

# **Durham University**

#### **Faculty Handbook Online**

www.durham.ac.uk/faculty.handbook/

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

# MEng General Engineering (H100), MEng General Engineering with a year abroad (H106)

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:

<b>3</b>		Credit value
Applied Mechanics	ENGI1091	20
Electromagnetism and Manufacture	<b>ENGI1131</b>	20
Thermodynamics & Fluid Mechanics	ENGI1111	20
Electronic Measurement	ENGI1141	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
Electronics	<b>ENGI2181</b>	20
Electrical Engineering	ENGI2191	20
Engineering Design	<b>ENGI2201</b>	20
Engineering Mathematics	<b>ENGI2211</b>	20
Mechanics	<b>ENGI2221</b>	20
Thermodynamics and Fluid Mechanics	ENGI2231	20

#### Year 3 (Year Abroad)

5. During the third year candidates shall study and be assessed in a university abroad under the ERASMUS programme or a similar exchange programme. Students who are considered by the subject Board of Examiners to have made satisfactory progress, judged by reference to each student's learning agreement, will continue to Level 3 of the MEng General Engineering with year abroad (H106) programme. Otherwise, they will transfer to the MEng General Engineering (H100) programme.

# Level 3 (Degree)

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

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

<b>g</b>		Credit value
Geotechnics 3	ENGI3311	20
Structures and Geomatics 3	ENGI3301	20
Environmental Engineering 3	ENGI3341	20
Applied Mechanics 3	ENGI3411	20
Civil Design 3	ENGI3401	20
Materials 3	ENGI3471	20

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

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

		Credit value
Control and Signal Processing 3	ENGI3391	20
Electrical Engineering 3	ENGI3371	20

