

Department of Electrical and Electronic Engineering

Scheme For The Award Of Honours

Academic Year 2019/20¹

BEng in Electrical and Electronic Engineering (H600)

MEng in Electrical and Electronic Engineering (H604)

MEng in Electrical and Electronic Engineering with Management (H6N2)

MEng in Electrical and Electronic Engineering with a Year Abroad (H601)

This document only applies to students who started their degrees in 2018-19 or earlier²

¹ Changes implemented since 2018-19 include:

- The 1st year curriculum has been reviewed in line with the College's Teaching and Learning strategy and students entering the 1st year in October 2019 should refer to the programme specifications.
- 3rd year BEng students are allowed to choose an 8th module for ECTS only (for restrictions on module choice, see further in the document).
- 4th year MEng students who choose an 8th module do so for ECTS only (this changes the past 8th module rule. Similar restrictions as those for the BEng exist).

² Module codes have changed but not the name and contents of the module.

Introduction

This document sets out the assessment structure of degrees awarded in Electrical and Electronic Engineering, including the criteria for progression and the criteria for the honours classifications. The degrees are composed of Parts corresponding to the years of the course: four Parts for a MEng and three Parts for a BEng.

The award of honours is based on the following mark boundaries. These are the same boundaries as used for the grade letters for reporting examination marks throughout the degree programme.

First class honours	$A \geq 70\%$
Second class honours (upper division)	$70 > B \geq 60\%$
Second class honours (lower division)	$60 > C \geq 50\%$
Third class honours	$50 > D \geq 40\%$
Fail	$40 > E$

Assessors or the Board of Examiners does not disclose final marks to you. The Registrar will release the marks confirmed at the Examiners' Meeting to you in accordance with the procedures of Imperial College.

Moderation and calculation of final marks

All marks are held in the Department's database to full machine precision but displayed marks will be rounded up. The final degree overall mark will be calculated from the full-precision marks. Marks will be sent to The Registry to a precision of 2 decimal points. Note that marks for any examination, project, coursework, or other assessed work may be moderated (scaled up or down) if deemed appropriate by the Board of Examiners. Standard formulae are used for moderation and are described in the student handbook. Marks gained at any other institution (such as during a year abroad) should be treated with particular caution, as they are likely to be moderated before being incorporated into the overall results.

Graduating students

At the end of your degree programme, a decision is made during the examiners' meeting on whether you have passed and if so, what classification of honours is to be awarded. The Board of Examiners normally meets one week after the end of the summer term and is composed of all teaching staff involved with the degree programmes plus four external examiners, appointed from other UK universities.

If your mark falls no more than 2.5% below the minimum mark for a higher degree classification then your overall performance will be discussed anonymously by the Board of Examiners* to determine your final degree classification.

If you have mitigating circumstances and your mark is no more than 5% below the minimum mark for a higher degree classification, then your case will be discussed during the Mitigating Circumstance Committee meeting who advises the Board of Examiners anonymously to determine the final degree classification. To be considered, you must formally notify the Department of any mitigating circumstances by the deadlines set out in the [Mitigating Circumstances policy](#).

*In both cases the decisions are informed by your tutor reports from all years of study, and your project supervisor reports.

Non-graduating students

If you are not in your final year, the Board of Examiners will make a decision on whether you may progress to the next Part using the criteria set out later in this document. Mitigating circumstances, notified in **advance**, will be taken into account in progression decisions but will not change the marks obtained during the year.

If you are in 3rd year, then progression will be decided in the September Examiners' meeting unless you have failed the assessment aggregate, in which case you will be notified earlier.

Failing exams and progression

1st and 2nd year students

- SQTs

If you are unsuccessful in any of your exams, it is possible, but not guaranteed, that you will be allowed to resit failed exams. In the case of a marginal fail in one, or exceptionally two, modules, the examiners may set a supplementary qualifying test (SQT) to allow you to reach the pass mark (40%) and progress to the next

Part without delay. SQTs are held at the end of August/early September.

If you are invited for an SQT then your progression will be decided at the September examiners' meeting.

- *Resits:*

If you do not meet the progression requirements, we will contact you after the examiners' meeting to discuss your options. You may be invited to temporarily leave the college³ and resit all exams the following summer. In this case, your marks will not be capped at 40% and the fresh marks will count towards the final degree. The marks of your coursework will be carried forward.

If you fail your resit exams, neither SQTs nor further resits will be offered and you will be required to withdraw from College.

