

# **Durham University Faculty Handbook Online**

Crodit value

These programme regulations should be read in conjunction with the University's <u>core regulations for undergraduate programmes</u>.

## **MEng General Engineering (H100)**

1. This programme is available at Durham City, in a full-time mode of study.

### Level 1 (Certificate)

2. Candidates shall study and be assessed in the following modules:

		Credit value
Applied Mechanics I	ENGI1091	20
Electrical Engineering I	ENGI1101	20
Thermodynamics & Fluid Mechanics I	ENGI1111	20
Electronic Fundamentals & Manufacture	ENGI1121	20
Mathematics for Engineers and Scientists	MATH1551	20

3. Candidates shall also study and be assessed in modules to the value of 20 credits offered by any Boards of Studies (including appropriate credit-bearing language modules offered by the University's Centre for Foreign Language Study).

### Level 2 (Diploma)

4. Candidates shall study and be assessed in the following modules:

,		Credit value
Systems Modelling and Computing	ENGI2011	20
Analytical Methods	ENGI2051	20
Mechanics and Materials	ENGI2141	20
Manufacturing and Electromechanics	ENGI2151	20
Electronics and Design	ENGI2161	20
Thermofluids and Design	ENGI2171	20

### Level 3 (Degree)

## **EITHER (Civil Engineering Route)**

5. Candidates shall study and be assessed in the following modules:

		Credit value
Soil Engineering	ENGI3311	20
Structures and Geomatics	ENGI3301	20
Environmental Engineering	ENGI3341	20
Applied Mechanics III	ENGI3411	20
Civil Design	ENGI3401	20
Design and Management for Civil Engineering	ENGI3381	20

## **OR (Electrical Engineering Route)**

6. Candidates shall study and be assessed in the following modules:

,		Credit value
Control and Signal Processing	ENGI3391	20
Electrical Engineering	ENGI3371	20
Electronics	ENGI3361	20
Thermodynamics and Fluid Mechanics	ENGI3291	20
Engineering Design	ENGI3351	20
Management and Manufacture	ENGI3421	20

## **OR (Electronic Engineering Route)**

7. Candidates shall study and be assessed in the following modules:

		Credit value
Electronics	ENGI3361	20
Computer Architecture and Communications	ENGI3321	20
Microelectronics	ENGI3331	20
Control and Signal Processing	ENGI3391	20

	Engineering Design Management and Manufacture	ENGI3351 ENGI3421	20 20
OR	(Mechanical Engineering Route)		
8.	Candidates shall study and be assessed in the following modules:		
	Control and Signal Processing Electrical Engineering Applied Mechanics III Thermodynamics and Fluid Mechanics Engineering Design Management and Manufacture	ENGI3391 ENGI3371 ENGI3411 ENGI3291 ENGI3351 ENGI3421	20 20 20 20 20 20 20 20
Lev	vel 4 (Degree)		
EIT	HER (Aeronautics)		
9.	Candidates shall study and be assessed in the following modules:		
	Aeromechanics Fluid Mechanics and Turbomachinery Applied Mechanics MEng Research and Development Project	ENGI4231 ENGI4221 ENGI4211 ENGI4093	20 20 20 20 60
OR	(Civil Engineering)		
10.	Candidates shall study and be assessed in the following modules:		Credit value
	Geotechnical and Highway Engineering Civil Design and Materials Hydrology and the Environment MEng Research and Development Project	ENGI4161 ENGI4141 ENGI4151 ENGI4093	20 20 20 20 60
OR	(Design and Operations Engineering)		
11.	Candidates shall study and be assessed in the following modules:		
	MEng Technical Project MEng Industrial Project Advanced Design and Manufacture Enterprise and Operations	ENGI4112 ENGI4111 ENGI4201 ENGI4311	40 20 20 20 20
12.	Candidates shall also study and be assessed in modules to the value	ue of 20 credits	s from List A:
	List A: Applied Mechanics Digital Systems Energy Conversion and Delivery	ENGI4211 ENGI4251 ENGI4271	Credit value 20 20 20 20
OR	(Electronic Engineering)		
13.	Candidates shall study and be assessed in the following modules:		<b>.</b>
	Digital Systems Microelectronics Communications Systems MEng Research and Development Project	ENGI4251 ENGI4131 ENGI4121 ENGI4093	20 20 20 20 60
OR	(Mechanical Engineering)		
14.	Candidates shall study and be assessed in the following modules:		
15.	Applied Mechanics Fluid Mechanics and Turbomachinery MEng Research and Development Project Candidates shall also study and be assessed in modules to the value	ENGI4211 ENGI4221 ENGI4093 ue of 20 credits	Credit value 20 20 60 s from List B:

