BEng (Materials Engineering) and BA (Economics) *(wef AY2018)*

List of courses that contribute towards BEng (Materials Engineering)				AU Load	
Discipline Requirement	**Core**	PH1011/12	Physics**	3	85 AUs (PA Option) 90 AUs (PI Option)
		MH1810	Mathematics I	3	
		MS1008	Introduction to Computational Thinking	3	
		MS1012	Materials Physics	3	
		MS1013	Materials Chemistry I	3	
		MS1014	Materials Chemistry II	3	
		MS1015	Materials Science	3	
		MS1016	Thermodynamics of Materials	3	
		MH2811	Mathematics II	3	
		MS2012	Introduction to Manufacturing	3	
		MS2013	Polymers and Composites	3	
		MS2014	Materials Structure and Defects	3	
		MS2015	Mechanical Behaviour of Materials	3	
		MS2016	Phase Transformation and Kinetics	3	
		MS2018	Electronic & Magnetic Properties of Materials	3	
		MS2081	Laboratory IIA	1	
		MS2082	Laboratory IIB	1	
		MS3011	Metallic & Ceramic Materials	3	
		MS3012	Micro/Nanoelectronic Materials Processing	3	
		MS3013	Environmental Effects on Materials	3	
		MS3014	Analysis of Materials	3	
		MS3015	Materials Aspect in Design	3	
		MS3081	Laboratory III	1	
		MS3096/ MS3099	Professional Attachment / Professional Internship	5/10	
		MS4012	Quality Control	3	
		MS4013	Biomaterials	3	
		MS4014	Nanomaterials: fundamentals and applications	3	
		MS4089	Final Year Project	8	
	UE	HE1001	Microeconomic Principles	3	12 AUs from compulsory Year 1 and 2 Economics courses. Remaining 12 AUs from 3rd and 4th 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	MS46xx	Materials Engineering PE1	3	12 AUs
		MS46xx	Materials Engineering PE2	3	
		MS46xx	Materials Engineering PE3	3	
		MS46xx	Materials Engineering PE4	3	
General Education Requirements (GER)	**GER (Core)**	HW0188	Engineering Communication I	2	14 AUs
		HW0288	Engineering Communication II	2	
		ML0003	Kickstart your Career Success	1	
		GC0001	Introduction to Sustainability	1	
		HY0001	Ethics and Moral Reasoning	1	
		ET0001	Entrepreneurship and Innovation	1	
		MS0002	Engineers and Society	3	
		MS0003	Introduction to Data Science and Artificial Intelligence	3	
	GER - UE		Elective	4	5 AUs (PA Option)
			TOTAL		**140/141 AUs**

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