MEEC CGPA Computation (MAINSTREAM)

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

List of Courses that Contributes to BEng (Mechanical Engineering)					AU Load
Discipline Requirement	**Core**	MH1810	Mathematics 1	3	**79/80*AU**
		PH1011	Physics*	3	
		FE1073	An Introduction to Engineering & Practices	1	
		EG1001	Engineers in Society	2	
		MA2003	Introduction to Thermo-Fluids	3	
		MH1811	Mathematics II	3	
		MA1001	Dynamics	3	
		MA1008	Introduction to Computational Thinking	3	
		MA2001	Mechanics of Materials	3	
		MA2002	Theory of Mechanism	3	
		MA2004	Manufacturing Processes	3	
		MA2006	Engineering Mathematics	3	
		MA2009	Introduction to Electrical & Electronic Devices	3	
		MA2071	Laboratory Experiments	1	
		MA2005	Engineering Graphics	3	
		MA2007	Thermodynamics	3	
		MA2079	Engineering Innovation and Design	2	
		MA3001	Machine Element Design	3	
		MA3006	Fluid Mechanics	3	
		MA3002	Solid Mechanics and Vibration	3	
		MA3003	Heat Transfer	3	
		MA3004	Mathematical Methods in Engineering	3	
		MA3005	Control Theory	3	
		MA3071	Engineering Experiments (ME)	1	
		MA4079	Final Year Project	8	
		MA4002	Fluid Dynamics	3	
		MA4001	Engineering Design	4	
	BDE	HE1001	Microeconomics I	3	**18AU** 15AU from compulsory Year 1 and 2 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	
	Major PE	MA48XX	Major-PE 1	3	**6AU**
		MA48XX	Major-PE 2	3	
Interdisciplinary Collaborative Core	**Common Core**	CC0001	Inquiry and Communication in an Interdisciplinary World	2	**14AU**
		CC0002	Navigating the Digital World	2	
		CC0003	Ethics & Civics in a Multi-Cultural World	2	
		CC0015	Health & Wellbeing	2	
		CC0006	Sustainability: Society, Economy & Environment	3	
		CC0007	Science & Technology for Humanity	3	
		ML0004	Career Design & Workplace Readiness in the V.U.C.A World	2	
	Professional Series	HW0288	Engineering Communication	2	**16AU** or **11**AU (PA only)
		MA0218	Introduction to Data Science and Artificial Intelligence	3	
		MA3920/ MA3910	Professional Internship/ Professional Attachment	10/ 5	
		MLxxxx	Profession Preparation	1	
	Care, Serve, Learn (CSL)		Service Learning	3	**3**
TOTAL					**136/137* AU**

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

MEEC CGPA Computation (DESIGN STREAM)
BEng (Mechanical Engineering) and BSocSci (Economics)
(wef AY2025/2026 Intake onwards)

List of Courses that Contributes to BEng (Mechanical Engineering)					AU Load
Discipline Requirement	**Core**	MH1810	Mathematics 1	3	**79/80*AU**
		PH1011	Physics*	3	
		FE1073	An Introduction to Engineering & Practices	1	
		EG1001	Engineers in Society	2	
		MA2003	Introduction to Thermo-Fluids	3	
		MH1811	Mathematics II	3	
		MA1001	Dynamics	3	
		MA1008	Introduction to Computational Thinking	3	
		MA2001	Mechanics of Materials	3	
		MA2002	Theory of Mechanism	3	
		MA2004	Manufacturing Processes	3	
		MA2006	Engineering Mathematics	3	
		MA2009	Introduction to Electrical & Electronic Devices	3	
		MA2071	Laboratory Experiments	1	
		MA2005	Engineering Graphics	3	
		MA2014	Product Presentation	3	
		MA2079	Engineering Innovation and Design	2	
		MA3001	Machine Element Design	3	
		MA3006	Fluid Mechanics	3	
		MA3002	Solid Mechanics and Vibration	3	
		MA3010	Thermodynamics and Heat Transfer	3	
		MA3004	Mathematical Methods in Engineering	3	
		MA3005	Control Theory	3	
		MA3071	Engineering Experiments (ME)	1	
		MA4079	Final Year Project	8	
		MA2013	Creative Thinking and Design	3	
		MA4011	Engineering Product Design	4	
	BDE	HE1001	Microeconomics I	3	<u>18AU</u> 15AU from compulsory Year 1 and 2 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	
	Major PE	MA48XX	Major-PE 1	3	**6AU**
		MA48XX	Major-PE 2	3	
Interdisciplinary Collaborative Core	**Common Core**	CC0001	Inquiry and Communication in an Interdisciplinary World	2	**14AU**
		CC0002	Navigating the Digital World	2	
		CC0003	Ethics & Civics in a Multi-Cultural World	2	
		CC0015	Health & Wellbeing	2	
		CC0006	Sustainability: Society, Economy & Environment	3	
		CC0007	Science & Technology for Humanity	3	
		ML0004	Career Design & Workplace Readiness in the V.U.C.A World	2	
	Professional Series	HW0288	Engineering Communication	2	**16AU** or **11**AU (PA only)
		MA0218	Introduction to Data Science and Artificial Intelligence	3	
		MA3920/ MA3910	Professional Internship/ Professional Attachment	10/ 5	
		MLxxxx	Profession Preparation	1	
	Care, Serve, Learn (CSL)		Service Learning	3	**3**
TOTAL					**136/137* AU**

