

**BEng (BioEngineering) and BA (Economics) (wef AY2016/2017)**

List of courses that contribute to BEng (BioEngineering)				AU Load	
<b>Discipline Requirement</b>	<b>Core</b>	PH1011*	Physics	3	88 AU (PA) 93 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	
		<b>BG3880 /</b>	Professional Attachment / Professional	5 /	
		<b>BG3885</b>	Internship	10	
		BG4103	Biomedical Project Design & Management	4	
		BG4102	Medical Device Design	3	
		BG4801	Final Year Project	8	
<b>UE</b>	HE1001	Microeconomic Principles	3	<b>24 AU</b> 12 AUs from compulsory Year 1 and 2 Economics courses. Remaining 12 AUs from 3 <sup>rd</sup> and 4 <sup>th</sup> 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		
<b>Major PE</b>	BGxxxx	BIE PE1	3	9 AU	
	BGxxxx	BIE PE2	3		
	BGxxxx	BIE PE3	3		
<b>General Education Requirements (GER)</b>	<b>GER (Core)</b>	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	
<b>GER-UE</b>		Elective	5	5 AUs (PA Option)	
<b>TOTAL</b>				<b>138 AU</b>	

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

**BEng (Chemical and Biomolecular Engineering) and BA (Economics)**  
(wef AY2016)

List of courses that contribute towards BEng (Chemical & Biomolecular)				AU Load		
<b>Discipline Requirement</b>	<b>Core</b>	MH1810	Mathematics 1	3	88 AU (PA) 93 (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		
		CH3880 / CH3888	Professional Attachment / Professional Internship	5 / 10		
	CH4101	Chemical, Biology and Plant Safety	2			
	CH4801	Final Year Design Project	8			
		<b>UE</b>	HE1001	Microeconomic Principles	3	24 AU 12 AUs from compulsory Year 1 and 2 Economics courses. Remaining 12 AUs from 3 <sup>rd</sup> and 4 <sup>th</sup> 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		
	<b>Major PE</b>	CHxxxx	CBE PE 1	3	9 AU	
		CHxxxx	CBE PE 2	3		
		CHxxxx	CBE PE 3	3		
<b>General Education Requirements (GER)</b>	<b>GER (Core)</b>	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			
	<b>GER-UE</b>		Elective	5	5 AUs (PA Option)	
<b>TOTAL</b>				<b>138 AU</b>		