List B:		Credit value
Advanced Design and Manufacture	ENGI4201	20
Enterprise and Operations	ENGI4311	20
Energy Markets, Low Carbon and Thermal Technologies	ENGI4281	20

#### **OR (New and Renewable Energy)**

16. Candidates shall study and be assessed in the following modules:

		Credit value
Energy Conversion and Delivery	ENGI4271	20
Energy Markets, Low Carbon and Thermal Technologies	ENGI4281	20
MEng Research and Development Project	ENGI4093	60

17. Candidates shall also study and be assessed in modules to the value of 20 credits from List C:

List C:		Credit value
Digital Systems	ENGI4251	20
Applied Mechanics	ENGI4211	20
Advanced Design and Manufacture	ENGI4201	20
Enterprise and Operations	<u>ENGI4311</u>	20

## Assessment, progression and award

- 18. Professional Awareness in Engineering Course (PEAC). Although not part of the formal assessment of any module, attendance at this is compulsory for professional body accreditation of the degree.
- 19. An exemption has been given to the Core Regulations so that students who wish to progress to Level 2 of the MEng are required to achieve an average marks of 50% across all modules excluding the free choice open module studied at Level 1, with no mark for a module below 40%. Students who fail to achieve this standard but whose marks are consistent with the requirements of the Core Regulations for progression from Level 1 to Level 2 shall be permitted to progress to Level 2 of the BEng in General Engineering in the Honours or Ordinary stream in accordance with the Core Regulations.
- 20. Students who fail to achieve the standard required under the Core Regulations for progression to Level 3 of an MEng but who achieve the standard required for progression to Level 3 of a Bachelors programme may progress to Level 3 of the BEng in General Engineering in the Honours or Ordinary stream in accordance with the Core Regulations.
- 21. A student who is qualified to progress from Level 2 to Level 3 of an MEng programme but wishes to transfer to Level 3 of the BEng in General Engineering shall be permitted to do so.
- 22. A student who has satisfied the requirements for progression from Level 2 to Level 3 of an MEng programme and whose language ability is satisfactory to the Board of Studies may be allowed to undertake Level 3 on an agreed student exchange scheme at an overseas university. This is subject to the availability of appropriate places at the overseas university.
- 23. Students whose achievement at the end of Level 3 does not qualify them to proceed to Level 4 may be awarded the degree of BSc Engineering at either Honours or Ordinary level in accordance with the Core Regulations for the award of a Bachelors degree.
- 24. Students who successfully complete the Electronic Engineering route at Level 3 may register for the following specialisms at Level 4: Electronic Engineering OR Design and Operations Engineering.
- 25. Students who successfully complete the Electrical Engineering route at Level 3 may register for the following specialisms at Level 4: New and Renewable Energy OR Design and Operations Engineering.
- 26. Students who successfully complete the Mechanical Engineering route at Level 3 may register for the following specialisms at Level 4: Mechanical Engineering OR Aeronautics OR Design and Operations Engineering OR New and Renewable Energy.
- 27. Students who successfully complete the Civil Engineering route at Level 3 may register for the following specialism at Level 4: Civil Engineering.

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28. A student whose achievement at the end of Level 4 does not qualify them to be awarded the degree of MEng may be awarded the degree of BSc Engineering at Honours level in accordance with the Core Regulations for the award of a Bachelors degree.

#### Professional accreditation

- 29. This programme is accredited, depending on the specialism chosen in Level 4:
  - a. by the IET for students entering Level 1 up to and including October 2013 (Design and Operations Engineering, Electronic Engineering, Mechanical Engineering, New and Renewable Energy specialisms);
  - b. by the IMechE for students entering Level 1 up to and including October 2013 provided a 2.2 degree classification or above is achieved (Aeronautics, Design and Operations Engineering, Mechanical Engineering, New and Renewable Energy specialisms);
  - c. by the JBM (ICE, IStructE, IHE, CIHT) for students entering Level 1 up to and including October 2013 (Civil Engineering specialism).