

NUS DEPARTMENT OF MECHANICAL ENGINEERING
B.Eng(ME)(Hons) & B.Soc.Sci (Economics) Double Degree Programme
(Matriculating AY16/17)

Degree Requirements	Modular Credits (MCs)	Comments
(A) University Level Requirements	Total 20 MCs	
General Education (GE)	20 MCs	
(B) FASS Programme Requirements	Total 8 MCs	
Level 1000 Exposure modules (Asian studies)	4 MCs	Asian Studies modules: CH1101E, CL1101E, JS1101E, MS1101E, SE1101E, SN1101E.
Level 1000 Exposure modules (Social Sciences)	4 MCs	EC1301/EC1101E
(C) Economics Programme Requirements	Total 28 MCs	
Essential Modules	20 MCs	EC2101, EC2102, EC3101, EC3102, EC3303
Elective Major Modules	8 MCs	Must be Level-3000 Economics modules
(D) Engineering Programme Requirements	Total 100 MCs	
ES1531 (Compulsory)	4MCs	
Foundation Modules	20MCs	
ME Requirements (Essential, Technical Electives, Pathway Requirements)	70MCs	
Free Electives	6MCs	
(E) Common Modules	Total 24 MCs	
These modules map towards both degrees.	FAS1102 (replaces ES2331) ¹	
	<u>Three</u> common essential modules (12 MCs): MA1505, MA1506, PH2208/PH2218/PH2223	See Table 1
	8MCs of electives: Any <u>One</u> BEng Module Any <u>One</u> BA(Econs) Module	See Table 2
(F) Unrestricted Elective Requirements	(Exempted)	
Unrestricted Elective	-	<i>Exempted under DDP Structure</i>
TOTAL	180 MCs (min)	
1. FAS1102 is a compulsory writing module which is pre-allocated in Year 1.		

Semester Schedule for B.Eng. (M.E.) & BA Double Degree Programme (2016/2017)

Year 1						
Semester 1	MCs		Semester 2	MCs		
MA1505 Mathematics I ²	4	CA (*)	MA1506 Mathematics II ²	4	CA	
PC1431 Physics IE	4	C1 (*)	ES1531 Critical Thinking and Writing	4	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	CA	FASS Level-1000 Exposure module (Asian Studies)	4	C2	
GER1000 Quantitative Reasoning (GE 1 - QR) ¹	4	CA	GEQ Asking Questions (GE2) ¹	4	CA	
Sub-Total	26		Sub-Total	26		
Year 2						
Semester 3	MCs		Semester 4	MCs		
ME2112 Strength of Materials	4	C1	ME2102 Engineering Innovation and Modelling	4	C1	
ME2134 Fluid Mechanics I	4	C1	ME2121 Engineering Thermodynamics	4	C1	
ME2151 Principles of Mechanical Engineering Materials	4	C1	ME3112 Mechanics of Machines	4	C1	
ME3162 Manufacturing Processes ² (BEng Module as shown in Table D)	4	CA	Free Elective 1	4	C1	
EC2101 Microeconomic Analysis I	4	C2	EC2102 Macroeconomic Analysis I	4	C2	
GE 3 Thinking and Expression ¹	4	CA	GE 4 Human Cultures ¹	4	CA	
Sub-Total	24		Sub-Total	24		
Year 3						
Semester 5	MCs		Semester 6	MCs		
ME3103 Mechanical Systems Design	6	C1	ME2142 Feedback Control Systems	4	C1	
ME Technical Elective 1	4	C1	ME Technical Elective 2	4	C1	
PH2223 Introduction To The Philosophy Of Technology (replaces EG2401)[Table 1] ²	4	CA	Free Elective 2	2	C1	
EC3101 Microeconomic Analysis II	4	C2	EC3102 Macroeconomic Analysis II	4	C2	
B.SocSci Elective Level-3000	4	C2	Any <u>one</u> B.Eng. Module as shown in Table 2 ²	4	CA	
			GE 5 Singapore Studies ¹	4	CA	
Sub-Total	22		Sub-Total	22		

Year 4					
Semester 7	MCs		Semester 8	MCs	
ME4101A B.Eng. Dissertation	4	C1	ME4101A B.Eng. Dissertation	4	CA
ME Technical Elective 3	4	C1	ME Technical Elective 4	4	C1
Pathway Requirement 1	4	C1	Pathway Requirement 2	4	C1
EC3303 Econometrics I	4	C2	Any <u>one</u> B.A. (Econs) Module as shown in Table D	4	CA
FASS Elective Module (Level 3000)	4	C2			
Sub-Total	20		Sub-Total	16	
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) Students are strongly encouraged to complete all the five GE modules latest by the end of Year 2.
- 2) Common module that also satisfies FASS requirements (Table 1).

■ **Table 1 - 12 MCs of Essential Common Modules ***

Module Title	
MA1505 Mathematics I	These two modules are EC-recognized modules that students can use to fulfil Economics major requirements.
MA1506 Mathematics II	
PH2208 Applied Ethics / PH2218 Business Ethics / PH2223 Introduction to the Philosophy of Technology (fulfils the FoE requirement for the 3MC EG2401 Engineering Professionalism)	This module is accepted in lieu of the FASS Faculty exposure requirement as it involves some humanities.

■ **Table 2 - Selected Elective Modules ***

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