	Applied Mechanics 3	ENGI3411	20
	Thermodynamics and Fluid Mechanics 3	ENGI3291	20
	Engineering Design 3	ENGI3351	20
	Materials 3	ENGI3331	
	Materials 3	<u>ENGI347 I</u>	20
OR	(Electronic Engineering Route)		
8.	Candidates shall study and be assessed in the following modules:		
	·		Credit value
	Electronics and Communications 3	ENGI3451	20
	Advanced Computer Systems & Digital Electronics 3	<b>ENGI3461</b>	20
	Semiconductor Physics and Devices 3	ENGI3331	20
	Control and Signal Processing 3	ENGI3391	20
	Engineering Design 3	ENGI3351	20
	Electrical Engineering 3	ENGI3371	20
		<u>LINOISS7 I</u>	20
OR	(Mechanical Engineering Route)		
9.	Candidates shall study and be assessed in the following modules:		Cradit value
	Control and Circual Drassesing 2	ENGIO204	Credit value
	Control and Signal Processing 3	ENGI3391	20
	Electrical Engineering 3	ENGI3371	20
	Applied Mechanics 3	ENGI3411	20
	Thermodynamics and Fluid Mechanics 3	ENGI3291	20
	Engineering Design 3	ENGI3351	20
	Materials 3	ENGI3471	20
Lev	vel 4 (Degree)		
EIT	THER (Aeronautics)		
10.	Candidates shall study and be assessed in the following modules:		
			Credit value
	Aeromechanics	ENGI4231	20
	Fluid Mechanics and Turbomachinery	ENGI4221	20
	Applied Mechanics 4	ENGI4211	20
11.	Candidates shall also study and be assessed in modules to the value	ue of 60 credit	s from List A:
11.	•	ue of 60 credit	
11.	List A:		Credit value
11.	List A: MEng Research and Development Project	ENGI4093	Credit value 60
11.	List A: MEng Research and Development Project MEng Technical Project	ENGI4093 ENGI4112	Credit value 60 40
	List A: MEng Research and Development Project MEng Technical Project Engineering into Schools	ENGI4093	Credit value 60
	List A: MEng Research and Development Project MEng Technical Project	ENGI4093 ENGI4112	Credit value 60 40
OR	List A:  MEng Research and Development Project  MEng Technical Project  Engineering into Schools  (Civil Engineering)	ENGI4093 ENGI4112	Credit value 60 40
OR	List A: MEng Research and Development Project MEng Technical Project Engineering into Schools	ENGI4093 ENGI4112	Credit value 60 40 20
OR	List A:  MEng Research and Development Project  MEng Technical Project  Engineering into Schools  (Civil Engineering)	ENGI4093 ENGI4112	Credit value 60 40
OR	List A:  MEng Research and Development Project MEng Technical Project Engineering into Schools  (Civil Engineering)  Candidates shall study and be assessed in the following modules:	ENGI4093 ENGI4112 ENGI4321	Credit value 60 40 20  Credit value
OR	List A:  MEng Research and Development Project MEng Technical Project Engineering into Schools  (Civil Engineering)  Candidates shall study and be assessed in the following modules:  Applied Mechanics 4	ENGI4093 ENGI4112 ENGI4321	Credit value 60 40 20  Credit value 20
OR	List A:  MEng Research and Development Project MEng Technical Project Engineering into Schools  (Civil Engineering)  Candidates shall study and be assessed in the following modules:  Applied Mechanics 4 Structures, Highways and Construction	ENGI4093 ENGI4112 ENGI4321 ENGI4211 ENGI4141	Credit value 60 40 20  Credit value 20 20
OR	List A:  MEng Research and Development Project MEng Technical Project Engineering into Schools  (Civil Engineering)  Candidates shall study and be assessed in the following modules:  Applied Mechanics 4	ENGI4093 ENGI4112 ENGI4321	Credit value 60 40 20  Credit value
<b>OR</b> 12.	List A:  MEng Research and Development Project MEng Technical Project Engineering into Schools  (Civil Engineering)  Candidates shall study and be assessed in the following modules:  Applied Mechanics 4 Structures, Highways and Construction Advanced Geotechnical Engineering and Hydrology	ENGI4093 ENGI4112 ENGI4321 ENGI4211 ENGI4141 ENGI4151	Credit value 60 40 20  Credit value 20 20 20 20
<b>OR</b> 12.	List A:  MEng Research and Development Project MEng Technical Project Engineering into Schools  (Civil Engineering)  Candidates shall study and be assessed in the following modules:  Applied Mechanics 4 Structures, Highways and Construction Advanced Geotechnical Engineering and Hydrology  Candidates shall also study and be assessed in modules to the value	ENGI4093 ENGI4112 ENGI4321 ENGI4211 ENGI4141 ENGI4151	Credit value 60 40 20  Credit value 20 20 20 s from List B:
<b>OR</b> 12.	List A:  MEng Research and Development Project MEng Technical Project Engineering into Schools  (Civil Engineering)  Candidates shall study and be assessed in the following modules:  Applied Mechanics 4 Structures, Highways and Construction Advanced Geotechnical Engineering and Hydrology  Candidates shall also study and be assessed in modules to the valuation	ENGI4093 ENGI4112 ENGI4321 ENGI4211 ENGI4141 ENGI4151 ue of 60 credit	Credit value 60 40 20  Credit value 20 20 20 20
<b>OR</b> 12.	List A:  MEng Research and Development Project MEng Technical Project Engineering into Schools  (Civil Engineering)  Candidates shall study and be assessed in the following modules:  Applied Mechanics 4 Structures, Highways and Construction Advanced Geotechnical Engineering and Hydrology  Candidates shall also study and be assessed in modules to the value	ENGI4093 ENGI4112 ENGI4321 ENGI4211 ENGI4141 ENGI4151	Credit value 60 40 20  Credit value 20 20 20 s from List B:
