BEng (Bioengineering) and BSocSci (Economics) *(wef AY2021/2022)*

List of Courses that Contributes to BEng (Bioengineering)				AU Load	
Discipline Requirement	**Core**	EG1001	Engineers In Society	2	**77 AU**
		MH1810	Math 1	3	
		PH1011*	Physics	3	
		CB1102	Introduction to Chemical and Biomedical Engineering	1	
		CB1103	Organic Chemistry For Engineers	3	
		CB1117	Engineering Mathematics	4	
		BG1141	Fundamental Biology for Bioengineers	3	
		BG1801	Bioengineering Lab 1A	1	
		BG1802	Bioengineering Lab 1B	1	
		BG2103	Signal Processing in Biosystems	3	
		BG2104	Electronics for Biomedical Engineering	3	
		BG2110	Bioelectricity	3	
		BG2119	Anatomy and Physiology	3	
		BG2131	Biomaterials	3	
		BG2142	Biological Thermodynamics	3	
		BG2209	Mechanics for Bioengineers	3	
		BG2211	Introduction to Computational Thinking	3	
		BG2801	Bioengineering Lab 2A	1	
		BG2802	Bioengineering Lab 2B	1	
		BG3102	Control in Biosystems	3	
		BG3104	Biomedical Imaging	3	
		BG3105	Biomedical Instrumentation	3	
		BG3112	Biofluid Mechanics and Medical Devices	3	
		BG3801	Bioengineering Lab 3	1	
		BG4104	Machine Learning and Optimization for Bioengineers	3	
		BG4122	Medical Device Design	6	
		BG4801	Final Year Project	8	
	BDE	HE1001	Microeconomics I	3	**21AU** 15AU from compulsory Economics Core courses. Remaining 3AU from Year 3 and 4 Economics PE that yield the highest CGPA. + 5AU (PA only)
		HE1002	Macroeconomics I	3	
		HE2001	Microeconomics II	3	
		HE2002	Macroeconomics II	3	
		HE2003	Econometrics I	3	
		HEXXXX	Economics PE	3	
			BDE 1	3	

List of Courses that Contributes to BEng (Bioengineering)				AU Load	
	Major PE	BGXXXX	BIE PE 1	3	**6AU**
		BGXXXX	BIE PE 2	3	
Interdisciplinary Collaborative Core	**Common Core**	CC0001	Inquiry and Communication in the Interdisciplinary World	2	**17AU**
		CC0002	Navigating the Digital World	2	
		CC0003	Ethics & Civics in a Multi-Cultural World	2	
		CC0005	Healthy Living & Wellbeing	3	
		CC0006	Sustainability: Society, Economy & Environment	3	
		CC0007	Science & Technology for Humanity	3	
		ML0004	Career and Entrepreneurial Development for the Future World	2	
	Foundational Core	HW0288	Engineering Communication	2	**15AU** or 10AU (for PA only)
		CB0494	Introduction to Data Science and Artificial Intelligence	3	
		^BG3880/ BG3885	Professional Internship/ Professional Attachment	10/5	
TOTAL					**136 AU**

**Students without 'A' Level Physics will take 'PH1012 Physics A' (4AU).*
^Students from U23 intake onwards will do BG3920 Professional Internship or BG3910 Professional Attachment instead

BEng (Chemical and Biomolecular Engineering) and BSocSci (Economics)

(wef AY2021/2022)

List of Courses that Contributes to BEng (Chemical and Biomolecular Engineering)				AU Load	
Discipline Requirement	**Core**	EG1001	Engineers In Society	2	**77AU**
		MH1810	Math 1	3	
		PH1011*	Physics	3	
		CB1102	Introduction to Chemical and Biomedical Engineering	1	
		CB1103	Organic Chemistry For Engineers	3	
		CB1117	Engineering Mathematics	4	
		CB1131	Introduction to Biomolecular Engineering	3	
		CH1104	Materials & Energy Balance	3	
		CH1801	Chemical & Biomolecular Engineering Laboratory 1A	1	
		CH1802	Chemical & Biomolecular Engineering Laboratory 2	1	
		CH2010	Engineering Statistics	3	
		CH2103	Fluid Systems	3	
		CH2107	Introduction to Computational Thinking	3	
		CH2108	Thermodynamics	3	
		CH2112	Chemical Reaction Engineering	3	
		CH2114	Heat & Mass Transfer in Chemical and Biological Systems	3	
		CH2123	Chemical Thermodynamics	3	
		CH2151	Unit Operations: Fluid-Solid Separation	3	
		CH2801	Chemical & Biomolecular Engineering Laboratory 2A	2	
		CH2802	Chemical & Biomolecular Engineering Laboratory 2B	2	
		CH3104	Biochemical Engineering	3	
		CH3109	Decision Tools for Business & Engineering	3	
		CH3111	Process Control and Dynamics	3	
		CH3121	Chemical, Biological & Plant Safety	2	
		CH3140	Unit Operations B	3	
		CH3802	Chemical & Biomolecular Engineering Laboratory 5	3	
		CH4801	Final Year Design Project	8	

List of Courses that Contributes to BEng (Chemical and Biomolecular Engineering)				AU Load	
	BDE	HE1001	Microeconomics I	3	**21AU** 15AU from compulsory Economics Core courses. Remaining 3AU from Year 3 and 4 Economics PE that yield the highest CGPA. + 5AU (PA only)
		HE1002	Macroeconomics I	3	
		HE2001	Microeconomics II	3	
		HE2002	Macroeconomics II	3	
		HE2003	Econometrics I	3	
		HEXXXX	Economics PE	3	
			BDE 1	3	
	Major PE	BGXXXX	BIE PE 1	3	**6AU**
		BGXXXX	BIE PE 2	3	
Interdisciplinary Collaborative Core	**Common Core**	CC0001	Inquiry and Communication in the Interdisciplinary World	2	**17AU**
		CC0002	Navigating the Digital World	2	
		CC0003	Ethics & Civics in a Multi-Cultural World	2	
		CC0005	Healthy Living & Wellbeing	3	
		CC0006	Sustainability: Society, Economy & Environment	3	
		CC0007	Science & Technology for Humanity	3	
		ML0004	Career and Entrepreneurial Development for the Future World	2	
	Foundational Core	HW0288	Engineering Communication	2	**15AU or 10AU (for PA only)**
		CB0494	Introduction to Data Science and Artificial Intelligence	3	
		^BG3880/ BG3885	Professional Internship/ Professional Attachment	10/5	
TOTAL					**136 AU**

**Students without 'A' Level Physics will take 'PH1012 Physics A' (4AU).*

^Students from U23 intake onwards will do BG3920 Professional Internship or BG3910 Professional Attachment instead