

AU Required for Mechanical Engineering with Second Major in Business (International Trading) (MEBM-ITP)

Students admitted from AY2018/2019 **Mainstream**

Year of Study	Number of Academic Units (AUs)								
	Major Requirements		General Education Requirement (GER)						Total
	Core	Major PE	GER Core	GER Prescribed Electives				UE	
				BM	LA	STS	Any Category (BM, LA, STS)		
1	22/23*	0	3					14	39/40*
2	27	0	9					5	41
3	26	0	2					4	32
4	15	12	0					7	34
Total	90/91*	12	14	0				30	146/147*

*Poly Direct Entry Students and JC students without A Level Physics ONLY

Course Code and Title	Type	AU	Pre-requisite/ Remarks
YEAR 1 SEMESTER 1			
MH1810 Mathematics I	C	3	
MA1008 Introduction to Computational Thinking	C	3	
PH1011 Physics OR PH1012 Physics A	C	3 OR 4	A Level Physics Only for Poly Direct Entry Students and JC students without A Level Physics
FE1073 Introduction to Engineering and Practices	C	1	
HW0188 Engineering Communication I	GC	2	HW0001 (co-requisite)
GC0001 Introduction to Sustainability: Multidisciplinary Approaches & Solutions	GC	1	
AD1101 Financial Management	UE	4	
AB1201 Financial Management	UE	3	
Total		20	
YEAR 1 SEMESTER 2			
MH1811 Mathematics II	C	3	
MA1001 Dynamics	C	3	Having read PH1011/PH1012/CY1305 and MH1810/MH2812/CY1201
MA1002 Fundamental Engineering Materials	C	3	
MA2001 Mechanics of Materials	C	3	
AB1501 Marketing	UE	3	
BE1401 Business Operations and Processes	UE	4	
Total		19	
YEAR 2 SEMESTER 1			
MA2002 Theory of Mechanism	C	3	MA1001
MA2003 Introduction to Thermo-fluids	C	3	
MA2004 Manufacturing Process	C	3	
MA2006 Engineering Mathematics	C	3	FE1006/MH1810 and FE1007/MH1811 or CY1201 and CY1203 or MA1003/MH2812
MA2009 Introduction to Electrical Circuits and Electronics	C	3	
HY0001 Ethics and Moral Reasoning	GC	1	
ML0003 Career Course	GC	1	
BF2217 Commodity Markets	UE	3	
Total		20	
YEAR 2 SEMESTER 2			
MA2005 Engineering Graphics	C	3	
MA2007 Thermodynamics	C	3	MA2003
MA2071 Laboratory Experiments (ME)	C	1	
MA2079 Engineering Innovation and Design	C	2	Semester 2 with 1 week in Special Term
MA3006 Fluid Mechanics	C	3	MA2003
MA0101 Engineers & Society	GC	3	
MA0218 Data Science and Artificial Intelligence	GC	3	
BF3214 Commodities Trading	UE	2	
ET0001 Entrepreneurship and Innovation	GC	1	
Total		21	

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Students admitted from AY2018/2019 **Mainstream**

YEAR 3 SEMESTER 1			
MA3001 Machine Element Design	C	3	Having read MA2001 & MA2002
MA3002 Solid Mechanics and Vibration	C	3	MA2001
MA3003 Heat Transfer	C	3	MA2007
MA3004 Mathematical Methods in Engineering	C	3	MH1810 & MH1811 / CY1203 / MH2812 / FE1006 & FE1007 / FE1006 & MH1811 / CY1602 / MH2810
MA3005 Control Theory	C	3	Having Read MA2006
MA3071 Engineering Experiments (ME)	C	1	
HW0288 Engineering Communication II	GC	2	HW0188
BF2216 Trade Incoterms & Ship Chartering	UE	4	
Total		22	
YEAR 3 SEMESTER 2			
MA3080 Professional Internship	C	10	ML0003
Total		10	
YEAR 4 SEMESTER 1			
MA4079 Final Year Project	C	4	Year 4 standing, 2 semesters
MA4001 Engineering Design	C	4	Having Read MA3001
MA48XX Major-PE 1	PE	3	
MA48XX Major-PE 2	PE	3	
BF2302 International Tax and Trading Law	UE	2	
BF4001 Industry Seminar	UE	1	
Total		17	
YEAR 4 SEMESTER 2			
MA4079 Final Year Project	C	4	Year 4 standing, 2 semesters
MA4002 Fluid Dynamics	C	3	MA3006
MA48XX Major-PE 3	PE	3	
MA48XX Major-PE 4	PE	3	
BF3212 Trade, Structured & Supply Chain Finance	UE	2	BF2216
BF3213 Enterprise Risk Management in Commodity Markets	UE	2	
Total		17	
GRAND TOTAL (Year 1 to 4)		146/147	