<b>OR</b> 12.	List A:  MEng Research and Development Project MEng Technical Project Engineering into Schools  (Civil Engineering)  Candidates shall study and be assessed in the following modules:  Applied Mechanics 4 Structures, Highways and Construction Advanced Geotechnical Engineering and Hydrology  Candidates shall also study and be assessed in modules to the valuation	ENGI4093 ENGI4112 ENGI4321 ENGI4211 ENGI4141 ENGI4151 ue of 60 credit	Credit value 60 40 20  Credit value 20 20 20 s from List B: Credit value
<b>OR</b> 12.	List A:  MEng Research and Development Project MEng Technical Project Engineering into Schools  (Civil Engineering)  Candidates shall study and be assessed in the following modules:  Applied Mechanics 4 Structures, Highways and Construction Advanced Geotechnical Engineering and Hydrology  Candidates shall also study and be assessed in modules to the value List B:  MEng Research and Development Project MEng Technical Project	ENGI4093 ENGI4112 ENGI4321 ENGI4211 ENGI4141 ENGI4151 ue of 60 credit ENGI4093 ENGI4112	Credit value 60 40 20  Credit value 20 20 20 s from List B: Credit value 60
OR 12.	List A:  MEng Research and Development Project MEng Technical Project Engineering into Schools  (Civil Engineering)  Candidates shall study and be assessed in the following modules:  Applied Mechanics 4 Structures, Highways and Construction Advanced Geotechnical Engineering and Hydrology  Candidates shall also study and be assessed in modules to the value List B:  MEng Research and Development Project	ENGI4093 ENGI4112 ENGI4321 ENGI4211 ENGI4141 ENGI4151 ue of 60 credit	Credit value 60 40 20  Credit value 20 20 20 s from List B: Credit value 60 40
OR 12.	List A:  MEng Research and Development Project MEng Technical Project Engineering into Schools  (Civil Engineering)  Candidates shall study and be assessed in the following modules:  Applied Mechanics 4 Structures, Highways and Construction Advanced Geotechnical Engineering and Hydrology  Candidates shall also study and be assessed in modules to the value List B:  MEng Research and Development Project MEng Technical Project Engineering into Schools  (Electronic Engineering)	ENGI4093 ENGI4112 ENGI4321 ENGI4211 ENGI4141 ENGI4151 ue of 60 credit ENGI4093 ENGI4112	Credit value 60 40 20  Credit value 20 20 20 s from List B: Credit value 60 40
OR 12.	List A:  MEng Research and Development Project MEng Technical Project Engineering into Schools  (Civil Engineering)  Candidates shall study and be assessed in the following modules:  Applied Mechanics 4 Structures, Highways and Construction Advanced Geotechnical Engineering and Hydrology  Candidates shall also study and be assessed in modules to the value List B:  MEng Research and Development Project MEng Technical Project Engineering into Schools	ENGI4093 ENGI4112 ENGI4321 ENGI4211 ENGI4141 ENGI4151 ue of 60 credit ENGI4093 ENGI4112	Credit value 60 40 20  Credit value 20 20 20 s from List B: Credit value 60 40 20
OR 12.	List A:  MEng Research and Development Project MEng Technical Project Engineering into Schools  (Civil Engineering)  Candidates shall study and be assessed in the following modules:  Applied Mechanics 4 Structures, Highways and Construction Advanced Geotechnical Engineering and Hydrology  Candidates shall also study and be assessed in modules to the valuation  List B:  MEng Research and Development Project MEng Technical Project Engineering into Schools  (Electronic Engineering)  Candidates shall study and be assessed in the following modules:	ENGI4093 ENGI4112 ENGI4321 ENGI4321 ENGI4141 ENGI4151 ue of 60 credit ENGI4093 ENGI4112 ENGI4321	Credit value 60 40 20  Credit value 20 20 20 s from List B: Credit value 60 40
OR 12.	List A:  MEng Research and Development Project MEng Technical Project Engineering into Schools  (Civil Engineering)  Candidates shall study and be assessed in the following modules:  Applied Mechanics 4 Structures, Highways and Construction Advanced Geotechnical Engineering and Hydrology  Candidates shall also study and be assessed in modules to the valuation List B:  MEng Research and Development Project MEng Technical Project Engineering into Schools  (Electronic Engineering)  Candidates shall study and be assessed in the following modules:  DSP and Microwave Engineering	ENGI4093 ENGI4112 ENGI4321 ENGI4321 ENGI4141 ENGI4151 ue of 60 credit ENGI4093 ENGI4112 ENGI4321	Credit value 60 40 20  Credit value 20 20 20 s from List B: Credit value 60 40 20  Credit value 20
OR 12.	List A:  MEng Research and Development Project MEng Technical Project Engineering into Schools  (Civil Engineering)  Candidates shall study and be assessed in the following modules:  Applied Mechanics 4 Structures, Highways and Construction Advanced Geotechnical Engineering and Hydrology  Candidates shall also study and be assessed in modules to the valuation  List B:  MEng Research and Development Project MEng Technical Project Engineering into Schools  (Electronic Engineering)  Candidates shall study and be assessed in the following modules:	ENGI4093 ENGI4112 ENGI4321 ENGI4321 ENGI4141 ENGI4151 ue of 60 credit ENGI4093 ENGI4112 ENGI4321	Credit value 60 40 20  Credit value 20 20 20 s from List B: Credit value 60 40 20  Credit value

