MECHANICAL ENGINEERING			
Bachelor of Engineering Systems (Honours) Mechanical Engineering Specialisation		**Bachelor of Engineering (Honours) in Mechanical 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**
Mathematics Pathway Option 1 (Standard Pathway)		*Mathematics Pathway Option 1 (Standard Pathway)*	
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
Mathematics Pathway Option 2 (Advanced Pathway)		*Mathematics Pathway Option 2 (Advanced Pathway)*	
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
Mechanical Engineering Specialisation Units		**Other Mechanical Engineering Units**	
ENO51001 - Introduction to Computer Aided Design and Drafting	6	ENI81005 - Energy, the Environment and Mechanical Engineering	12
ENO61001 - Computer Aided Design Applications	6		
ENI72001 - Dynamics	12	ENI72001 - Dynamics	12
ENI72005 - Introduction to Mechanical Design and Manufacturing	12	ENI72005 - Introduction to Mechanical Design and Manufacturing	12
ENG62003 - Introduction to Solid Mechanics	6	ENG20001 - Mechanics of Materials	12
ENG72003 - Mechanics of Materials	6		
ENI73025 - Thermodynamics	12	ENI73025 - Thermodynamics	12
ENI73005 - Machine Element Design	12	ENI73005 - Machine Element Design	12
ENI73001 - Dynamics of Machines	12	ENI73001 - Dynamics of Machines	12
ENI73015 - Electro-Mechanical and Robotics Technology	12	ENI73015 - Electro-Mechanical and Robotics Technology	12
ENI82005 - Thermal Engineering	12	ENI82005 - Thermal Engineering	12
ENI83015 - Modern Internal Combustion Engines	**12**	**ENI83015 - Modern Internal Combustion Engines**	12
ENI83005 - Mechanical Systems Design	**12**	**ENI83005 - Mechanical Systems Design**	12
ENI83040 - Control Systems and Automation	**12**	**ENI83040 - Control Systems and Automation**	12
ENG30004 - Analysis and Computer Modelling of Structures	12	ENI73020 - Fluids Engineering	12
ENG10758 - Humanitarian Projects	12	ENG10758 - Humanitarian Engineering Project	12
ENI73009 - Finite Element Method and Fracture Mechanics	12	ENI73009 - Finite Element Method and Fracture Mechanics	12
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