AU Required for Mechanical Engineering with Second Major in Business (International Trading) (MEBM-ITP)

Students admitted from AY2018/2019 **Design Stream**

Year of Study	Number of Academic Units (AUs)								
	Major Requirements		General Education Requirement (GER)					Total	
	Core	Major PE	GER Core	GER Prescribed Electives			UE		
				BM	LA	STS			Any Category (BM, LA, STS)
1	22/23*	0	3					14	39/40*
2	30	0	8					5	43
3	26	0	2					4	32
4	12	12	1					7	32
Total	90/91*	12	14	0				30	146/147*

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Curriculum for Mechanical Engineering with Second Major in Business (International Trading) (MEBM-ITP)
 Students admitted from AY2018/2019 **Design Stream**

Course Code and Title	Type	AU	Pre-requisite/ Remarks
YEAR 1 SEMESTER 1			
MH1810 Mathematics I	C	3	
MA1008 Introduction to Computational Thinking	C	3	
PH1011 Physics OR PH1012 Physics A	C	3 OR 4	A Level Physics Only for Poly Direct Entry Students and JC students without A Level Physics
FE1073 Introduction to Engineering and Practices	C	1	
HW0188 Engineering Communication I	GC	2	HW0001 (co-requisite)
GC0001 Introduction to Sustainability: Multidisciplinary Approaches & Solutions	GC	1	
AD1101 Financial Management	UE	4	
AB1201 Financial Management	UE	3	
Total		20	
YEAR 1 SEMESTER 2			
MH1811 Mathematics II	C	3	
MA1001 Dynamics	C	3	Having read PH1011/PH1012/CY1305 and MH1810/MH2812/CY1201
MA1002 Fundamental Engineering Materials	C	3	
MA2001 Mechanics of Materials	C	3	
AB1501 Marketing	UE	3	
BE1401 Business Operations and Processes	UE	4	
Total		19	
YEAR 2 SEMESTER 1			
MA2002 Theory of Mechanism	C	3	MA1001
MA2003 Introduction to Thermo-fluids	C	3	
MA2004 Manufacturing Process	C	3	
MA2006 Engineering Mathematics	C	3	FE1006/MH1810 and FE1007/MH1811 or CY1201 and CY1203 or MA1003/MH2812
MA2014 Product Presentation	C	3	
MA2071 Laboratory Experiments (ME)	C	1	
HY0001 Ethics and Moral Reasoning	GC	1	
ML0003 Career Course	GC	1	
BF2217 Commodity Markets	UE	3	
Total		21	
YEAR 2 SEMESTER 2			
MA2005 Engineering Graphics	C	3	
MA2009 Introduction to Electrical Circuits and Electronics	C	3	
MA2013 Creative Thinking and Design	C	3	
MA2079 Engineering Innovation and Design	C	2	Semester 2 with 1 week in Special Term
MA0101 Engineers & Society	GC	3	
MA0218 Data Science and Artificial Intelligence	GC	3	
MA3001 Machine Element Design	C	3	Having read MA2001 & MA2002
BF3214 Commodities Trading	UE	2	
Total		22	

Curriculum for Mechanical Engineering with Second Major in Business (International Trading) (MEBM-ITP)
 Students admitted from AY2018/2019 **Design Stream**

YEAR 3 SEMESTER 1			
MA3002 Solid Mechanics and Vibration	C	3	MA2001
MA3004 Mathematical Methods in Engineering	C	3	MH1810 & MH1811 / CY1203 / MH2812 / FE1006 & FE1007 / FE1006 & MH1811 / CY1602 / MH2810
MA3005 Control Theory	C	3	Having Read MA2006
MA3006 Fluid Mechanics	C	3	MA2003
MA3010 Thermodynamics & Heat Transfer	C	3	MA2003
MA3071 Engineering Experiments (ME)	C	1	
HW0288 Engineering Communication II	GC	2	HW0188
BF2216 Trade Incoterms & Ship Chartering	UE	4	
Total		22	
YEAR 3 SEMESTER 2			
MA3080 Professional Internship	C	10	ML0003
Total		10	
YEAR 4 SEMESTER 1			
MA4079 Final Year Project	C	4	Year 4 standing, 2 semesters
MA4011 Engineering Product Design	C	4	Having Read MA3001
MA48XX Major-PE 1	PE	3	
MA48XX Major-PE 2	PE	3	
BF2302 International Tax and Trading Law	UE	2	
Total		16	
YEAR 4 SEMESTER 2			
MA4079 Final Year Project	C	4	Year 4 standing, 2 semesters
MA48XX Major-PE 3	PE	3	
MA48XX Major-PE 4	PE	3	
BF3212 Trade, Structured & Supply Chain Finance	UE	2	BF2216
BF3213 Enterprise Risk Management in Commodity Markets	UE	2	
BF4001 Industry Seminar	UE	1	
ET0001 Entrepreneurship and Innovation	GC	1	
Total		16	
GRAND TOTAL (Year 1 to 4)		146/147	

