# NUS DEPARTMENT OF MECHANICAL ENGINEERING B.Eng(ME) & BBA. (ACC) Degree Programme (Matriculating AY15/16)

Degree Requirements	Modular Credits (MCs)	Comment	
(A) University Level Requirements	Total 20 MCs		
GEMs	20 MCs		
(B) Business Programme Requirements	Total 68 MCs (Min)		
Foundation Modules	44 MCs (+16 MCs of common modules)	See Table A for the list of Foundation Modules	
Essential Modules	24 MCs (as shown in Table C)	Table C: List of Required Accounting Essential modules	
(C) Engineering Programme Requirements	Total 95MCs (Min)	Some engineering courses will have more than this. As it varies according to the engineering course, students should seek advice from their department of the recommended schedule.	
Engineering Modules	95 MCs + common modules (16 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 16 MCs		
These constitute part of the Business Foundation modules and the Engineering Faculty requirements.	Four common modules (16 MCs)	See Table B. These elective modules map towards both degrees.	
(E) Unrestricted Elective Requirements	Total 8 MCs		
Unrestricted Elective	8 MCs	Table D: List of Required Accounting Professional Modules	
TOTAL	207 MCs (Min)	This is only the minimum requirement and will vary according to the engineering course. Students should seek advice from their department on the total MCs required to fulfil the DDP.	

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

### Notes:

<sup>\*</sup> 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.

<sup>\*\*</sup> 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.

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 <sup>1</sup> Critical Thinking and Expository Writing [Table B]	4	CA
EG1109M Statics and Mechanics of Materials	4	C1	EG1108 Electrical Engineering	3	C1
CS1010E Programming Methodology	4	C1	ME2103 Engineering Visualisation and Modelling	3	C1
ACC1002 Financial Accounting [Compulsory Foundation Business Module 1- Table A]	4	C2*	BSP1004 Legal Environment of Business [Compulsory Foundation Business Module 2-Table A]	4	C2
GER1000 Quantitative Reasoning (GE 1 - QR) <sup>2</sup>	4	CA	ACC1006 Accounting Information Systems [Compulsory Foundation Business Module 3-Table A]	4	C2
			$GE 2^2$	4	CA
Sub-total	24		Sub-total	26	
Year 2					
Semester 3			Semester 4		
ME2113 Mechanics of Materials I	3	C1	ME2101 Fundamentals of Mechanical Design	4	C1
ME2121 Engineering Thermodynamics	4	C1	ME2114 Mechanics of Materials II	3	C1
ME2151 Principles of Mechanical Engineering Materials	4	C1	ME2135 Fluid Mechanics II	4	C1
ME2134 Fluid Mechanics I	4	C1	ME2143 Sensors and Actuators	4	C1
ACC2002 Managerial Accounting [Compulsory Foundation Business Module 4-Table A]	4	C2	FIN2004 Finance [Compulsory Foundation Business Module 5-Table A]	4	C2
GE 3 <sup>2</sup>	4	CA	GE4 <sup>2</sup>	4	CA
Sub-total	23		Sub-total	23	
Year 3					
Semester 5			Semester 6		
ME3103 Mechanical Systems Design	6	C1	ME2142 Feedback Control Systems	4	C1
ME3122 Heat Transfer	4	C1	ME3112 Mechanics of Machines	4	C1
ME3162 Manufacturing Processes	4	C1	MNO2007 Leadership and Ethics [replaces EG2401) [Table B]	4	CA
MNO1001 Management & Organisation [replaces HR2002 - Table B]	4	CA	ACC3603 Assurance and Attestation [Accounting Essential Module 2 - Table C)	4	C2
ACC3601 Corporate Accounting and Reporting [Accounting Essential Module 1 - Table C)	4	C2	ACC3604 Corporate and Securities Law [Accounting Essential Module 3 - Table C)	4	C2
			Singapore Studies (SS) Module <sup>2</sup>	4	CA
Sub-total	22		Sub-total	24	

#### Year 4 Semester 7 Semester 8 ME4101A B.Eng. Dissertation (over 2 semesters) 4 C1 ME4101A B.Eng. Dissertation (over 2 semesters) 4 C1 ACC3605 Taxation 4 C2. ACC3619 Integrated Perspectives in Accounting & 4 C2. [Accounting Essential Module 4 - Table C) Business [Accounting Essential Module 6 - Table C) ACC3606 Advance Corporate Accounting & Reporting C2 MKT1003 Marketing C2 4 4 [Accounting Essential Module 5 - Table C) [Compulsory Foundation Business Module 6-Table A] ACC3614 Valuation 4 C2 BSP1005 Managerial Economics 4 C2 [Accounting Professional Module 1 - Table D] [Compulsory Foundation Business Module 7-Table A] ACC3616 Corporate Governance and Risk 4 C2 ME Technical Elective 1 4 C1 Management [Accounting Professional Module 2 - Table D) Sub-total Sub-total 20 20 Year 5 Semester 9 BSP2001 Macro and International Economics 4 C2 [Compulsory Foundation Business Module 8-Table A] BSP2005 Asia Pacific Business Environment C2 [Compulsory Foundation Business Module 9-Table A] C2DSC2006 Operations Management 4 [Compulsory Foundation Business Module 10-Table A] BSP3001 Strategic Management 4 C2 [Compulsory Foundation Business Module 11-Table A] ME Technical Elective 2 C1 4 ME Technical Elective 3 4 C1 Sub-total 24 **Total MCs** 208

### Notes:

<sup>1</sup>DDP students are encouraged to read ES1501X. However, in the event that students are not able to get ES1501X, they have to read one of the following choices as classified:

- a) ES1531 (C1) + ES2002 (CA)
- b) ES1531 (C1) + ES2331 (CA)
- c) USP Writing and Critical Thinking Module (CA)
- d) IEM1201X (C1) + IEM2201X (CA)

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.

<sup>&</sup>lt;sup>2</sup>Students are strongly encouraged to complete all the five GE modules latest by the end of Year 2.

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

Table A: List of Compulsory Business Foundation Modules AY2012/2013 onwards

Module Code	Module Title	
ACC1002	Financial Accounting	
MKT1003	Marketing	
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	

## Table B: List of 16 MCs of Common Modules that map to part of the Business Foundation Modules & Engineering Requirements for all BBA programmes from AY2012/2013 onwards.

### Module Code and Title

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.

- 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
- Ideas and Exposition Modules offered by the University Town if you are in the University Town residential programme. These modules are: IEM1201x (on a graded basis) and IEM2201x (on a graded basis), which may be read in lieu of ES1531 and ES2331, respectively.

Depending on the options that you have chosen, the modules will be classified as:

- ES1501X (CA)
- ES1531 (C1) + ES2002 (CA)
- ES1531 (C1) + ES2331 (CA)
- USP Writing and Critical Module Module (CA)
- IEM1201X (C1) + IEM2201X (CA)

### Legend

CA = grade included in calculating Cumulative Average Points (CAPs) of both degrees

C1 = grade included in calculating CAP of primary degree

- MNO2007 Leadership and Ethics (replaces EG2401 Engineering Professionalism)

- MNO1001 Management & Organization (replaces HR2002 Understanding Human Relations in the New Economy)

- MA1505 Mathematics I (replaces DSC1007 Business Analytics – Models & Decisions)

### <u>Table C: Common Modules in the BEng & BBA Double Degree programme.\*\*\*</u>

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 (anti-req: DSC3214 Int. to Optimization)	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