3rd and 4th year students

In the 3rd and 4th years of MEng and BEng, progression is not determined by individual modules but by the exam and coursework aggregate. Failing a module simply results in a lower assessment aggregate. Progression will be based on the module aggregate.

Further information on assessment, mitigating circumstances, moderation of marks, the considerations undertaken by the Board of Examiners and the arrangements for resits and SQTs is available in the [student handbook](#).

³ This means that you will not be registered as a student for the autumn and the spring terms (thus you are not in attendance). You will be expected back in the summer term for the revision lectures and the exams. Fees for the summer term only will be required in this instance.

Degree Part Weightings and ECTS

These tables summarise how marks in the various Parts are weighted when combined into a total for the degree programme and how ECTS⁴ are allocated for each Part⁵. References to MEng apply equally to the Technical, Management and Year Abroad streams. Additional ECTS can be earned as described in the student handbook.

Weightings	Part I	Part II	Part III	Part IV	Total	
BEng	12.5%	37.5%	50%		100%	
MEng	11.1%	22.2%	33.3%	33.4%	100%	

ECTS	Part I	Part II	Part III	Part IV	Total	Bologna Compliant ⁶
BEng	60	60	66		186	Yes
MEng with Industrial Placement (IP)	60	60	90	66	276	Yes
MEng with Group Project (GP)	60	60	66	66	252	No, a further 18 ECTS are needed ⁷

Note that in 3rd and 4th year some variation of the ECTS can exist for some optional modules, notably those offered by another department. This can lead to an ECTS total slightly higher than those listed in the table.

1 ECTS is equivalent to 25-30 hours of study (including lectures, study groups, classes, tutorials, labs and self-study).

⁴ European Credit Transfer and Accumulation System - http://ec.europa.eu/education/ects/ects_en.htm

⁵ These weightings are valid only for students registered **before** the academic year 2019-20. Students joining the department in year 1 on academic year 2019-20 should refer to the new programme specifications.

⁶ <http://www.imperial.ac.uk/electrical-engineering/study/current-students-course-handbook/ects/>

⁷ Additional ECTS can be obtained through activities such as relevant work experience or UROP projects.

Part I: BEng and MEng

The information for Part I is for reference only, and only applies if you started your degree in 2018-19 and earlier.

If you are starting your degree in academic year 2019-20 please refer to the Programme Specification document.

If you are resitting the 1st year in attendance, you are expected to follow the new curriculum and refer to the Programme Specification document.

Modules

	Term	Name	Weighting (%)	ECTS	Assessment Method
EE1-1	Autumn	Circuit Analysis	7.5	5	2-hour exam
EE1-2	Autumn	Digital Electronics	7.5	5	2-hour exam
EE1-5	Autumn	Energy Conversion	7.5	5	2-hour exam
EE1-7	Autumn	Software Engineering	7.5	5	Coursework
EE1-3	Spring	Semiconductor Devices	7.5	5	2-hour exam
EE1-4	Spring	Analogue Electronics	7.5	5	2-hour exam
EE1-6	Spring	Signals and Communications	7.5	5	2-hour exam
EE1-10	Autumn & Spring	Mathematics	15.0	10	Two 2-hour exams
EE1-13	Autumn & Spring	Engineering Design and Practice	7.5	5	Coursework
		Total	75.0	50	

Practical Work

	Term	Name	Weighting (%)	ECTS	Assessment Method
EE1-LABE	Autumn & Spring	Electrical Laboratory	15.0	5	Reports, Oral Examinations, Logbooks, Computer Based Test
EE1-PRJ	Autumn, Spring & Summer	Group Design Project	10.0	5	Reports and Oral Examinations
		Total	25.0	10	

Pass Mark and Progression Criteria

In order to progress to Part II, you are normally required to achieve the following minimum marks:

- a) 40% in each of the modules listed above.
- b) 40% in each of the practical work components listed above.

For SQT and resit procedures: refer to page 2 of this document.

