BEng (Aerospace Engineering) and BSocSci (Economics) *(wef AY2021/2022)*

List of Courses that Contributes to BEng (Aerospace Engineering)				AU Load	
Discipline Requirement	**Core**	MH1810	Mathematics 1	3	**85AU**
		PH1011	Physics*	3	
		EG1001	Engineers in Society	2	
		MA2001	Mechanics of Materials	3	
		MH1811	Mathematics II	3	
		MA1001	Dynamics	3	
		MA1008	Introduction to Computational Thinking	3	
		MA1700	Aerospace Discovery Course	1	
		MA2003	Introduction to Thermo-fluids	3	
		MA2007	Thermodynamics	3	
		MA2005	Engineering Graphics	3	
		MA2006	Engineering Mathematics	3	
		MA2072	Laboratory Experiments (AE)	1	
		MA2701	Flight Performance	2	
		MA3700	Aircraft Structures I	3	
		MA3701	Aerodynamics	3	
		MA2700	Aerospace Materials & Manufacturing Process	3	
		MA2079	Engineering Innovation and Design	2	
		MA3006	Fluid Mechanics	3	
		MA3705	Aerospace Control Theory	3	
		MA3003	Heat Transfer	3	
		MA3072	Engineering Experiments (AE)	1	
		MA3702	Aircraft Propulsion	3	
		MA3703	Flight Dynamics	2	
		MA3704	Aircraft Electrical Devices	3	
		MA4702	Aircraft Structures II	3	
		MA4705	Aircraft Navigation and Flight Computers	3	
		MA4079	Final Year Project	8	
		MA4701	Aircraft Design	3	
		MA4704	Aeroelasticity	3	
	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	
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 (PA only)
		MA0218	Introduction to Data Science and Artificial Intelligence	3	
		MA3080/ MA3075	Professional Internship/ Professional Attachment	10/ 5	
TOTAL					**135 AU**

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

MEEC CGPA Computation (MAINSTREAM)

BEng (Mechanical Engineering) and BSocSci (Economics) *(wef AY2021/2022)*

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	
		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	<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 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 (PA only)
		MA0218	Introduction to Data Science and Artificial Intelligence	3	
		MA3080/ MA3075	Professional Internship/ Professional Attachment	10/ 5	
TOTAL					**135 AU**

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

MEEC CGPA Computation (DESIGN STREAM)
BEng (Mechanical Engineering) and BSocSci (Economics) *(wef AY2021/2022)*

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	
		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 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 (PA only)
		MA0218	Introduction to Data Science and Artificial Intelligence	3	
		MA3080/ MA3075	Professional Internship/ Professional Attachment	10/ 5	
TOTAL					**135 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 AY2021/2022)*

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	<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 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 (PA only)
		MA0218	Introduction to Data Science and Artificial Intelligence	3	
		MA3080/ MA3075	Professional Internship/ Professional Attachment	10/ 5	
TOTAL					**135 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 AY2022/2023)*

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	
		MA4013	Manufacturing Engineering 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 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 (PA only)
		MA0218	Introduction to Data Science and Artificial Intelligence	3	
		MA3080/ MA3075	Professional Internship/ Professional Attachment	10/ 5	
TOTAL					**135 AU**

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