

**Model Study Path for BENGU3 MFSE 2016 Cohort - Advanced Standing Ia (non-CES mode)  
(for those who satisfy the pre-requisite for MA1201)**

Yr	Sem	Major/College Requirements						Gateway Education & Others		CU
1	A		MBE2016 Engineering Graphics (3)	MBE2101 Thermo and Fluid Dynamics (3)	MBE2034 Engineering Materials and Processing (3)	CSpC 1: MA1201 Calculus and Basic Linear Algebra II (3)	MBE2020 Engineering Workshop Practice (0)	English (3)		15
	B		MBE2003 Mechanics (3)	MBE2029 Electrical & Electronic Principles I (3)	MA2177 Engineering Mathematics & Statistics (3)	CSpC 2: CS1102 Introduction to Computer Studies / CS1302 Introduction to Computer Programming (3)		English (3)		15
	S							Reserve for missed courses		
2	A	MBE3007 CAD/CAM (3)	MBE3006 Plastics Engineering (3)	SEEM3032 Production and Operations Planning (3)		MBE3050 Design for Manufacturing and Manufacturing Systems (3)		GE1501 Chinese Civilisation (3)		15
	B	MBE4005 Finite Element Analysis (3)	MBE3010 Mechanical Design (3)	SEEM3102 Quality Engineering (3)	MBE2036 Engineering Computing (3)	MBE3019 Metrology and Applications (3)				15
	S	Reserve for IAS or taking some Elective courses, if available /						Reserve for missed courses		
3	A	MBE4068 Project (3)*	MBE3046 Automation Technology (3)			Major Elective 1 (3)	Major Elective 2 (3)		GE 1 (3)	15
	B	MBE4068 Project (6)*	MBE4066 Professional Engineering Practice (3)				Major Elective 3 (3)		GE 2 (3)	15
	S	Reserve for missed Elective courses, if available /						Reserve for missed courses		
( ) indicates number of credits								<b>Total credits required = 90</b>		

\* MBE4068 Project/ MBE4116 Capstone Project II.

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

Note 2: Students who have passed the placement test arranged by the MA department at the end of August before Year 1 Semester A are required to take MA1201 and CS1102 or CS1302-as College/School-specified Courses (CSpC).

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 2 depending on their overall study plan.

**Model Study Path for BENGU3 MFSE 2016 Cohort - Advanced Standing Ib (non-CES mode)  
(for students who are required to complete MA1200)**

Yr	Sem	Major/College Requirements						Gateway Education & Others		CUs
1	A		MBE2016 Engineering Graphics (3)	MBE2034 Engineering Materials and Processing (3)	MBE2029 Electrical & Electronic Principles I (3)	CSpC 1: MA1200 Calculus and Basic Linear Algebra I (3)	MBE2020 Engineering Workshop Practice (0)	English (3)		15
	B		MBE2003 Mechanics (3)	MBE2101 Thermo and Fluid Dynamics (3)	MBE2036 Engineering Computing (3)	CSpC 2: MA1201 Calculus and Basic Linear Algebra II (3)		English (3)		15
	S							Reserve for missed courses		
2	A	MBE3007 CAD/CAM (3)	MBE3006 Plastics Engineering (3)	SEEM3032 Production and Operations Planning (3)	MBE3050 Design for Manufacturing and Manufacturing Systems (3)	MA2177 Engineering Mathematics & Statistics (3)				15
	B	MBE4005 Finite Element Analysis (3)	MBE3010 Mechanical Design (3)	SEEM3102 Quality Engineering (3)		MBE3019 Metrology and Applications (3)		GE1501 Chinese Civilisation (3)		15
	S	Reserve for IAS or taking some Elective courses, if available /						Reserve for missed courses		
3	A	MBE4068 Project (3)*	MBE3046 Automation Technology (3)			Major Elective 1 (3)	Major Elective 2 (3)		GE 1 (3)	15
	B	MBE4068 Project (6)*	MBE4066 Professional Engineering Practice (3)				Major Elective 3 (3)		GE 2 (3)	15
	S	Reserve for missed Elective courses, if available /						Reserve for missed courses		
( ) indicates number of credits								<b>Total credits required = 90</b>		

\* MBE4068 Project/ MBE4116 Capstone Project II.

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

Note 2: Students who have not passed the placement test arranged by the MA department at the end of August before Year 1 Semester A are required to take MA1200 and MA1201 as College/School-specified Courses (CSpC).