Part II: BEng and MEng

Modules

	Term	Name	Weighting (%)	ECTS	Assessment Method
ELEC95010	Autumn	Digital Electronics II	6	4	2-hour exam
ELEC95003	Autumn	Analogue Electronics II	6	4	2-hour exam
ELEC95020	Autumn	Signals and Linear Systems	6	4	2-hour exam
ELEC95006	Autumn	Computer Architecture	9	5	Computer based tests and coursework
ELEC95019	Spring	Power Engineering	6	4	2-hour exam
ELEC95005	Spring	Communications	6	4	2-hour exam
ELEC95008	Spring	Control Engineering	6	4	2-hour exam
	Spring	Two modules chosen from	8	6	Two 1.5-hour exams
		ELEC95009 Devices ELEC95016 Fields ELEC95001 Algorithms and Complexity			
ELEC95002	Spring	Algorithms and Data Structures.	9	5	Computer based tests and coursework
ELEC95018	Autumn and Spring	Mathematics	14	8	Two 1.5-hour exams and coursework
		Total	76	48	

Practical Work

	Term	Name	Weighting (%)	ECTS	Assessment Method
ELEC95011	Autumn and Spring	Electrical Laboratory	16	8	Reports, Oral Examinations, Logbooks
ELEC95012	Autumn & Spring	Group Design Project	8	4	Report and Presentation
		Total	24	12	

Pass Mark and Progression Criteria

In order to progress to Part III of the BEng, you are normally required to achieve the following minimum marks:

- a) 40% in each of the modules listed above.
- b) 40% in each of the practical work components listed above.

In order to progress to Part III of the MEng, you are normally required to achieve the BEng criteria and additionally need to obtain the following minimum marks:

- a) 50% in mathematics.
- b) 50% in the exam average.
- c) No module/practical component mark below 40% (one module may be compensated).

In the second year the compensation rule will be applied to *one* module. Compensation means that for one module (excluding Mathematics, Electrical Laboratory and Group Project) with a mark in the range between 30% to 40% the mark will be automatically adjusted to 40% and thus considered a pass, *if* the exam aggregate is > 45%.

In order to progress to Part III of MEng (Year Abroad) you are normally required to achieve the MEng criteria and additionally need to obtain the following minimum marks:

- a) 55% in mathematics.
- b) 55% in in the exam average.
- c) No module/practical component mark below 40%.
- d) No compensation.

Year abroad places are competitive and will only be allocated after interview with the Year Abroad Course Director. There may be a minimum level of language ability specified for placements in particular universities abroad appropriate to their teaching language⁸. Visa requirements are also applicable and if you wish to go on a year abroad, you are advised to contact the International Office.

For SQT and resit procedures: refer to page 2 of this document.

If you fail your resit exams, no SQTs or further resits will be offered and you will be required to withdraw from College.

⁸ <http://www.imperial.ac.uk/languages/year-in-europe/>

Part III: BEng

Modules

You must take 7 modules subject to the following constraints:

- 4 autumn term modules chosen from the EEE module list (coded ELEC*).
- 2 spring term modules chosen from the EEE module list (coded ELEC*).
- 1 module from Imperial Horizons or the Business School⁹.

Module registration for autumn and spring term will be in the 4th week of each term. Modules cannot be dropped after the closing date for registration.

Eighth module for ECTS

You may choose an 8th module for ECTS only. The module name and ECTS will only be allocated and recorded on the transcript upon passing the module.

As 8th module choice:

You can take

- any 3rd year Autumn term, exam-only assessed EEE module (coded ELEC*)
- any Horizons module

You cannot take

- any module with coursework as part of the assessment
- any Business School module

Assessment

Autumn term modules are assessed mainly by written examination at the end of autumn term. Spring term modules are normally assessed through coursework and may include a short test in the spring term.

The aggregate mark for the modules is weighted as 65% of Part III.

EEE modules carry 6 ECTS each. Modules from other departments may carry different ECTS. The group of Part III modules carries minimum 42 ECTS.

Individual Project

You will choose a final year project topic from a list or propose your own project in consultation with an academic member of staff, in the beginning of spring term. The Individual Project is weighted as 35% of Part III and carries 24 ECTS.

Final Assessment and Honours Classification BEng Electrical and Electronic Engineering

To obtain an honours degree, you must obtain at least 40% in Part III, normally by obtaining at least 40% in both the individual project and the module aggregate. There is no pass mark for individual modules, only for the module aggregate.

The marks from each Part are combined using the weightings defined on page 3 and the honours classification is based on the mark boundaries defined on page 2.

⁹ EEE students have to take on-line modules where they are available.

Part III: MEng – All Streams

Modules

If you are studying on the **Technical or Year Abroad stream**, you must take 8 modules subject to the following constraints:

- 4 autumn term modules chosen from the EEE module list (coded ELEC*).
- 3 spring term modules chosen from the EEE module list (coded ELEC*).
- 1 module from Imperial Horizons or the Business school.

