

MEng GENERAL ENGINEERING (H100) MEng CIVIL ENGINEERING (H200) MEng MECHANICAL ENGINEERING (H300) MEng AERONAUTICS (H420) MEng ELECTRONIC ENGINEERING (H610) MEng COMMUNICATIONS ENGINEERING (H640) MEng DESIGN AND OPERATIONS ENGINEERING (H150) MEng NEW AND RENEWABLE ENERGY (H221)

Programme offered at: Durham.

Mode of study: this programme is available full-time.

I EVEL 1 (Certificate)

1	Engineering 1A		ENGI1091	20
2	Engineering 1B		ENGI1101	20
3	Engineering 1C		<u>ENGI1111</u>	20
4	Engineering 1D		ENGI1121	20
5	Mathematics for I	Engineers and Scientists	<u>MATH1551</u>	20
6	One 20 credit ope	en module chosen from:		20
	EITHER One 20 credit Level 1 open module offered by any Board of Studies			
	OR An open 20 credit language module offered by the Language Centre			

Notes:

PEAC (Professional Awareness in Engineering Course). Although not part of the formal assessment of any module, attendance at this is compulsory for professional body accreditation of the degree.

An exemption has been given to the Core Regulations so that students are required to achieve an average mark of 50%, across all modules excluding the free choice open module studied at Level 1, with no mark for a module below 40% to progress to Level 2 of an MEng programme. 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.

LEVEL 2 (Diploma)

1	Systems Modelling and Computing	ENGI2011	20
2	Analytical Methods	ENGI2051	20
3	Mechanics and Materials	ENGI2141	20
4	Manufacturing and Electromechanics	<u>ENGI2151</u>	20
5	Electronics and Design	ENGI2161	20
6	Thermofluids and Design	ENGI2171	20
Materia			

Notes:

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;

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;

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. Students who take part in the student exchange scheme will not be able to register on the MEng General Engineering at level 4.

LEVEL 3 (Degree)

EITHER: Electronic	Engineering	(i)	
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1	Electronics	<u>ENGI3361</u>	20
2	Computer Architecture & Communications	<u>ENGI3321</u>	20
3	Microelectronics	<u>ENGI3331</u>	20
4	Control and Signal Processing	<u>ENGI3391</u>	20
5	Engineering Design	<u>ENGI3351</u>	20
6	Management & Electronic Manufacture	<u>ENGI3431</u>	20

	OR: Electrical Engineering ⁽ⁱⁱ⁾		
1	Control and Signal Processing	ENGI3391	20
2	Electrical Engineering	ENGI3371	20
3	Electronics	ENGI3361	20
4	Thermodynamics & Fluid Mechanics	ENGI3291	20
5	Engineering Design	ENGI3351	20
6	Management & Manufacture	ENGI3421	20
	OR: Mechanical Engineering (iii)		
1	Control and Signal Processing	ENGI3391	20
2	Electrical Engineering	ENGI3371	20
3	Applied Mechanics	ENGI3411	20
4	Thermodynamics & Fluid Mechanics	ENGI3291	20
5	Engineering Design	ENGI3351	20
6	Management & Manufacture	ENGI3421	20
	OR: Civil Engineering ^(iv)		
1	Soil Engineering	ENGI3311	20
2	Structures and Surveying	ENGI3301	20
3	Environmental Engineering	ENGI3341	20
4	Applied Mechanics	ENGI3411	20
5	Civil Design	ENGI3401	20
6	Design and Management for Civil Engineering	ENGI3381	20
Notes:			

Notes:

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 in Engineering at either Honours or Ordinary level in accordance with the Core Regulations for the award of a Bachelors degree.

 Students who successfully complete the Electronic Engineering stream in Level 3 may register for Electronic Engineering (H610) or Computer Engineering (H130) or Communications Engineering (H640) or Design and Operations Engineering (H150) at Level 4;

 Students who successfully complete the Electrical Engineering stream in Level 3 may register for New and Renewable Energy (H221) or Design and Operations Engineering (H150) or General Engineering (H100) at Level 4;

(iii) Students who successfully complete the Mechanical Engineering stream in Level 3 may register for New and Renewable Energy (H221) or Design and Operations Engineering (H150) or Mechanical Engineering (H300) or Aeronautics (H420) or General Engineering (H100) at Level 4;

(iv) Students who successfully complete the Civil Engineering stream in Level 3 may register for Civil Engineering (H200) at Level 4.

