

# BE (HONS) (CIVIL, STRUCTURAL AND ENVIRONMENTAL) ENGINEERING

## Programme Requirements

Code	Title	Credits
<b>Year 1</b>		
Students take <b>60</b> credits as follows:		
<i>Core Modules</i>		
CE1003	Introduction to Structural and Civil Engineering	5
CE1005	Engineering Computation and Problem Solving	5
CM1001	Chemistry for Engineers	5
EE1007	Introduction to Electrical and Electronic Engineering	5
MA1011	Mathematical Methods I	5
MA1012	Mathematical Methods II	5
ME1002	Engineering Thermodynamics	5
NE1001	Introduction to Energy Engineering	5
PE1003	Introduction to Process and Chemical Engineering	5
PY1006	Physics for Engineers II	5
PY1012	Physics for Engineers I	10
<b>Year 2</b>		
Students take <b>60</b> credits as follows:		
<i>Core Modules</i>		
EG2001	Engineering Mechanics with Transform Methods	5
EG2002	Numerical Methods and Programming	5
CE2001	Solid and Structural Mechanics I	5
CE2002	Solid and Structural Mechanics II	5
CE2003	Fluids I	5
CE2004	Fluids II	5
CE2005	Surveying - Theory and Practice	5
CE2007	Design Studio I	5
CE2009	BIM 1: Modelling and Visualisation	5
MA2013	Mathematics for Engineering	5
PE2003	Heat Transfer	5
ST1051	Introduction to Probability and Statistics	5
<b>Year 3</b>		
Students take <b>60</b> credits as follows:		
<i>Core Modules</i>		
CE3002	Solid and Structural Mechanics III	5
CE3003	Design Studio II (Steel and Timber)	5
CE3004	Mechanics of Soils I	5
CE3005	Mechanics of Soils II	5
CE3006	Construction Project Management	5
CE3007	Hydraulics I	5
CE3008	Design Studio III (Structural Concrete)	5
GL3006	Geology for Engineers	5
CE3009	Environmental Engineering	5

CE3010	Energy in Buildings	5
CE3012	Materials and Sustainability	5
CE4012	Traffic and Highways	5

### Year 4

#### BE (Hons)

Students take **60** credits as follows - all listed core modules (**40** credits) and **20** credits of elective modules:

#### Core Modules

CE4002	BE Research Project	10
CE4004	Design Studio IV (Reinforced Concrete)	5
CE4006	Structural Analysis	5
CE4007	Geotechnical Engineering	5
CE4015	Environmental Hydraulics	5
CE4026	Environmental Design Studio	10
Plus <b>20</b> credits from the following <b>5 credit</b> modules:		20

#### Elective Modules

CE4019	Design Studio VII (Heating, Ventilation and Air Conditioning) (5) (plus CE4016 Energy Systems in Buildings) Candidates choosing CE4019 must also select CE4016.	
CE4016	Energy Systems in Buildings (5) (if not previously selected with CE4019)	
CE4020	Environmental Hydrodynamics (5)	
CE4021	Work Placement (5)	
CE4024	Progressing Toward Sustainable Industry (5)	
NE4005	Sustainability, Bioenergy and Circular Economy Systems (5)	
MG4052	Management in Practice (5)	

<b>Total Credits</b>	<b>240</b>
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