If you are studying on the **Management stream**, you must take 8 modules, subject to the following constraints:

- 3 autumn term modules chosen from the EEE module list (coded ELEC*).
- 2 autumn term modules from the specified business module list (automatic enrolment)
- 2 spring term modules chosen from the EEE module list (coded ELEC*).
- 1 spring term module from the specified business module list (automatic enrolment)

Autumn term courses are assessed by written examination at the end of autumn term, some modules may contain a small fraction of coursework. Spring term courses are normally assessed through coursework and may include a short written paper or oral examination in spring term.

On-line business modules must be taken where available. Management stream students will be automatically registered for the required business modules.

EEE modules carry 6 ECTS each. Modules from other departments might carry different ECTS. The group of Part III modules carries minimum 48 ECTS.

The aggregate mark for the modules is weighted as 77% of Part III.

Group Project or Industrial Placement

You will choose either a group project (summer term) or industrial placement (6 months) that commences after the spring term of the third year.

Group Project and Industrial Placement are both weighted at 23%. The group project carries 18 ECTS and the industrial placement 42 ECTS. Note that if you are on the Year Abroad programme, you must check the start date of your studies at the host university to ensure that you have enough time to complete the IP before committing to a placement. In those exceptional cases where an IP is agreed, the full time equivalent of 22 working weeks must be spent in the company. This might mean no holiday allocation during placement time.

Pass Mark and Progression Criteria

In order to progress to Part IV of the **MEng Technical stream**, you must achieve at least 40% in the Part III modules aggregate. There is no pass mark for individual modules, only for the module aggregates. In addition, you must achieve at least 40% in the group project/industrial placement.

In order to progress to Part IV of the **MEng Year Abroad stream**, you must achieve at least 70% in the modules aggregate, must achieve a minimum of 50% on all assessed modules and a minimum of 60% in the group project.

In order to progress to Part IV of the **MEng Management stream**, you must achieve at least 40% in the Part III EEE modules aggregate and 40% in the Part III Business modules aggregate. There is no pass mark for individual modules, only for the module aggregates. In addition, you must achieve at least 40% in the group project/industrial placement.

Part IV: MEng - Technical stream

Lecture Modules

You must take 7 modules subject to the following constraints:

- 6 modules chosen from the EEE module list (coded ELEC97* or COMP97*)¹⁰ (amongst which, max. 1 IDX module).
- 1 module from Imperial Horizons or the Business School¹¹.

Module registration for autumn and spring term will be in the 4th week of each term. Modules cannot be dropped after the closing date for registration.

Eighth module for ECTS

You may choose an 8th module for ECTS only. The module name and ECTS will only be allocated and recorded on the transcript upon passing the module.

As 8th module choice:

You can take

- any 3rd or 4th year exam-only assessed EEE module (coded ELEC*)
- an IDX module approved for EEE students
- any Horizons module

You cannot take

- any module with coursework as part of the assessment
- any Business School module

Assessment

Modules will be assessed through coursework, or written examination, or a combination of the two as laid down in the module description.

The average module mark is weighted as 60% of Part IV.

The 6 technical modules carry 6 ECTS each. Modules from other departments (business school, horizons and IDX) may carry 6 or 7.5 ECTS. The 6-technical module minimum set will carry at least 36 ECTS. The total ECTS may depend on the modules taken. The additional module, if taken and passed, will earn additional ECTS but will not count towards the final degree mark.

Project

You will choose a final year project topic from a list or propose your own project in consultation with an academic member of staff, in the beginning of autumn term. The individual project is weighted as 40% of Part IV and carries 24 ECTS.

Final Assessment and Honours Classification

MEng Electrical and Electronic Engineering – Technical stream

To obtain an honours degree, you must obtain at least 40% in Part IV, normally by obtaining at least 40% in each of the elements: module aggregates and individual project. There is no pass mark for individual modules, only for the module aggregates.

The marks from each Part are combined using the weightings defined on page 3 and the honours classification is based on the mark boundaries defined on page 2.

¹⁰ A maximum of one module can be from the 3rd year. This can be either coded ELEC96* or COMP96* (from the EEE 4th year list). You cannot take a module that you took before.

¹¹ On-line business modules must be taken where available.

