

**Model Study Path for BENGU4 MFSE 2015 Cohort (non-CES mode)**

Yr	Sem	College Requirements	Gateway Education (GE): College/School-specified Courses			GE: English®	Gateway Education & Others		CUs
1	A	Science 1 (3)	MA1200 Calculus and Basic Linear Algebra I / MA1300 Enhanced Calculus and Linear Algebra I (3)	CS1102 Introduction to Computer Studies / CS1302 Introduction to Computer Programming (3)		GE1401 University English (3)		GE 1 (3)	15
	B	Science 2 (3)	MA1201 Calculus and Basic Linear Algebra I / MA1301 Enhanced Calculus and Linear Algebra II (3)			GE2410 English for Engineering (3)	GE1501 Chinese Civilisation – History and Philosophy (3)	GE 2 (3)	15
	S	Reserve for missed courses, if available /						Reserve for missed courses	
<b>Major Requirements</b>									
2	A	AP1201 General Physics I / BCH1100 Chemistry (3) (if not taken#)	MBE2016 Engineering Graphics (3)	MBE2101 Thermo and Fluid Dynamics (3)	MBE2034 Engineering Materials and Processing (3)	MBE2020 Engineering Workshop Practice (0)	Free Elective 1 (3)	GE 3 (3)	15 or 18
			MBE2003 Mechanics (3)	MBE2029 Electrical & Electronic Principles I (3)	MA2177 Engineering Mathematics and Statistics (3)				
	B	MBE2036 Engineering Computing (3)	MBE2003 Mechanics (3)	MBE2029 Electrical & Electronic Principles I (3)	MA2177 Engineering Mathematics and Statistics (3)		GE 4 (3)	15	
			MBE2016 Engineering Graphics (3)	MBE2101 Thermo and Fluid Dynamics (3)	MBE2034 Engineering Materials and Processing (3)				
S	Reserve for missed courses								
3	A	MBE3007 CAD/CAM (3)	MBE3006 Plastics Engineering (3)	SEEM3032 Production and Operations Planning (3)	MBE3050 Design for Manufacturing and Manufacturing Systems (3)	Major Elective 1 (3)			15
	B	MBE4005 Finite Element Analysis (3)	MBE3010 Mechanical Design (3)	SEEM3102 Quality Engineering (3)	MBE3019 Metrology and Applications (3)	Major Elective 2 (3)			15
	S	Reserve for IAS or taking some Elective courses, if available /						Reserve for missed courses	
4	A	MBE4068 Project (3)*	MBE3046 Automation Technology (3)		Major Elective 3 (3)	Major Elective 4 (3)	Free Elective 2 (3) (if needed#)		15 or 12
	B	MBE4068 Project (6)*	MBE4066 Professional Engineering Practice (3)		Major Elective 5 (3)	Major Elective 6 (3)			15
	S	Reserve for missed Elective courses, if available /						Reserve for missed courses	
							<b>Total credits required = 120</b>		

( ) indicates number of credits

® Students whose entry qualifications in HKDSE English Language is below Level 4 are required to take ELO200A/ELO200B English for Academic Purposes 1 & 2.

# Students should complete AP1201 or BCH1100 whichever is not taken as Science 1 and Science 2, otherwise need to take a second Free Elective to fulfill the minimum credit units required for graduation.

\* MBE4068 Project/ MBE4116 Capstone Project II.

Note 1: MBE2020 should be taken in Year 2 during Semester A, Semester B, or Summer Term depending on the allocation and availability of workshop training places.

Note 2: Under special circumstances, students may be allowed to register for courses in the grey boxes if pre-requisite requirements have been satisfied, or vice versa.

Note 3: Students may alter the study path and courses can be taken in any order or in any year of study provided pre-requisite and pre-cursor requirements are satisfied and all graduation requirements could be met within the normative study period.

Note 4: Students can take Major electives from Year 3 depending on their overall study plan.