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 2 depending on their overall study plan.

**Model Study Path for BENGU3 MFSE 2016 Cohort - Advanced Standing Ia (Optional CES mode)  
(for those who satisfy the pre-requisite for MA1201)**

Yr	Sem	Major/College Requirements						Gateway Education & Others		CU's
1	A		MBE2016 Engineering Graphics (3)	MBE2034 Engineering Materials and Processing (3)	MBE2101 Thermo and Fluid Dynamics (3)	CSpC 1: MA1201 Calculus and Basic Linear Algebra II (3)	MBE2020 Engineering Workshop Practice (0)	English (3)		15
	B		MBE2003 Mechanics (3)	MBE2029 Electrical & Electronic Principles I (3)	MA2177 Engineering Mathematics & Statistics (3)	CSpC 2: CS1102 Introduction to Computer Studies / CS1302 Introduction to Computer Programming (3)		English (3)		15
	S							Reserve for missed courses		
2	A	MBE3007 CAD/CAM (3)	MBE3006 Plastics Engineering (3)	SEEM3032 Production and Operations Planning (3)		MBE3050 Design for Manufacturing and Manufacturing Systems (3)		GE1501 Chinese Civilisation (3)		15
	B	MBE4005 Finite Element Analysis (3)	MBE3010 Mechanical Design (3)	SEEM3102 Quality Engineering (3)	MBE2036 Engineering Computing (3)	MBE3019 Metrology and Applications (3)	Major Elective 1 (3)			18
	S							GE 1 (3)	GE 2 (3)	6
3	A	MBE4068 Project (3)	MBE3046 Automation Technology (3)	CES FS4001 (4)		Major Elective 2 (3)				13
	B	MBE4068 Project (6)	MBE4066 Professional Engineering Practice (3)	CES FS4001 (4)		Major Elective 3 (3)				16
	S	Reserve for missed Elective courses, if available /						Reserve for missed courses		
( ) indicates number of credits								<b>Total credits required = 98</b>		

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

Note 2: Students who have passed the placement test arranged by the MA department at the end of August before Year 1 Semester A are required to take MA1201 and CS1102 or CS1302-as College/School-specified Courses (CSpC).

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 2 depending on their overall study plan.

**Model Study Path for BENGU3 MFSE 2016 Cohort - Advanced Standing Ib (Optional CES mode)  
(for students who are required to complete MA1200)**

Yr	Sem	Major/College Requirements						Gateway Education & Others		CU's
1	A		MBE2016 Engineering Graphics (3)	MBE2034 Engineering Materials and Processing (3)	MBE2029 Electrical & Electronic Principles I (3)	CSpC 1: MA1200 Calculus and Basic Linear Algebra I (3)	MBE2020 Engineering Workshop Practice (0)	English (3)		15
	B		MBE2003 Mechanics (3)	MBE2101 Thermo and Fluid Dynamics (3)	MBE2036 Engineering Computing (3)	CSpC 2: MA1201 Calculus and Basic Linear Algebra II (3)		English (3)		15
	S							Reserve for missed courses		
2	A	MBE3007 CAD/CAM (3)	MBE3006 Plastics Engineering (3)	SEEM3032 Production and Operations Planning (3)	MBE3050 Design for Manufacturing and Manufacturing Systems (3)	MA2177 Engineering Mathematics & Statistics (3)				15
	B	MBE4005 Finite Element Analysis (3)	MBE3010 Mechanical Design (3)	SEEM3102 Quality Engineering (3)		MBE3019 Metrology and Applications (3)	Major Elective 1 (3)	GE1501 Chinese Civilisation (3)		18
	S							GE 1 (3)	GE 2 (3)	6
3	A	MBE4068 Project (3)	MBE3046 Automation Technology (3)	CES FS4001 (4)			Major Elective 2 (3)			13
	B	MBE4068 Project (6)	MBE4066 Professional Engineering Practice (3)	CES FS4001 (4)			Major Elective 3 (3)			16
	S	Reserve for missed Elective courses, if available /						Reserve for missed courses		
( ) indicates number of credits								<b>Total credits required = 98</b>		

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

Note 2: Students who have not passed the placement test arranged by the MA department at the end of August before Year 1 Semester A are required to take MA1200 and MA1201 as College/School-specified Courses (CSpC).

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 2 depending on their overall study plan.