

**NUS DEPARTMENT OF MECHANICAL ENGINEERING**  
**B.Eng(ME)(Hons) & B.Soc.Sci (Economics) Double Degree Programme**  
**(Matriculating AY19/20 & AY20/21)**

Degree Requirements	Modular Credits (MCs)	Comments
<b>(A) University Level Requirements</b>	<b>Total 20 MCs</b>	Modules will be classified as CA
General Education (GE)	20 MCs	
<b>(B) FASS Programme Requirements</b>	<b>Total 16 MCs</b>	Modules will be 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
<b>(C) Economics Programme Requirements</b>	<b>Total 36 MCs</b>	Modules will be 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
<b>(D) Engineering Programme Requirements</b>	<b>Total 100 MCs</b>	Modules will be 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
<b>(E) Common Modules</b>	<b>Total 8 MCs</b>	Modules will be classified as CA
These modules map towards both degrees	<b>Two</b> of the following modules (8MCs):- - <b>One</b> BEng Module - <b>One</b> BA (Econs) Module	See Table 1
<b>(F) Engineering Programme Requirements</b>	<b>(Exempted)</b>	
Unrestricted Elective	-	<i>Exempted under DDP Structure</i>
<b>TOTAL</b>	<b>180 MCs (min)</b>	
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 (AY2019/2020 & 2020/2021 onwards)**

Year 1						
Semester 1	MCs		Semester 2	MCs		
MA1505 Mathematics I	4	C1 (*)	MA1512 Differential Equations for Engineering	2	C1	
CS1010E Programming Methodology	4	C1	MA1513 Linear Algebra & Differential Equations	2	C1	
ME1101 Engineering Principles & Practice I	4	C1	ME2104 Engineering Principles & Practice II	4	C1	
EC1101E Introduction to Economic Analysis or its equivalent EC1301	4	C2(*)	EG1311 Design and Make	4	C1	
FAS1102 Public Writing and Communication	4	C2	EC2104 Quantitative Methods for Economics Analysis	4	C2	
GER1000 Quantitative Reasoning (GE 1) <sup>1</sup>	4	CA(*)	GEQ1000 Asking Questions (GE 2) <sup>1</sup>	4	CA	
			GE3 - GET Thinking and Expression <sup>1</sup>	4	CA	
<b>Sub-Total</b>	<b>24</b>		<b>Sub-Total</b>	<b>24</b>		
Year 2						
Semester 3	MCs		Semester 4	MCs		
MLE1010 Materials Engineering Principles & Practice	4	C1	IE2141 Systems Thinking and Dynamics	4	C1	
EE2211 Introduction to Machine Learning	4	C1	ME2102 Engineering Innovation and Modelling	4	C1	
ME2112 Strength of Materials	4	C1	ME2115 Mechanics of Machines	4	C1	
ME2134 Fluid Mechanics I	4	C1	ME2121 Engineering Thermodynamics	4	C1	
EC2101 Microeconomic Analysis I	4	C2	EC2102 Macroeconomic Analysis I	4	C2	
ES1531 Critical Thinking Writing	4	C1	GE4 - GEH Human Cultures	4	CA	
<b>Sub-Total</b>	<b>24</b>		<b>Sub-Total</b>	<b>24</b>		
Year 3						
Semester 5	MCs		Semester 6	MCs		
ME3162 Manufacturing Processes <sup>1</sup> (BEng Module as shown in Table 1)	4	CA	Any <u>one</u> B.A. (Econs) Module as shown in Table 1 <sup>1</sup>	4	CA	
ME2142 Feedback Control Systems	4	C1	ME Technical Elective 1	4	C1	
EG2401A Engineering Professionalism	2	C1	EC3102 Macroeconomic Analysis II	4	C2	
FASS Level-1000 Exposure module (Humanities)	4	C2	FASS Level-1000 Exposure module (Asian Studies)	4	C2	
EC3101 Microeconomic Analysis II	4	C2	Free Elective 2	4	C1	
EC3303 Econometrics I	4	C2	GE5 – GES Singapore Studies	4	CA	
Free Elective 1	4	C1				
<b>Sub-Total</b>	<b>26</b>		<b>Sub-Total</b>	<b>24</b>		

Year 4					
Semester 7	MCs		Semester 8	MCs	
ME3103 Mechanical Systems Design <u>OR</u> ME4101A B.Eng. Dissertation	4	C1	ME3103 Mechanical Systems Design <u>OR</u> 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
ME Technical Elective 2	4	C1	FASS Elective Module (Level 2000/3000)	4	C2
<b>Sub-Total</b>	<b>20</b>		<b>Sub-Total</b>	<b>14</b>	
<b>Total MCs</b>	<b>180</b>				

**Notes:**

(\*) C1 – Counted as B.Eng. degree requirement; C2 – Counted as 2<sup>nd</sup> degree requirement; CA – Double-counted as both degree requirements.

1) Common module that also satisfies FASS requirements (Table 1).

**Table 1 – Selected Elective Module**

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