

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

Degree Requirements	Modular Credits (MCs)	Comments
(A) University Level Requirements	Total 20 MCs	
GEMs	20 MCs	5 GE Pillars
(B) Business Programme Requirements	Total 80 MCs	
Foundation Modules	52 MCs (+ 12 MCs of common modules)	See Table A for the list of Foundation Modules See Table B for the list of Common Modules.
Honours Dissertation	12 MCs	
Essential Modules (Specialization Modules)	8 MCs (+ 16 MCs of common modules from Table C)**	Modules in this section are required for Business's specialization. *
Compulsory Field Service Project	8 MCs	
(C) Engineering Programme Requirements	Total 78 MCs	Some engineering courses will have more than this. As it varies according to the engineering course, students should seek advice from their department on the recommended schedule.
Engineering Modules	78 MCs + common modules (28 MCs)	BEng Program requirements including Faculty & Discipline specific requirements (core, elective, projects & FYP Thesis). It is not compulsory for DDP students to do the Industrial Attachment
(D) Common Modules	Total 28 MCs	
These modules map towards both degrees.	<u>Three</u> common modules (12 MCs) (Please see Table B for details.)	These constitute part of the Business Foundation modules and the Engineering Faculty requirements.
	<u>Four</u> of the following modules (16 MCs) from Table C: ** <ul style="list-style-type: none"> • <u>Two</u> BEng Modules • <u>Two</u> BBA Modules 	
(E) Unrestricted Elective Requirements		
Unrestricted Elective	-	<i>Exempted under DDP Structure</i>
TOTAL	206 MCs (min)	

Please note that the curriculum is subject to changes and the MCs may vary.

Notes:

* Students can choose to specialize or not. If they choose to specialize, they will have to read modules contributing to their chosen area of specialization. For different areas of specialization, the total number of MCs required may vary.

** Subject to the availability of common modules for the respective department of study and area of specialization. Students have to read two modules (one BEng module & one BBA module) for each common module requirement that is not satisfied, subject to approval from FoE/Biz.

Sample Semester Schedule for B.Eng. (M.E.) & B.B.A. Double Hons. Degree Programme (Matriculating AY16/17)

Year 1								
Semester 1			MCs		Semester 2		MCs	
MA1505	Mathematics I (replaces DSC1007) [Table B]	4	CA*	MA1506	Mathematics II	4	C1	
PC1431	Physics IE	4	C1*	ES1501X ¹	Critical Thinking and Expository Writing [Table B]	4	CA	
EG1111	Engineering Principles & Practice I	6	C1	EG1112	Engineering Principles & Practice II	6	C1	
ACC1002	Financial Accounting	4	C2	CS1010E	Programming Methodology	4	C1	
GER1000	Quantitative Reasoning (GE 1 - QR) ¹	4	CA	MKT1003	Marketing	4	C2	
				GEQ1000	Asking Questions (GE2) ¹	4	CA	
Sub-total		22		Sub-total		26		
Year 2								
Semester 3					Semester 4			
ME2112	Strength of Materials	4	C1	ME2121	Engineering Thermodynamics	4	C1	
ME2151	Principles of Mechanical Engineering Materials	4	C1	ME2102	Engineering Innovation and Modelling	4	C1	
ME2134	Fluid Mechanics I	4	C1	ME3112	Mechanics of Machines	4	C1	
ME3162	Manufacturing Processes	4	C1	MNO1001	Management & Organisation	4	C1	
GE 3 ¹		4	CA	BSP1004	Legal Environment of Business	4	C2	
				GE4 ¹		4	CA	
Sub-total		20		Sub-total		24		
Year 3								
Semester 5					Semester 6			
ME3103	Mechanical Systems Design	6	C1	ME2142	Feedback Control Systems	4	C1	
ACC2002	Managerial Accounting Compulsory Foundation Business Module 3 [Table A]	4	C2	BSP2001	Macro and International Economics Compulsory Foundation Business Module 7 [Table A]	4	C2	
BSP1005	Managerial Economics Compulsory Foundation Business Module 4 [Table A]	4	C2	BSP2005	Asia Pacific Business Environment Compulsory Foundation Business Module 6 [Table A]	4	C2	
FIN2004	Finance Compulsory Foundation Business Module 10 [Table A]	4	C2	DSC2006	Operations Management Compulsory Foundation Business Module 9 [Table A]	4	C2	
Singapore Studies (SS) Module ¹		4	CA	MNO2007	Leadership and Ethics (replaces EG2401) [Table B]	4	CA	
Sub-total		22		Sub-total		20		

