test of Digital Systems	10	10		6	

(b) 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>
EEE8108	Individual Project and Dissertation (MEng)	40	20	20	7	
EEE8109	Individual Project and Dissertation (MEng)	40	10	30	7	
EEE8110	Individual Project and Dissertation (MEng)	40	30	10	7	

(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>
CSC2012	Database Technology	20	20		5	
CSC2014	Modelling and Computation	20		20	5	
CSC2016	Algorithm Design and Analysis	20	10	10	5	

(d) All candidates must select modules to the value of 20 credits from List II and 3 5(e).

#### 5. Stage 4

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

<i>Code</i>	<i>Descriptive title</i>	<i>Total</i>	<i>Credits</i>	<i>Credits</i>	<i>Level</i>	<i>Type</i>
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		<i>Credits</i>	<i>Sem 1</i>	<i>Sem 2</i>		
EEE3012	Integrated Circuit Design	10		10	6	
EEE8113	Group Design Project	30		30	7	
EEE8114	Industrial Project	40	40		7	

(b) 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>
EEE8106	Extended Course Work on Applications and Design (ECAD)	10	10		7	
EEE8107	Extended Course Work on Applications and Design (ECAD)	10		10	7	

(c) All candidates must pursue the module from list I pre-selected from stage 3.

(d) All candidates must select modules to a credit value of 20 from lists II and III

(e)

List I

<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>
EEE8100	Software Tools for Digital System Design	10		10	7	
EEE8101	Mobile and Cellular Communications (MEng)	10		10	7	

List II

<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>
CSC3001	Operating Systems	10		10	6	
CSC3002	Reliability and Fault Tolerance	10		10	6	
CSC3003	Interaction Design	10	10		6	
CSC3005	Real-time Programming in Java	10		10	6	
CSC3101	Distributed Systems	10	10		6	
CSC3102	Systems and Network Security	10		10	6	
CSC3103	Internet Technology and Electronic Commerce	10	10		6	
CSC3201	Graphics	10	10		6	

List III

<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>
EEE3001	Design of Linear Control Systems	10	10		6	
EEE3004	Digital Signal Processing	10	10		6	

EEE3005	Analogue Systems	10	10		6	
EEE3006	RF Engineering	10		10	6	
EEE3008	Industrial Automation and Robotics	10	10		6	
EEE3009	Real Time and Embedded Systems	10	10		6	
EEE3013	Image Processing and Machine Vision	10		10	6	
EEE3015	Telecommunication Networks	10		10	6	
EEE3016	Optoelectronics	10		10	6	
ENG8017	Management of New Product Introduction	10	5	5	6	

With the permission of the Degree Programme Director, modules up to a value of 20 credits may be selected from options offered in engineering mathematics or career development modules or a 20 credit foreign language module may be taken – students may not, as part of their degree programme, study language modules based on their mother tongue.

## 6. Assessment Methods

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

## 7. Degree classification

Candidates will be assessed for degree classification on the basis of all the modules taken at Stages 2, 3 and 4 with the weighting of the stages being 1:3:3 for Stage 2, Stage 3 and Stage 4 respectively.

## 8. Transfer to BEng Honours in Electrical and Electronic Engineering or Electronic Engineering or Electronic Communications

Candidates who qualify under the degree programme regulations for the BEng Honours in Electrical and Electronic Engineering or Electronic Engineering or Electronic Communications may transfer to that degree at the end of stages 0, 1 or 2.

## 9. Award of BEng Honours Degree

Candidates who, at the end of stage 3 fail to qualify for progression to stage 4 of the MEng degree, may, at the discretion of the Board of examiners, be considered for the award of the equivalent BEng Honours degree. Candidates who, at the end of stage 4 fail to qualify for the award of a MEng degree, may, at the discretion of the Board of examiners, be considered for the award of the equivalent BEng Honours degree.