Part IV: MEng - Management stream

Lecture Modules

Candidates must take 7 modules subject to the following constraints:

- 4 modules chosen from the EEE module list (coded ELEC97* or COMP97*)¹² (amongst which, max. 1 IDX module).
- 2 specified autumn term Business School modules (automatic enrolment)
- 1 specified spring term Business School module (automatic enrolment)

Module registration for autumn and spring term will be in the 4th week of each term. Modules cannot be dropped after the closing date for registration.

Eighth module for ECTS

You may choose an 8th module for ECTS only. The module name and ECTS will only be allocated and recorded on the transcript upon passing the module.

As 8th module choice:

You can take

- any 3rd or 4th year exam-only assessed EEE module (coded ELEC*)
- an IDX module approved for EEE students
- any Horizons module

You cannot take

- any module with coursework as part of the assessment
- any Business School module

Assessment

Modules will be assessed through coursework, or written examination, or combination of the two as laid down in the module description.

The average module mark is weighted as 60% of Part IV.

The technical modules carry 6 ECTS each. Modules from other departments (business school, horizons and IDX) may carry 6 or 7.5 ECTS. The total ECTS may depend on the modules taken. The additional module, if taken, will earn additional ECTS.

Project

You will choose a final year project topic from a list or propose your own project in consultation with an academic member of staff, in the beginning of autumn term. The individual project is weighted as 40% of Part IV and carries 24 ECTS.

Final Assessment and Honours Classification

MEng Electrical and Electronic Engineering – Management stream

To obtain an honours degree, you must obtain at least 40% in Part IV, normally by obtaining at least 40% in each of the elements: EEE module aggregates, Business module aggregates and individual project. There is no pass mark for individual modules, only for the module aggregates.

The marks from each Part are combined using the weightings defined on page 3 and the honours classification is based on the mark boundaries defined on page 2.

¹² A maximum of two modules can be from the 3rd year. These can be coded ELEC96* or COMP96* (from the EEE 4th year list). You cannot take a module that you took before. COMP96* modules count towards a 3rd year module.

Part IV: MEng Electrical and Electronic Engineering Year Abroad stream

University Aboard

In order to progress to Part IV of MEng - year abroad, you are normally required to achieve the following minimum marks:

- a) 70% in the exam average.
- b) 60% in the 3rd year group project
- c) No module mark below 50%.

Year abroad places are competitive and will only be allocated after interview with the Year Abroad Course Director. There may be a minimum level of language ability specified for placements in particular universities abroad appropriate to their teaching language¹³. Visa requirements are also applicable and if you wish to go on a year abroad, you are advised to contact the International Office. Note that start dates in guest universities may be in conflict with end dates of Industrial Placements. Students are required to ensure no clashes occur when choosing an industrial placement as well as a year abroad. Minimum 22 weeks, without holidays is the time required for the Industrial placement.

You must take a programme of examined modules selected from the courses offered by the overseas university equivalent to five modules from the Electrical and Electronic Engineering fourth year. Learning outcomes of the selected modules should be mapped against the IET level 7 learning outcomes. In addition, you must complete a dissertation and an individual project. The selection of examined modules is to be approved in each case by the Year Abroad Course Director.

Assessment is based on a written report in the language of study and an oral presentation of the project work in English. The project mark awarded will be determined by the Board of Examiners taking into account the marks awarded by the overseas university together with any supporting written comments. Marks obtained abroad might be moderated on the advice of the Board of Examiners.

The ECTS points gained during the year abroad will depend on the programme of work agreed with the host university.

The table below present the weighting of the elements of the Year Abroad.

Description	Location	Weighting within studies abroad	Weighting within Part IV
Registered Modules	Host Institution	40%	40%
Individual Project	Host Institution	40%	40%
Dissertation	Host Institution	20%	20%
Total	Host Institution	100%	100%

Final Assessment and Honours Classification

MEng Electrical and Electronic Engineering – Year Abroad stream

To obtain an honours degree¹⁴, you must obtain at least 40% in Part IV, normally by obtaining at least 40% in the module aggregates and at least 40% in the individual project.

The marks from each Part are combined using the weightings defined on page 3 and the honours classification is based on the mark boundaries defined on page 2.

¹³ <http://www.imperial.ac.uk/languages/year-in-europe/>

¹⁴ Note that the academic year in many host universities is different from that of the Department and thus the award and classification for year abroad students often has to be decided in the September examiners' meeting.