## Model Study Path for BENGU4 MFSE 2015 Cohort (Optional-CES mode)

Yr	Sem	College Requirements	Gateway Education (GE): College/School-specified Courses				GE: English <sup>@</sup>	Gateway Education & Others		CU's
<b>1</b>	<b>A</b>	Science 1 (3)	MA1200 Calculus and Basic Linear Algebra I / MA1300 Enhanced Calculus and Linear Algebra I (3)	CS1102 Introduction to Computer Studies / CS1302 Introduction to Computer Programming (3)		GE1401 University English (3)		GE 1 (3)	<b>15</b>	
	<b>B</b>	Science 2 (3)	MA1201 Calculus and Basic Linear Algebra I / MA1301 Enhanced Calculus and Linear Algebra II (3)			GE2410 English for Engineering (3)	GE1501 Chinese Civilisation – History and Philosophy (3)	GE 2 (3)	<b>15</b>	
	<b>S</b>	Reserve for missed courses /						Reserve for missed courses		
<b>Major Requirements</b>										
<b>2</b>	<b>A</b>	AP1201 General Physics I / BCH1100 Chemistry (3) (if not taken <sup>#</sup> )	MBE2016 Engineering Graphics (3)	MBE2101 Thermo and Fluid Dynamics (3)	MBE2034 Engineering Materials and Processing (3)	MBE2020 Engineering Workshop Practice (0)		GE 3 (3)	<b>12 or 15</b>	
			MBE2003 Mechanics (3)	MBE2029 Electrical & Electronic Principles I (3)	MA2177 Engineering Mathematics and Statistics (3)					
	<b>B</b>	MBE2036 Engineering Computing (3)	MBE2003 Mechanics (3)	MBE2029 Electrical & Electronic Principles I (3)	MA2177 Engineering Mathematics and Statistics (3)			GE 4 (3)	<b>15</b>	
			MBE2016 Engineering Graphics (3)	MBE2101 Thermo and Fluid Dynamics (3)	MBE2034 Engineering Materials and Processing (3)					
<b>S</b>	Reserve for missed courses /						Reserve for missed courses			
<b>3</b>	<b>A</b>	MBE3007 CAD/CAM (3)	MBE3006 Plastics Engineering (3)	SEEM3032 Production and Operations Planning (3)	MBE3050 Design for Manufacturing and Manufacturing Systems (3)	Major Elective 1 (3)	Major Elective 2 (3)		<b>18</b>	
	<b>B</b>	MBE4005 Finite Element Analysis (3)	MBE3010 Mechanical Design (3)	SEEM3102 Quality Engineering (3)	MBE3019 Metrology and Applications (3)	Major Elective 3 (3)	Major Elective 4 (3)		<b>18</b>	
	<b>S</b>	Reserve for IAS or taking some Elective courses, if available /						Reserve for missed courses		
<b>4</b>	<b>A</b>	MBE4068 Project (3)	MBE3046 Automation Technology (3)	CES FS4001 (4)		Major Elective 5 (3)			<b>13</b>	
	<b>B</b>	MBE4068 Project (6)	MBE4066 Professional Engineering Practice (3)	CES FS4001 (4)		Major Elective 6 (3)			<b>16</b>	
	<b>S</b>	Reserve for missed Elective courses, if available /						Reserve for missed courses		
( ) indicates number of credits							<b>Total credits required = 122 or 125</b>			

<sup>@</sup> Students whose entry qualifications in HKDSE English Language is below Level 4 are required to take ELO200A/ELO200B English for Academic Purposes 1 & 2.

<sup>#</sup> Students should complete AP1201 or BCH1100 whichever is not taken as Science 1 and Science 2.

Note 1: MBE2020 should be taken in Year 2 during Semester A, Semester B, or Summer Term depending on the allocation and availability of workshop training places.

Note 2: Under special circumstances, students may be allowed to register for courses in the grey boxes if pre-requisite requirements have been satisfied, or vice versa.

Note 3: Students may alter the study path and courses can be taken in any order or in any year of study provided pre-requisite and pre-cursor requirements are satisfied and all graduation requirements could be met within the normative study period.

Note 4: Students can take Major electives from Year 3 depending on their overall study plan.