

AY2021-22 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 HE1002 HE2001 HE2002 HE2003 HEXXXX	Microeconomics I Macroeconomics I Microeconomics II Macroeconomics II Econometrics I Economics PE	3 3 3 3 3 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)
	Major PE	MA48XX MA48XX	Major-PE 1 Major-PE 2	3 3	6AU
Interdisciplinary Collaborative Core	Common Core	CC0001 CC0002 CC0003 CC0005 CC0006 CC0007 ML0004	Inquiry and Communication in the Interdisciplinary World Navigating the Digital World Ethics & Civics in a Multi-Cultural World Healthy Living & Wellbeing Sustainability: Society, Economy & Environment Science & Technology for Humanity Career and Entrepreneurial Development for the Future World	2 2 2 3 3 3 2	17AU
	Foundational Core	HW0288 MA0218 MA3080/ MA3075	Engineering Communication Introduction to Data Science and Artificial Intelligence Professional Internship/ Professional Attachment	2 3 10/ 5	15AU or 10AU (PA only)
TOTAL					135 AU

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

List of courses that contribute towards BSocSci (Econs)				AU Load	
Discipline Requirement	Core	HE1001	Microeconomics I	3	32AU
		HE1002	Macroeconomics I	3	
		HE2001	Microeconomics II	3	
		HE2002	Macroeconomics II	3	
		HE2003	Econometrics I	3	
		HE3001	Microeconomics III	3	
		HE3002	Macroeconomics III	3	
		HE3003	Econometrics II	3	
		MA4079	Final Year Project	8	
		MPE	MH1820	Introduction to Probability and Statistical Methods	
HE3XXX	Econs PE1		3		
HE3XXX	Econs PE2		3		
HE3XXX	Econs PE3		3		
HE3XXX	Econs PE4		3		
HE3XXX	Econs PE5		3		
HE3XXX	Econs PE6		3		
HE4XXX	Econs PE7		4		
HE4XXX	Econs PE8		4		
HE4XXX	Econs PE9		4		
BDE	MH1810	Mathematics 1	3	9AU from Year 1 Engineering graded Core courses that yield the highest CGPA.	
	PH1011	Physics*	3		
	FE1073	An Introduction to Engineering & Practices	1		
	EG1001	Engineers in Society	2		
	MH1811	Mathematics II	3		
	MA1001	Dynamics	3		
	MA1008	Introduction to Computational Thinking	3		

	BDE	MA2003 MA2001 MA2002 MA2004 MA2006 MA2009 MA2071 MA2005 MA2007 MA2079 MA3001 MA3006 MA3002 MA3003 MA3004 MA3005 MA3071	Introduction to Thermo-Fluids Mechanics of Materials Theory of Mechanism Manufacturing Processes Engineering Mathematics Introduction to Electrical & Electronic Devices Laboratory Experiments Engineering Graphics Thermodynamics Engineering Innovation and Design Machine Element Design Fluid Mechanics Solid Mechanics and Vibration Heat Transfer Mathematical Methods in Engineering Control Theory Engineering Experiments (ME)	3 3 3 3 3 3 1 3 3 2 3 3 3 3 3 3 1	21AU from Year 2 and 3 Engineering graded courses that yield the highest CGPA + 5AU (PA only)
Interdisciplinary Collaborative Core	Common Core	CC0001 CC0002 CC0003 CC0005 CC0006 CC0007 ML0004	Inquiry and Communication in the Interdisciplinary World Navigating the Digital World Ethics & Civics in a Multi-Cultural World Healthy Living & Wellbeing Sustainability: Society, Economy & Environment Science & Technology for Humanity Career and Entrepreneurial Development for the Future World	2 2 2 3 3 3 2	17AU
	Foundational Core	HW0288 MA0218 MA3080/ MA3075	Engineering Communication Introduction to Data Science and Artificial Intelligence Professional Internship/ Professional Attachment	2 3 10/ 5	15AU or 10AU (PA only)
TOTAL					127AU

