

BEng (BioEngineering) and BA (Economics) (wef AY2014/2015)

List of courses that contribute to BEng (BioEngineering)				AU Load	
Discipline Requirement	Core	PH1011*	Physics	3	87 AU (PA) 91 AU (PI)
		BG1101	Introduction to Biomedical Engineering	2	
		MH1810	Mathematics 1	3	
		BG1103	Chemistry	3	
		BG1105	Materials Science	3	
		BG1117	Engineering Mathematics	4	
		BG1109	Anatomy & Physiology	3	
		BG1131	Molecular Cell Biology for Biomedical Engineers	4	
		BG1801	Lab 1a	1	
		BG1802	Lab 1b	1	
		BG2104	Electronics for Biomedical Engineering	3	
		BG2109	Biomechanics	3	
		BG2110	Bioelectricity	3	
		BG2111	Computational Methods	4	
		BG2112	Cardiovascular Engineering	4	
		BG2131	Biomaterials	3	
		BG2141	Mechanics of Materials	3	
		BG2142	Biological Thermodynamics	3	
		BG2801	Lab 2a	1	
		BG2802	Lab 2b	1	
		BG3102	Control in Biosystems	3	
		BG3103	Signal Processing	3	
		BG3104	Biomedical Imaging	3	
		BG3105	Biomedical Instrumentation	3	
		BG3801	Lab 3	1	
		BG3810 / BG3820	Professional Attachment / Professional Internship	4 / 8	
		BG4103	Biomedical Project Design & Management	4	
		BG4102	Medical Device Design	3	
		BG4801	Final Year Project	8	
		UE	HE1001	Microeconomic Principles	
HE1002	Macroeconomic Principles		3		
HE1005	Intro to Probability & Statistical Inference		3		
HE2005	Principles of Econometrics		3		
HExxxx	Economics Course 1		3		
HExxxx	Economics Course 2		3		
HExxxx	Economics Course 3		3		
HExxxx	Economics Course 4		4		
Major PE	BGxxxx	BIE PE1	3	9 AU	
	BGxxxx	BIE PE2	3		
	BGxxxx	BIE PE3	3		
General Education Requirements (GER)	GER (Core)	BG0491	Engineers and Society	3	12 AU
		HW0188	Engineering Communication I	2	
		HW0288	Engineering Communication II	2	
		ML0001	Absolute Basics for Career	1	
		ML0002	Career Power Up!	1	
		GC0001	Introduction to Sustainability	1	
		HY0001	Ethics and Moral Reasoning	1	
		ET0001	Entrepreneurship and Innovation	1	
GER-UE		Elective	4	4 Aus (PA Option)	
TOTAL				136 AU	

* Students without 'A' level Physics will take PH1012/FE1012 Physics A (4AU)

BEng (Chemical and Biomolecular Engineering) and BA (Economics)
(wef AY2014)

List of courses that contribute towards BEng (Chemical & Biomolecular)				AU Load			
Discipline Requirement	Core	MH1810	Mathematics 1	3	87 AU (PA) 91 (PI)		
		CH1104	Materials & energy balances	4			
		CH1105	Materials Science	3			
		CH1117	Engineering Mathematics	4			
		CH1102	Introduction to Chemical Engineering in New Era	1			
		CH1108	Thermodynamics	4			
		CH1131	Biomolecular engineering	4			
		CH1801	Lab 1	1			
		CH1802	Lab 2	1			
		CH2102	Organic chemistry and Spectrophotometry	4			
		CH2103	Fluid systems	4			
		CH2104	Heat & mass transfer	4			
		CH2106	Introduction to Multidisciplinary Engineering	2			
		CH2107	Computational methods	3			
		CH2109	Decision Tools for Business & Engineering	3			
		CH2140	Unit Operation	4			
		CH2801	Lab 2A	2			
		CH2802	Lab 2B	2			
		CH3101	Process Control and Dynamics	4			
		CH3102	Chemical Reaction engineering	4			
		CH3103	Chemical Thermodynamics	3			
		CH3104	Biochemical Engineering	3			
		CH3141	Advanced Unit Operations	3			
		CH3802	Lab 3	3			
		CH3810 / CH3820	Professional Attachment / Professional Internship	4 / 8			
		CH4101	Chemical, Biology and Plant Safety	2			
		CH4801	Final Year Design Project	8			
		UE	HE1001	Microeconomic Principles		3	24 AU 12 AUs from compulsory Year 1 and 2 Economics courses. Remaining 12 AUs from 3 rd and 4 th year Economics courses that yield the highest CGPA
			HE1002	Macroeconomic Principles		3	
			HE1005	Intro to Probability & Statistical Inference		3	
			HE2005	Principles of Econometrics		3	
			HExxxx	Economics Course 1		3	
			HExxxx	Economics Course 2		3	
HExxxx	Economics Course 3		3				
HExxxx	Economics Course 4		4				
Major PE	CHxxxx		CBE PE 1	3	9 AU		
	CHxxxx		CBE PE 2	3			
	CHxxxx	CBE PE 3	3				
General Education Requirements (GER)	GER (Core)	CH0491	Engineers and Society	3	12 AU		
		HW0188	Engineering Communication I	2			
		HW0288	Engineering Communication II	2			
		ML0001	Absolute Basics for Career	1			
		ML0002	Career Power Up!	1			
		GC0001	Introduction to Sustainability	1			
		HY0001	Ethics and Moral Reasoning	1			
		ET0001	Entrepreneurship and Innovation	1			
GER-UE		Elective	4	4 Aus (PA Option)			
TOTAL				136 AU			