NUS DEPARTMENT OF MECHANICAL ENGINEERING

B.Eng(ME) (Hons) & B.Soc.Sci (Economics) Double Degree Programme (Matriculating AY17/18 onwards)

Degree Requirements	Modular Credits (MCs)	Comments		
(A) University Level Requirements	Total 20 MCs	Modules will classified as CA		
General Education (GE)	20 MCs			
(B) FASS Programme Requirements	Total 16 MCs	Modules will classified as C2		
Level 1000 Exposure modules (Asian studies)	4 MCs	Asian Studies modules: CH1101E, CL1101E, JS1101E, MS1101E, SE1101E, SN1101E.		
Level 1000 Exposure module (Social Sciences)	4 MCs	EC1101E		
Level 1000 Exposure module (Humanities)	4 MCs	Humanities Modules		
FASS Writing Module	4 MCs	FAS1102		
(C) Economics Programme Requirements	Total 36 MCs	Modules will classified as C2		
Essential Modules	24 MCs	EC2101, EC2102, EC2104, EC3101, EC3102 and EC3103.		
Elective Major Modules	12 MCs	At least 8MCs must be Level-3000 Economics modules		
(D) Engineering Programme Requirements	Total 100 MCs	Modules will classified as C1		
Engineering Modules (Common Engineering modules, Discipline Core modules, Electives)	100 MCs	Includes Faculty & Discipline requirement (core, elective, projects & FYP Thesis). It is not compulsory for DDP students to do the Industrial Attachment		
(E) Common Modules	Total 8 MCs	Modules will classified as CA		
These modules map towards both degrees	Two of the following modules (8MCs): One BEng Module - One BA (Econs) Module	See Table 1		
(F) Unrestricted Elective Requirements	(Exempted)			
Unrestricted Elective	-	Exempted under DDP Structure		
TOTAL	180 MCs (min)			
FAS1102 is a compulsory writing module with the second secon	nich is pre-allocated in Year 1.			

Semester Schedule for B.Eng. (M.E.) & BA Double Degree Programme (2017/2018 onwards)

Year 1						
Semester 1	MCs			Semester 2	MCs	
MA1505 Mathematics I ²	4	C1 (*)	MA1512 Differential Equations for Engineering	2	C1
PC1431 Physics IE	4	C1		MA1513 Linear Algebra & Differential Equations	2	C1
EG1111 Engineering Principles & Practice I	6	C1		EG1112 Engineering Principles & Practice II	6	C1
EC1101E Introduction to Economic Analysis or its equivalent EC1301	4	C2(*	*)	CS1010E Programming Methodology	4	C1
FAS1102 Public Writing and Communication	4	C2		EC2104 Quantitative Methods for Economic Analysis	4	C2
GER1000 Quantitative Reasoning (GE 1 - QR) ¹	4	CA(*	*)	GEQ1000 Asking Questions (GE2)		CA
				GE3 - GET Thinking and Expression 1	4	CA
Sub-Total	26			Sub-Total	26	
Year 2						
Semester 3	M	Cs		Semester 4	MCs	
ME2112 Strength of Materials	4	1	C1	ME2102 Engineering Innovation and Modelling	4	C1
ME2134 Fluid Mechanics I	4	1	C1	ME2121 Engineering Thermodynamics	4	C1
ME2151 Principles of Mechanical Engineering Materials	4	4	C1	ME3112 Mechanics of Machines	4	C1
ME3162 Manufacturing Processes ¹ (BEng Module as shown in Table 1)	4	t C	CA	EC2102 Macroeconomic Analysis I	4	C2
EC2101 Microeconomic Analysis I	4	1 (C2	Free Elective 1	4	C1
ES1531 Critical Thinking Writing	4	1 (C1	GE4 - GEH Human Cultures	4	CA
Sub-Total	2	4		Sub-Total	24	
Year 3						
Semester 5	M	Cs	Ì	Semester 6	MCs	
ME3103 Mechanical Systems Design	8	3 (C1	ME Technical Elective 1	4	C1
ME2142 Feedback Control Systems	4	1 (C1	Free Elective 2	4	C1
EG2401 Engineering Professionalism	2	2	C1	EC3102 Macroeconomic Analysis II	4	C2
FASS Level-1000 Exposure module (Humanities)	4	1 (C2	FASS Level-1000 Exposure module (Asian Studies)	4	C2
EC3101 Microeconomic Analysis II	4	1		Any <u>one</u> B.A. (Econs) Module as shown in Table 1 ¹	4	CA
EC3303 Econometrics I	4	1 (C2	GE5 – GES Singapore Studies	4	CA
Sub-Total	2	6		Sub-Total	24	

Year 4					
Semester 7	MCs		Semester 8	MCs	
ME4101A B.Eng. Dissertation	4	C1	ME4101A B.Eng. Dissertation	4	C1
Pathway Requirement 1	4	C1	Pathway Requirement 2	4	C1
FASS Elective Module (Level 3000) x 2	8	C2	Free Elective 3	2	C1
			FASS Elective Module (Level 2000/3000)	4	C2
Sub-Total	16		Sub-Total	14	
Total MCs	180				

Notes:

- (*) C1 Counted as B.Eng. degree requirement; C2 Counted as 2nd degree requirement; CA Double-counted as both degree requirements.
- 1) Common module that also satisfies FASS requirements (Table 1).

<u>Table 1 – Selected Elective Module</u>

BEng Programme	BEng modules that can be counted towards BA-Economics major requirements*	BA - Economics modules that can be counted towards BEng requirements*
Mechanical Engineering	ME3162 Manufacturing Processes ME4262 Automation in manufacturing EE4305 Introduction to Fuzzy/Neural Systems	EC3322 Industrial Organisation I EC4322 Industrial Organisation II EC4372 Technology & Innovation EC5324R Cost Benefit Analysis