

Durham University

Faculty Handbook Online

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

These programme regulations should be read in conjunction with the University's <u>core regulations for</u> <u>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	<u>ENGI1101</u>	20
Thermodynamics & Fluid Mechanics I	<u>ENGI1111</u>	20
Electronic Fundamentals & Manufacture	ENGI1121	20
Mathematics for Engineers and Scientists	<u>MATH1551</u>	20

3. Candidates shall also study and be assessed in modules to the value of 20 credits from those offered by any board of studies.

Level 2 (Diploma)

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

		Credit value
Systems Modelling and Computing	ENGI2011	20
Analytical Methods	<u>ENGI2051</u>	20
Mechanics and Materials	<u>ENGI2141</u>	20
Manufacturing and Electromechanics	<u>ENGI2151</u>	20
Electronics and Design	<u>ENGI2161</u>	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 #	<u>ENGI3311</u>	20
Structures and Surveying #	<u>ENGI3301</u>	20
Environmental Engineering #	<u>ENGI3341</u>	20
Applied Mechanics #	<u>ENGI3411</u>	20
Civil Design #	<u>ENGI3401</u>	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 #	<u>ENGI3391</u>	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 #	<u>ENGI3361</u>	20
Computer Architecture and Communications #	ENGI3321	20
Microelectronics #	<u>ENGI3331</u>	20
Control and Signal Processing #	<u>ENGI3391</u>	20
Engineering Design #	<u>ENGI3351</u>	20
Management and Manufacture #	ENGI3421	20

OR (Mechanical Engineering Route)

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

		Credit value
Control and Signal Processing #	<u>ENGI3391</u>	20
Electrical Engineering #	<u>ENGI3371</u>	20
Applied Mechanics #	<u>ENGI3411</u>	20
Thermodynamics and Fluid Mechanics #	<u>ENGI3291</u>	20
Engineering Design #	<u>ENGI3351</u>	20
Management and Manufacture #	<u>ENGI3421</u>	20

Level 4 (Degree)

EITHER (Aeronautics)

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

		Credit value
Aeromechanics	ENGI4231	20
Fluid Mechanics and Turbomachinery	ENGI4221	20
Applied Mechanics	<u>ENGI4211</u>	20

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

List A:		Credit value
MEng Research and Development Project	<u>ENGI4093</u>	60
MEng Technical Project	<u>ENGI4112</u>	40
L4 Engineering into Schools*	ENGI4321	20

OR (Civil Engineering)

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

		Credit value
Geotechnical and Highway Engineering	<u>ENGI4161</u>	20
Civil Design and Materials	ENGI4141	20
Hydrology and the Environment	ENGI4151	20

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

List B:		Credit value
MEng Research and Development Project	<u>ENGI4093</u>	60
MEng Technical Project	<u>ENGI4112</u>	40
L4 Engineering into Schools*	<u>ENGI4321</u>	20

OR (Design and Operations Engineering)

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

		Credit value
MEng Technical Project	<u>ENGI4112</u>	40
MEng Industrial Project	<u>ENGI4111</u>	20
Advanced Design and Manufacture	<u>ENGI4201</u>	20
Enterprise and Operations	ENGI4311	20

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

List C:		Credit value
Applied Mechanics	ENGI4211	20
Digital Systems	ENGI4251	20
Energy Conversion and Delivery	ENGI4271	20

OR (Electronic Engineering)

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

		Credit value
Digital Systems	ENGI4251	20
Microelectronics	ENGI4131	20
Communications Systems	ENGI4121	20

16. 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	<u>ENGI4112</u>	40
L4 Engineering into Schools	ENGI4321	20

OR (Mechanical Engineering)

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

		Credit value
Applied Mechanics	<u>ENGI4211</u>	20
Fluid Mechanics and Turbomachinery	ENGI4221	20

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

List E:		Credit value
Advanced Design and Manufacture	ENGI4201	20
Enterprise and Operations	ENGI4311	20
Energy Markets, Low Carbon and Thermal Technologies	ENGI4281	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	<u>ENGI4093</u>	60
MEng Technical Project	<u>ENGI4112</u>	40
L4 Engineering into Schools*	<u>ENGI4321</u>	20

OR (New and Renewable Energy)

20. 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

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

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

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

List H:		Credit value
MEng Research and Development Project	ENGI4093	60
MEng Technical Project	<u>ENGI4112</u>	40
L4 Engineering into Schools*	ENGI4321	20

Assessment, progression and award

- 23. Modules marked with a # must be passed at 40% or above in order to progress to the Honours degree at the next Level.
- 24. Modules marked * are not available in 2012-13.
- 25. 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.
- 26. 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 Engineering in the Honours or Ordinary stream in accordance with the Core Regulations.
- 27. 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 Engineering in the Honours or Ordinary stream in accordance with the Core Regulations.
- 28. 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 Engineering shall be permitted to do so.
- 29. 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.
- 30. 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.
- 31. 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.
- 32. 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.
- 33. 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.
- 34. Students who successfully complete the Civil Engineering route at Level 3 may register for the following specialism at Level 4: Civil Engineering.
- 35. 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

- 36. 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 2012 (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, IHIE, IHT, IStructE) for students entering Level 1 up to and including October 2013 (Civil Engineering specialism).