

BEng (Materials Engineering) and BSocSci (Economics)*(wef AY2025/2026 Intake onwards)*

List of courses that contribute towards BEng (Materials Engineering)				AU Load	
Discipline Requirement	Core	PH1011/12	Physics**	3	77/78** AU
		MH1810	Mathematics I	3	
		EG1001	Engineer & Society	2	
		MS1008	Introduction to Computational Thinking	3	
		MS1011	Materials Matter	1	
		MS1013	Materials Chemistry I	2	
		MS1014	Materials Chemistry II	2	
		MS1017	Introduction to Materials Science	2	
		MS1018	Properties of Materials	2	
		MS1016	Thermodynamics of Materials	3	
		MH2811	Mathematics II	3	
		MS2012	Introduction to Manufacturing	3	
		MS2013	Introduction to Polymer Science	3	
		MS2083	Polymer Lab	1	
		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	
		MS3011	Metallic & Ceramic Materials	3	
		MS3012	Micro/Nanoelectronic Materials Processing	3	
		MS3013	Corrosion of Materials	3	
		MS3082	Design Lab	1	
		MS3014	Analysis of Materials	3	
		MS3015	Materials Aspect in Design	4	
		MS4012	Quality Control	3	
		MS4013	Biomaterials	2	
		MS4014	Nanomaterials: fundamentals and applications	2	
		MS4089	Final Year Project	8	
	BDE	HE1001	Microeconomic I	3	15 AU from compulsory Year 1 and 2 Economics courses. Remaining 3 AU from Year 3 and 4 Economics PE that yield the highest CGPA. + 5 AU (PA only)
		HE1002	Macroeconomic I	3	
		HE2001	Microeconomics II	3	
		HE2002	Macroeconomics II	3	
		HE2003	Econometrics I	3	
		HExxxx	Economics PE1	3	
	Major PE	MS46xx	Materials Engineering PE1	3	10 AU
		MS46xx	Materials Engineering PE2	3	
		MS46xx	Materials Engineering PE3	2	
		MS46xx	Materials Engineering PE4	2	
	Common Core	CC0003	Ethics & Civics in a Multi-Cultural World	2	14 AU

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Interdisciplinary Collaborative Core		CC0015 CC0001	Health & Wellbeing Inquiry and Communication in an Interdisciplinary World	2 2	
		CC0007 ML0004	Science & Technology for Humanity Career Design & Workplace Readiness in the V.U.C.A World	3 2	
		CC0006	Sustainability: Society, Economy & Environment	3	
	Professional Series	MS0003 HW0288 MS3920/MS3910 MLxxxx	Introduction to Data Science and Artificial Intelligence Effective Communication 2 Professional Internship/Professional Attachment Profession Preparation	3 2 10/5 1	16 AU (PI Option) 11 AU (PA Option)
	Care, Serve, Learn (CSL)		Service Learning	3	3
TOTAL				138/139** AU	

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