Year 4					
Semester 7			Semester 8		
ME4101A B.Eng. Dissertation (over 2 semesters)	4	C1	ME4101A B.Eng. Dissertation (over 2 semesters)	4	C1
MNO2009 Entrepreneurship Compulsory Foundation Business Module 8 [Table A]	4	C2	BSP3001 Strategic Management Compulsory Foundation Business Module 12 [Table A]	4	C2
DSC2008 Business Analytics – Data & Decisions Compulsory Foundation Business Module 11 [Table A]	4	C2	B.B.A. Common Electives 1 [Table C] ²	4	CA
BEng Common Electives 1 [Table C] ²	4	CA	Pathway Requirement 1	4	C1
FSP4003 Field Service Project (Can be done over 1 or 2 semesters)	4	C2	FSP4003 Field Service Project	4	C2
Sub-total	20		Sub-total	20	
Year 5					
Semester 9			Semester 10		
B.B.A. Thesis	6	C2	B.B.A. Thesis	6	C2
BEng Common Electives 2 [Table C] ²	4	CA	B.B.A. Common Electives 2 [Table C] ²	4	CA
Pathway Requirement 2	4	C1	Business Essential Modules 2	4	C2
Business Essential Modules 1	4	C2			
Sub-total	18		Sub-total	14	
Total MCs				206	

Notes:

⁻¹ Students are strongly encouraged to complete all the five GE modules latest by the end of Year 2.

⁻² Four (4) modules from Table C with at least TWO from BEng and TWO from BBA modules. Students have to read two modules (one BEng module & one BBA module) for each common module requirement that is not satisfied subject to approval of FoE/Biz.

* C1 – Counted as B.Eng. degree requirement; C2 – Counted as 2nd degree requirement; CA – Double – counted as both degree requirements

Please note that this semester schedule is only a sample, you can customized your own schedule taking into considerations the semester the modules are offered and the pre- and co-requisites of a module.

Table A: List of Compulsory Business Foundation Modules

Module Code	Module Title
ACC1002	Financial Accounting
MKT1003	Marketing
MNO1001	Management Organisation
BSP1004	Legal Environment of Business
BSP1005	Managerial Economics
BSP2001	Macro and International Economics
ACC2002	Managerial Accounting
FIN2004	Finance
BSP2005	Asia Pacific Business Environment
DSC2006	Operations Management
DSC2008	Business Analytics – Data & Decisions
MNO2009	Entrepreneurship (NEW)
BSP3001	Strategic Management

The remaining 3 modules (ES2002, MNO2007 and DSC2008) are listed in Table B as common modules which double-count towards both degrees.

Table B: List of 12 MCs of Common Modules that map to part of the Business Foundation Modules & Engineering Requirements for all BBA programmes

Module Code and Title
<p>DDP students are strongly encouraged to read ES1501X (e.g. ES1501 A or ES1501B) so that they do not need to read an additional communications module which will add to the total workload. However, if you are a DDP student who is also in the USP or University Town residential programme, the respective specially-tailored writing and communication modules that you are reading will be deemed as the equivalent of ES1501X.</p> <ul style="list-style-type: none"> • ES1501X Critical Thinking and Expository Writing (4MCs) or • ES1531 Critical Thinking & Writing (4MCs) + ES2002 Business Communication (4MCs) or • ES1531 Critical Thinking & Writing (4MCs) + ES2331 Communicating Engineering (4MCs) or • USP Writing and Critical Thinking module (4MCs) if you are a USP student or • ES1601 Professional and Academic Communication (4MCs) if you are residing in the Ridge View Residential College • Ideas and Exposition Modules offered by the University Town if you are in the University Town residential programme. These modules are: UTW1001X and UTW2001X (on a graded basis), which may be read in lieu of ES1531 and ES2331, respectively. <p>Depending on the options that you have chosen, the modules will be classified as:</p> <ul style="list-style-type: none"> • ES1501X (CA) • ES1531 (C1/C2) + ES2002 (CA) • ES1531 (C1/C2) + ES2331 (CA) • USP Writing and Critical Module (CA) • ES1601 (CA) • UTW1001X and UTW2001X (CA) offered by College of Alice & Peter Tan, Residential College 4 and Tembusu College. <p>- MNO2007 Leadership and Ethics (replaces EG2401 Engineering Professionalism)</p> <p>- MA1505 Mathematics I (replaces DSC1007 Business Analytics – Models & Decisions)</p>

Table C: Common Modules in the BEng & BBA Double Degree programme.***

BEng Programmes	BEng modules that can be counted towards BBA requirements*	BBA modules that can be counted towards BEng requirements*
Mechanical Engineering	IE2110 Operations Research I <i>(anti-req: DSC3214 Int. to Optimization)</i> IE2130 Quality Engineering I <i>(anti-req: DSC3219 Quality Management)</i> IE4240 Project Management	DSC3201 Supply Chain Management DSC3214 Introduction to Optimisation DSC4211B/DSC4213 Seminars in Ops & Supply Chain Management: Analytical Tools for Consulting DSC5211B Analytical Tools for Consulting