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

AY2021-22 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 HE1002 HE2001 HE2002 HE2003 HEXXXX	Microeconomics I Macroeconomics I Microeconomics II Macroeconomics II Econometrics I Economics PE	3 3 3 3 3 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)
	Major PE	MA48XX MA48XX	Major-PE 1 Major-PE 2	3 3	6AU
Interdisciplinary Collaborative Core	Common Core	CC0001 CC0002 CC0003 CC0005 CC0006 CC0007 ML0004	Inquiry and Communication in the Interdisciplinary World Navigating the Digital World Ethics & Civics in a Multi-Cultural World Healthy Living & Wellbeing Sustainability: Society, Economy & Environment Science & Technology for Humanity Career and Entrepreneurial Development for the Future World	2 2 2 3 3 3 2	17AU
	Foundational Core	HW0288 MA0218 MA3080/ MA3075	Engineering Communication Introduction to Data Science and Artificial Intelligence Professional Internship/ Professional Attachment	2 3 10/ 5	15AU or 10AU (PA only)
TOTAL					135 AU

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

List of courses that contribute towards BSocSci (Econs)				AU Load	
Discipline Requirement	Core	HE1001	Microeconomics I	3	32AU
		HE1002	Macroeconomics I	3	
		HE2001	Microeconomics II	3	
		HE2002	Macroeconomics II	3	
		HE2003	Econometrics I	3	
		HE3001	Microeconomics III	3	
		HE3002	Macroeconomics III	3	
		HE3003	Econometrics II	3	
		MA4079	Final Year Project	8	
		MPE	MH1820	Introduction to Probability and Statistical Methods	
HE3XXX	Econs PE1		3		
HE3XXX	Econs PE2		3		
HE3XXX	Econs PE3		3		
HE3XXX	Econs PE4		3		
HE3XXX	Econs PE5		3		
HE3XXX	Econs PE6		3		
HE4XXX	Econs PE7		4		
HE4XXX	Econs PE8		4		
HE4XXX	Econs PE9		4		
BDE	MH1810	Mathematics 1	3	9AU from Year 1 Engineering graded Core courses that yield the highest CGPA.	
	PH1011	Physics*	3		
	FE1073	An Introduction to Engineering & Practices	1		
	EG1001	Engineers in Society	2		
	MH1811	Mathematics II	3		
	MA1001	Dynamics	3		
	MA1008	Introduction to Computational Thinking	3		

	BDE	MA2003 MA2001 MA2002 MA2004 MA2006 MA2009 MA2071 MA2005 MA2013 MA2079 MA3001 MA3006 MA3002 MA3010 MA3004 MA3005 MA3071 MA2014	Introduction to Thermo-Fluids Mechanics of Materials Theory of Mechanism Manufacturing Processes Engineering Mathematics Introduction to Electrical & Electronic Devices Laboratory Experiments Engineering Graphics Creative Thinking and Design Engineering Innovation and Design Machine Element Design Fluid Mechanics Solid Mechanics and Vibration Thermodynamics and Heat Transfer Mathematical Methods in Engineering Control Theory Engineering Experiments (ME) Product Presentation	3 3 3 3 3 3 1 3 3 2 3 3 3 3 3 3 1 3	21AU from Year 2 and 3 Engineering graded courses that yield the highest CGPA + 5AU (PA only)
Interdisciplinary Collaborative Core	Common Core	CC0001 CC0002 CC0003 CC0005 CC0006 CC0007 ML0004	Inquiry and Communication in the Interdisciplinary World Navigating the Digital World Ethics & Civics in a Multi-Cultural World Healthy Living & Wellbeing Sustainability: Society, Economy & Environment Science & Technology for Humanity Career and Entrepreneurial Development for the Future World	2 2 2 3 3 3 2	17AU
	Foundational Core	HW0288 MA0218 MA3080/ MA3075	Engineering Communication Introduction to Data Science and Artificial Intelligence Professional Internship/ Professional Attachment	2 3 10/ 5	15AU or 10AU (PA only)
TOTAL					127AU