AU Required for Mechanical Engineering with Second Major in Business (International Trading) (MEBM-ITP)
 Students admitted from AY2018/2019 **Robotics and Mechatronics Stream**

Year of Study	Number of Academic Units (AUs)								
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MA1008 Introduction to Computational Thinking	C	3	
PH1011 Physics OR PH1012 Physics A	C	3 OR 4	A Level Physics Only for Poly Direct Entry Students and JC students without A Level Physics
FE1073 Introduction to Engineering and Practices	C	1	
HW0188 Engineering Communication I	GC	2	HW0001 (co-requisite)
GC0001 Introduction to Sustainability: Multidisciplinary Approaches & Solutions	GC	1	
AD1101 Financial Management	UE	4	
AB1201 Financial Management	UE	3	
Total		20	
YEAR 1 SEMESTER 2			
MH1811 Mathematics II	C	3	
MA1001 Dynamics	C	3	Having read PH1011/PH1012/CY1305 and MH1810/MH2812/CY1201
MA1002 Fundamental Engineering Materials	C	3	
MA2001 Mechanics of Materials	C	3	
AB1501 Marketing	UE	3	
BE1401 Business Operations and Processes	UE	4	
Total		19	
YEAR 2 SEMESTER 1			
MA2002 Theory of Mechanism	C	3	MA1001
MA2003 Introduction to Thermo-fluids	C	3	
MA2004 Manufacturing Process	C	3	
MA2006 Engineering Mathematics	C	3	FE1006/MH1810 and FE1007/MH1811 or CY1201 and CY1203 or MA1003/MH2812
MA2011 Mechatronics Systems Interfacing	C	3	
MA2071 Laboratory Experiments (ME)	C	1	
HY0001 Ethics and Moral Reasoning	GC	1	
ML0003 Career Course	GC	1	
BF2217 Commodity Markets	UE	3	
Total		21	
YEAR 2 SEMESTER 2			
MA2005 Engineering Graphics	C	3	
MA2009 Introduction to Electrical Circuits and Electronics	C	3	
MA2012 Introduction to Mechatronics System Design	C	3	
MA2079 Engineering Innovation and Design	C	2	Semester 2 with 1 week in Special Term
MA0101 Engineers & Society	GC	3	
MA0218 Data Science and Artificial Intelligence	GC	3	
MA3001 Machine Element Design	C	3	Having read MA2001 & MA2002
BF3214 Commodities Trading	UE	2	
Total		22	

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YEAR 3 SEMESTER 1			
MA3002 Solid Mechanics and Vibration	C	3	MA2001
MA3004 Mathematical Methods in Engineering	C	3	MH1810 & MH1811 / CY1203 / MH2812 / FE1006 & FE1007 / FE1006 & MH1811 / CY1602 / MH2810
MA3005 Control Theory	C	3	Having Read MA2006
MA3006 Fluid Mechanics	C	3	MA2003
MA3010 Thermodynamics & Heat Transfer	C	3	MA2003
MA3071 Engineering Experiments (ME)	C	1	
HW0288 Engineering Communication II	GC	2	HW0188
BF2216 Trade Incoterms & Ship Chartering	UE	4	
Total		22	
YEAR 3 SEMESTER 2			
MA3080 Professional Internship	C	10	ML0003
Total		10	
YEAR 4 SEMESTER 1			
MA4079 Final Year Project	C	4	Year 4 standing, 2 semesters
MA48XX Major-PE 1	PE	3	
MA48XX Major-PE 2	PE	3	
ET0001 Entrepreneurship and Innovation	GC	1	
BF2302 International Tax and Trading Law	UE	2	
BF4001 Industry Seminar	UE	1	
Total		14	
YEAR 4 SEMESTER 2			
MA4079 Final Year Project	C	4	Year 4 standing, 2 semesters
MA4012 Mechatronics Engineering Design	C	4	Having read MA3001, Sem 2 only
MA48XX Major-PE 3	PE	3	
MA48XX Major-PE 4	PE	3	
BF3212 Trade, Structured & Supply Chain Finance	UE	2	BF2216
BF3213 Enterprise Risk Management in Commodity Markets	UE	2	
Total		18	
GRAND TOTAL (Year 1 to 4)		146/147	