

CIVIL ENGINEERING			
Bachelor of Engineering Systems (Honours) Civil Engineering Specialisation		Bachelor of Engineering (Honours) in Civil Engineering	
Common Core Units	Credit Points	Common Core Units	Credit Points
ENG10759 - Processes and Philosophy of Engineering	12	ENG10759 - Processes and Philosophy of Engineering	12
Physics	12	PHY10760 - Physics and Materials	12
CHE00201 - Chemistry	12	CHE00201 - Chemistry	12
ENG10757 - Applied Mechanics	12	ENG10757 - Applied Mechanics	12
Computational Analysis	12	ENG20007 - Engineering Computations	12
ENO71001 - Engineering Modelling and Experimentation	6	ENG72001 - Engineering Modelling and Experimentation	12
ENG72005 - Engineering Modelling and Experimentation I	6		
ENG62002 - Hydraulic Engineering Fundamentals	6	ENG20006 - Fluid Mechanics	12
ENG72004 - Fluid Dynamics	6		
ENG40007 - Engineering Project Management and Professional Ethics	12	ENG40007 - Engineering Project Management and Professional Ethics	12
ENG40005 - Engineering Capstone Project	24	ENG40005 - Engineering Capstone Project	24
ENG40001 - Engineering Thesis I	12	ENG40001 - Engineering Thesis I	12
ENG40004 - Engineering Thesis II	12	ENG40004 - Engineering Thesis II	12
<i>Mathematics Pathway Option 1 (Standard Pathway)</i>		<i>Mathematics Pathway Option 1 (Standard Pathway)</i>	
MAT10001 - Foundation Mathematics	12	MAT10001 - Foundation Mathematics	12
MAT71215 - Introductory Algebra and Calculus	12	MAT10251 - Statistical Analysis	12
Calculus and Linear Algebra I	12	MAT71003 - Mathematics for Engineers and Scientists	12
<i>Mathematics Pathway Option 2 (Advanced Pathway)</i>		<i>Mathematics Pathway Option 2 (Advanced Pathway)</i>	
Calculus and Linear Algebra I	12	MAT10719 - Calculus	12
Calculus and Linear Algebra II	12	MAT10720 - Linear Algebra	12
MAT10721 - Multivariate Calculus and Differential Equations	12	MAT10251 - Statistical Analysis	12
Civil Engineering Specialisation Units		Other Civil Engineering Units	
EN051001 - Introduction to Computer Aided Design and Drafting	6		
EN061001 - Computer Aided Design Applications	6	ENG20005 - Hydrology	12
GLY62001 - Principles of Stormwater and Drainage Management	6	ENG30009 - Hydraulic Engineering	12
ENG63004 - Hydraulic Design and Modelling	6	ENG20001 - Mechanics of Materials	12
ENG62003 - Introduction to Solid Mechanics	6	ENG20003 - Concrete Structures	12
ENG72003 - Mechanics of Materials	6	ENG30002 - Soil Mechanics and Geology	12
ENG61003 - Construction Materials - Concrete	6	ENG20002 - Engineering Construction and Tendering	12
ENG63001 - Concrete Structures Fundamentals	6		
ENG61004 - Construction Materials - Soils	6	ENG30011 - Regional and Urban Transport Planning	12
ENG63002 - Soil Mechanics Fundamentals	6	ENG30004 - Analysis and Computer Modelling of Structures	12
ENG61005 - Cost Estimation, Monitoring and Control	6	ENG30007 - Geotechnical Engineering	12
ENG61006 - Tendering for Civil Construction Projects	6	ENG30012 - Water and Wastewater Engineering	12
SUR61001 - Surveying Fundamentals	6	ENG30005 - Design of Steel Structures	12
ENG62004 - Road and Pavement Design	6	ENG30010 - Traffic and Road Safety Engineering	12
ENG30004 - Analysis and Computer Modelling of Structures	12	ENG83003 - Advanced Structural and Building Design	12
ENG30007 - Geotechnical Engineering	12	<i>Non-Construction Engineering Pathway</i>	
ENG30012 - Water and Wastewater Engineering	12	ENG10758 - Humanitarian Projects	12
ENG30005 - Design of Steel Structures	12	ENI73009 - Finite Element Method and Fracture Mechanics	12
ENG30010 - Traffic and Road Safety Engineering	12	ENG10758 - Humanitarian Engineering Project	12
ENG83003 - Advanced Structural and Building Design	12	AGR00215 - Water and Catchment Management	12
<i>Non-Construction Engineering Pathway</i>			
ENG10758 - Humanitarian Projects	12		
ENI73009 - Finite Element Method and Fracture Mechanics	12		
<i>Construction Engineering Pathway</i>			
ENG62001 - Civil Construction Career Development	6		
ENG63003 - The Diverse Civil Construction Workplace	6		
ENG51001 - Construction Site Safety and Risk Management	6		
ENG61001 - Civil Construction Planning and Compliance	6		
Elective Units		Elective Units	
Elective Units	24	Elective Units	24

No change from BE(Hons) to BEngSys

12 CP unit in BE(Hons) replaced with 2 x 6 CP units in BEngSys with similar content and

Significant change in content and learning outcomes between units in BE(Hons) and

BOLD

Indicates Honours level units