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

AY2021-22 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 HE1002 HE2001 HE2002 HE2003 HEXXXX	Microeconomics I Macroeconomics I Microeconomics II Macroeconomics II Econometrics I Economics PE	3 3 3 3 3 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)
	Major PE	MA48XX MA48XX	Major-PE 1 Major-PE 2	3 3	6AU
Interdisciplinary Collaborative Core	Common Core	CC0001 CC0002 CC0003 CC0005 CC0006 CC0007 ML0004	Inquiry and Communication in the Interdisciplinary World Navigating the Digital World Ethics & Civics in a Multi-Cultural World Healthy Living & Wellbeing Sustainability: Society, Economy & Environment Science & Technology for Humanity Career and Entrepreneurial Development for the Future World	2 2 2 3 3 3 2	17AU
	Foundational Core	HW0288 MA0218 MA3080/ MA3075	Engineering Communication Introduction to Data Science and Artificial Intelligence Professional Internship/ Professional Attachment	2 3 10/ 5	15AU or 10AU (PA only)
TOTAL					135 AU

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

List of courses that contribute towards BSocSci (Econs)				AU Load	
Discipline Requirement	Core	HE1001	Microeconomics I	3	32AU
		HE1002	Macroeconomics I	3	
		HE2001	Microeconomics II	3	
		HE2002	Macroeconomics II	3	
		HE2003	Econometrics I	3	
		HE3001	Microeconomics III	3	
		HE3002	Macroeconomics III	3	
		HE3003	Econometrics II	3	
		MA4079	Final Year Project	8	
		MPE	MH1820	Introduction to Probability and Statistical Methods	
HE3XXX	Econs PE1		3		
HE3XXX	Econs PE2		3		
HE3XXX	Econs PE3		3		
HE3XXX	Econs PE4		3		
HE3XXX	Econs PE5		3		
HE3XXX	Econs PE6		3		
HE4XXX	Econs PE7		4		
HE4XXX	Econs PE8		4		
HE4XXX	Econs PE9		4		
BDE	MH1810	Mathematics 1	3	9AU from Year 1 Engineering graded Core courses that yield the highest CGPA.	
	PH1011	Physics*	3		
	FE1073	An Introduction to Engineering & Practices	1		
	EG1001	Engineers in Society	2		
	MH1811	Mathematics II	3		
	MA1001	Dynamics	3		
	MA1008	Introduction to Computational Thinking	3		

	BDE	MA2003 MA2001 MA2002 MA2004 MA2006 MA2009 MA2071 MA2005 MA2012 MA2079 MA3001 MA3006 MA3002 MA3010 MA3004 MA3005 MA3071 MA2011	Introduction to Thermo-Fluids Mechanics of Materials Theory of Mechanism Manufacturing Processes Engineering Mathematics Introduction to Electrical & Electronic Devices Laboratory Experiments Engineering Graphics Introduction to Mechatronics Systems Design Engineering Innovation and Design Machine Element Design Fluid Mechanics Solid Mechanics and Vibration Thermodynamics and Heat Transfer Mathematical Methods in Engineering Control Theory Engineering Experiments (ME) Mechatronics System Interfacing	3 3 3 3 3 3 1 3 3 2 3 3 3 3 3 3 1 3	21AU from Year 2 and 3 Engineering graded courses that yield the highest CGPA + 5AU (PA only)
Interdisciplinary Collaborative Core	Common Core	CC0001 CC0002 CC0003 CC0005 CC0006 CC0007 ML0004	Inquiry and Communication in the Interdisciplinary World Navigating the Digital World Ethics & Civics in a Multi-Cultural World Healthy Living & Wellbeing Sustainability: Society, Economy & Environment Science & Technology for Humanity Career and Entrepreneurial Development for the Future World	2 2 2 3 3 3 2	17AU
	Foundational Core	HW0288 MA0218 MA3080/ MA3075	Engineering Communication Introduction to Data Science and Artificial Intelligence Professional Internship/ Professional Attachment	2 3 10/ 5	15AU or 10AU (PA only)
TOTAL					127AU

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