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

MEEC CGPA Computation (ROBOTICS & MECHATRONICS STREAM)

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

List of Courses that Contributes to BEng (Mechanical Engineering)					AU Load
Discipline Requirement	**Core**	MH1810	Mathematics 1	3	**79AU**
		PH1011	Physics*	3	
		FE1073	An Introduction to Engineering & Practices	1	
		EG1001	Engineers in Society	2	
		MA2003	Introduction to Thermo-Fluids	3	
		MH1811	Mathematics II	3	
		MA1001	Dynamics	3	
		MA1008	Introduction to Computational Thinking	3	
		MA2001	Mechanics of Materials	3	
		MA2002	Theory of Mechanism	3	
		MA2004	Manufacturing Processes	3	
		MA2006	Engineering Mathematics	3	
		MA2009	Introduction to Electrical & Electronic Devices	3	
		MA2071	Laboratory Experiments	1	
		MA2005	Engineering Graphics	3	
		MA2012	Introduction to Mechatronics Systems Design	3	
		MA2079	Engineering Innovation and Design	2	
		MA3001	Machine Element Design	3	
		MA3006	Fluid Mechanics	3	
		MA3002	Solid Mechanics and Vibration	3	
		MA3010	Thermodynamics and Heat Transfer	3	
		MA3004	Mathematical Methods in Engineering	3	
		MA3005	Control Theory	3	
		MA3071	Engineering Experiments (ME)	1	
		MA4079	Final Year Project	8	
		MA2011	Mechatronics System Interfacing	3	
		MA4012	Mechatronics Engineering Design	4	
	BDE	HE1001	Microeconomics I	3	**18AU** 15AU from compulsory Year 1 and 2 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	
	Major PE	MA48XX	Major-PE 1	3	**6AU**
		MA48XX	Major-PE 2	3	
Interdisciplinary Collaborative Core	**Common Core**	CC0001	Inquiry and Communication in an Interdisciplinary World	2	**14AU**
		CC0002	Navigating the Digital World	2	
		CC0003	Ethics & Civics in a Multi-Cultural World	2	
		CC0015	Health & Wellbeing	2	
		CC0006	Sustainability: Society, Economy & Environment	3	
		CC0007	Science & Technology for Humanity	3	
		ML0004	Career Design & Workplace Readiness in the V.U.C.A World	2	
	Professional Series	HW0288	Engineering Communication	2	**16AU** or **11**AU (PA only)
		MA0218	Introduction to Data Science and Artificial Intelligence	3	
		MA3920/ MA3910	Professional Internship/ Professional Attachment	10/ 5	
		MLxxxx	Profession Preparation	1	
	Care, Serve, Learn (CSL)		Service Learning	3	**3**
TOTAL					**136/137* AU**

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

MEEC CGPA Computation (INTELLIGENT MANUFACTURING STREAM)

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

List of Courses that Contributes to BEng (Mechanical Engineering)					AU Load
Discipline Requirement	**Core**	MH1810	Mathematics 1	3	**79/80*AU**
		PH1011	Physics*	3	
		FE1073	An Introduction to Engineering & Practices	1	
		EG1001	Engineers in Society	2	
		MA2003	Introduction to Thermo-Fluids	3	
		MH1811	Mathematics II	3	
		MA1001	Dynamics	3	
		MA1008	Introduction to Computational Thinking	3	
		MA2001	Mechanics of Materials	3	
		MA2002	Theory of Mechanism	3	
		MA2004	Manufacturing Processes	3	
		MA2006	Engineering Mathematics	3	
		MA2009	Introduction to Electrical & Electronic Devices	3	
		MA2071	Laboratory Experiments	1	
		MA2005	Engineering Graphics	3	
		MA2012	Introduction to Mechatronics Systems Design	3	
		MA2079	Engineering Innovation and Design	2	
		MA3001	Machine Element Design	3	
		MA3006	Fluid Mechanics	3	
		MA3002	Solid Mechanics and Vibration	3	
		MA3010	Thermodynamics and Heat Transfer	3	
		MA3004	Mathematical Methods in Engineering	3	
		MA3005	Control Theory	3	
		MA3071	Engineering Experiments (ME)	1	
		MA4079	Final Year Project	8	
		MA2011	Mechatronics System Interfacing	3	
		MA4013	Manufacturing Engineering Design	4	
	BDE	HE1001	Microeconomics I	3	**18AU** 15AU from compulsory Year 1 and 2 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	
	Major PE	MA48XX	Major-PE 1	3	**6AU**
		MA48XX	Major-PE 2	3	
Interdisciplinary Collaborative Core	**Common Core**	CC0001	Inquiry and Communication in an Interdisciplinary World	2	**14AU**
		CC0002	Navigating the Digital World	2	
		CC0003	Ethics & Civics in a Multi-Cultural World	2	
		CC0015	Health & Wellbeing	2	
		CC0006	Sustainability: Society, Economy & Environment	3	
		CC0007	Science & Technology for Humanity	3	
		ML0004	Career Design & Workplace Readiness in the V.U.C.A World	2	
	Professional Series	HW0288	Engineering Communication	2	**16AU** or **11**AU (PA only)
		MA0218	Introduction to Data Science and Artificial Intelligence	3	
		MA3920/ MA3910	Professional Internship/ Professional Attachment	10/ 5	
		MLxxxx	Profession Preparation	1	
	Care, Serve, Learn (CSL)		Service Learning	3	**3**
	TOTAL				**136/137* AU**

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