15. Candidates shall also study and be assessed in modules to the value of 60 credits from List C:

List C:		Credit value
MEng Research and Development Project	ENGI4093	60
MEng Technical Project	ENGI4112	40
Engineering into Schools	ENGI4321	20

#### **OR (Mechanical Engineering)**

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

		Credit value
Applied Mechanics 4	ENGI4211	20
Fluid Mechanics and Turbomachinery	ENGI4221	20
Low Carbon Technologies	ENGI4281	20

17. Candidates shall also study and be assessed in modules to the value of 60 credits from List D:

List D:		Credit value
MEng Research and Development Project	ENGI4093	60
MEng Technical Project	ENGI4112	40
Engineering into Schools	ENGI4321	20

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

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

		Credit value
Energy Conversion and Delivery	ENGI4271	20
Low Carbon Technologies	ENGI4281	20
Applied Mechanics 4	ENGI4211	20

19. Candidates shall also study and be assessed in modules to the value of 60 credits from List F:

List F:		Credit value
MEng Research and Development Project	ENGI4093	60
MEng Technical Project	<u>ENGI4112</u>	40
Engineering into Schools	ENGI4321	20

## Assessment, progression and award

- 20. 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.
- 21. 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.
- 22. 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.
- 23. 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.
- 24. 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.
- 25. Students who successfully complete the Electronic Engineering route at Level 3 may register for the following specialism at Level 4: Electronic Engineering.
- 26. Students who successfully complete the Electrical Engineering route at Level 3 may register for the following specialism at Level 4: Mechanical Engineering OR New and Renewable Energy

- 27. 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 New and Renewable Energy.
- 28. Students who successfully complete the Civil Engineering route at Level 3 may register for the following specialism at Level 4: Civil Engineering.
- 29. 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.

#### Year Abroad

- 30. Students admitted to the MEng General Engineering (H100) are able to apply to transfer to the MEng General Engineering with Year Abroad programme (H106). Students undertaking the MEng General Engineering with Year Abroad programme (H106) will undertake an approved exchange in an overseas university taking a course of study chosen in consultation with the departmental exchange coordinator or their academic adviser and the host institution.
- 31. Candidates wishing to transfer to the MEng General Engineering with Year Abroad (H106) must:
  - a. have successfully completed Level 1 of the MEng General Engineering (H100) and progressed to Level 2 of the honours or Ordinary programme; and
  - b. during the first term of Level 2 study, apply via the departmental exchange coordinator to the Board of Studies in the Department of Engineering.
  - c. to be admitted to the MEng General Engineering with Year Abroad (H106) and have their application approved by the Board of Studies; and
  - d. secure an exchange opportunity with an approved international partner institution of the University; and
  - e. successfully complete Level 2 of the MEng General Engineering (H100) programme so as to be eligible to progress to Level 3 of the MEng General Engineering (H100) Honours programme.
- 32. The marks achieved by the student during the period of study abroad will not contribute to the marks for degree classification. Students who the Board of Examiners for Engineering deem to have made satisfactory progress on the year abroad will continue to Level 3 of the MEng General Engineering with Year Abroad (H106) programme. Students who have not made satisfactory progress on the year abroad will not be permitted to continue on the MEng General Engineering with Year Abroad (H106) programme, but must instead proceed to Level 3 of the MEng General Engineering (H100) programme.

#### **Professional accreditation**

- 33. This programme is accredited on behalf of the Engineering Council for the purposes of fully meeting the academic requirement for registration as a Chartered Engineer, depending on the specialism chosen in Level 4.
  - a. by the IET for students entering Level 1 up to and including October 2018 (Aeronautics, Electronic Engineering, Mechanical Engineering, New and Renewable Energy specialisms);
  - b. by the IMechE for students entering Level 1 up to and including October 2018 provided a 2.2 degree classification or above is achieved (Aeronautics, Electronic Engineering, Mechanical Engineering, New and Renewable Energy specialisms);
  - by the JBM (ICE, IStructE, IHE, CIHT) for students entering Level 1 up to and including October 2018 (Civil Engineering specialism).
  - d. by the RAeS for students entering Level 1 up to and including October 2018 (Aeronautics specialism).