

**Double Degree in Bachelor of Engineering (Mechanical Engineering) and Bachelor of Arts (Economics)**

For students admitted to **First Year Engineering from AY2014/2015**

List of courses that contribute towards GPA Computation for BEng (Mechanical Engineering) – Design/Mechatronics Stream

List of courses that contribute towards GPA Computation for BEng (Mechanical Engineering) – Design/Mechatronics Stream				AU Load	
<b>Discipline Requirement</b>	<b>Core</b>	PH1011	Physics**	3	84 AUs (PA)/ 88 AUs (PI)
		MH1810	Mathematics 1	3	
		MH1811	Mathematics 2	3	
		FE1008	Computing	3	
		FE1073	Introduction to Engineering & Practices	1	
		MA1001	Dynamics	3	
		MA1002	Fundamental Engineering Materials	3	
		MA2001	Mechanics of Materials	3	
		MA2002	Theory of Mechanism	3	
		MA2003	Introduction to Thermo-fluids	3	
		MA2004	Manufacturing Processes	3	
		MA2005	Engineering Graphics	3	
		MA2006	Engineering Mathematics	3	
		MA2009	Introduction to Electrical Circuits & Electronic Devices	3	
		MA2011/ MA2013	Mechatronics Systems Interfacing/ Creative Thinking and Design	3	
		MA2012/ MA2014	Introduction to Mechatronics Systems Design/ Product Presentation	3	
		MA2071	Laboratory Experiments (ME)	1	
		MA2079	Engineering Innovation and Design	2	
		MA3001	Machine Element Design	3	
		MA3002	Solid Mechanics and Vibration	3	
	MA3004	Mathematical Methods in Engineering	3		
	MA3005	Control Theory	3		
	MA3006	Fluid Mechanics	3		
	MA3010	Thermodynamics & Heat Transfer	3		
	MA3071	Engineering Experiments (ME)	1		
	MA4011/ MA4012	Engineering Product Design (Design Stream)/ Mechatronics Engineering Design (Mechatronics Stream)	4		
	MA4079	Final Year Project	8		
<b>UE</b>	HE1001	Microeconomic Principles	3	24 AUs 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		
		Economics Course 1 Economics Course 2 Economics Course 3 Economics Course 4	3 3 3 4		
<b>Major PE</b>	MA48xx	Mechanical Engineering Stream PE 1	3	12 AUs	
	MA48xx	Mechanical Engineering Stream PE 2	3		
	MA48xx	Mechanical Engineering Stream PE 3	3		
	MA48xx	Mechanical Engineering Stream PE 4	3		
<b>General Education Requirements (GER)</b>	<b>GER-Core</b>	HW0188	Engineering Communication I	2	12 AUs
		HW0288	Engineering Communication II	2	
		-	MLCPS Communication	2	
		GC0001	Introduction to Sustainability	1	
		-	Ethics and Moral Reasoning	1	
		-	Entrepreneurship and Innovation	1	
	MA0101	Engineers & Society	3		
<b>GER-UE</b>	-	GER-UE	4	4 (PA only)	
<b>TOTAL</b>				<b>136 AUs</b>	

\*\* Students without 'A' level Physics will read FE1012/PH1012 Physics A (4 AUs)