LEVEL 4 (Degree) EITHER

ELLHE	R		
	MEng Electronic Engineering (H610) ⁽ⁱ⁾ H		
1-3	MEng Research and Development Project	ENGI4093	60
4	Digital Systems	ENGI4251	20
5	Microelectronics	ENGI4131	20
6	Communications Systems	ENGI4121	20
OR			
	MEng Communications Engineering (H640) ⁽ⁱ⁾ H		
1-3	MEng Research and Development Project	ENGI4093	60
4	Communications Systems	ENGI4121	20
5	Digital Systems	ENGI4251	20
6	Microelectronics	ENGI4131	20
OR			
	MEng New and Renewable Energy (H221) ^{(i) (ii)} H		
1-3	EITHER MEng Research and Development Project \$	ENGI4093	60
	OR MEng Technical Project \$	ENGI4112	40
	and Group Design Project \$	ENGI4301	20
4	Energy Conversion and Delivery	ENGI4271	20
5	Thermomechanical Energy Conversion and Energy Markets	ENGI4281	20
6	A module of 20 credits from the following:		
	Digital Systems	<u>ENGI4251</u>	20
	Applied Mechanics	ENGI4211	20
	Advanced Design and Manufacture	ENGI4201	20
	Supply Chain Management	<u>ENGI4171</u>	20

OR			
ÖR	MEng Design and Operations Engineering (H150) ⁽ⁱ⁾⁽ⁱⁱ⁾ H		
1-2	MEng Technical Project	ENGI4112	40
3	MEng Industrial Project	ENGI4111	20
4	Management and Operation of Production Systems	ENGI4191	20
5	Advanced Design and Manufacture	ENGI4201	20
6	A module of 20 credits from the following:		
	Supply Chain Management	<u>ENGI4171</u>	20
	Production Networks and Energy Markets	ENGI4241	20
OR			
	MEng Aeronautics (H420) ⁽ⁱⁱ⁾ H		
1-3	EITHER MEng Research and Development Project \$	<u>ENGI4093</u>	60
	OR MEng Technical Project \$	ENGI4112	40
	and Group Design Project \$	<u>ENGI4301</u>	20
4	Aeromechanics	ENGI4231	20
5	Fluid Mechanics and Turbomachinery	<u>ENGI4221</u>	20
6	A module of 20 credits from the following:		
	Applied Mechanics	<u>ENGI4211</u>	20
	Bioengineering and Energy Markets	ENGI4261	20
	Advanced Design and Manufacture	ENGI4201	20
0.0	Supply Chain Management	<u>ENGI4171</u>	20
OR	$ME_{\text{max}} = M_{\text{max}} + m_$		
1 2	MEng Mechanical Engineering (H300) ⁽ⁱⁱ⁾ //	ENC14002	60
1-3	EITHER MEng Research and Development Project \$	ENGI4093	60 40
	OR MEng Technical Project \$ and Group Design Project \$	ENGI4112	40 20
4	Applied Mechanics	<u>ENGI4301</u> ENGI4211	20 20
4 5	EITHER Thermodynamics and Fluid Mechanics	<u>ENGI4211</u> ENGI4181	20
5	OR Fluid Mechanics and Turbomachinery	<u>ENGI4181</u> ENGI4221	20
6	A module of 20 credits from the following:	<u>EN014221</u>	20
0	Bioengineering and Energy Markets	ENGI4261	20
	Advanced Design and Manufacture	ENGI4201	20
	Supply Chain Management	ENGI4171	20
OR	Suppry Chain Management		20
on	MEng Civil Engineering (H200) ⁽ⁱⁱⁱ⁾ H		
1-3	MEng Research and Development Project	ENGI4093	60
4	Geotechnical Engineering	ENGI4161	20
5	Civil Design and Materials	ENGI4141	20
6	Hydrology and the Environment	ENGI4151	20
OR			
	MEng General Engineering (H100)		
1-2	MEng Technical Project	ENGI4112	40
3-6	Modules to the value of 80 credits from the following		
	Digital Systems	ENGI4251	20
	Applied Mechanics	ENGI4211	20
	Energy Conversion and Delivery	ENGI4271	20
	Advanced Design and Manufacture	ENGI4201	20
	Bioengineering and Energy Markets	ENGI4261	20
	Supply Chain Management	ENGI4171	20
	EITHER Fluid Mechanics and Turbomachinery	ENGI4221	20
	OR Thermodynamics and Fluid Mechanics	<u>ENGI4181</u>	20

\$ A student who spends Level 3 overseas on an exchange scheme and who wishes to obtain an IMechE accredited degree in one of the listed programmes must select MEng Technical Project (<u>ENGI4112</u>) and Group Design Project (<u>ENGI4301</u>) to satisfy the requirements of the accreditation body. A student who successfully completes Level 3 in Durham must select MEng Research and Development (<u>ENGI4093</u>). Notes:

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 with Honours in Engineering in accordance with the Core Regulations for the award of a Bachelors degree.

This programme is accredited, depending on the specialism chosen in Level 4:

- (i) by the IET for students entering Level 1 up to and including October 2012;
- (ii) by the IMechE for students entering Level 1 up to and including October 2013 provided a 2.2 degree classification or above is achieved;

(iii) by the JBM for students entering Level 1 up to and including October 2013.
H This programme is not accredited for those students who complete Level 1 at Harbin Engineering University, China