

Model Study Path for BENG4 MFSE 2014-15 Cohort (non-CES mode)

| Yr | Sem | College Requirements | Gateway Education (GE): College/School-specified Courses | | | GE: English [@] | Gateway Education & Others | | CU's |
|---------------------------------|----------------------------|---|--|--|---|---|--|----------------------------|-----------------|
| 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 | |
| Major Requirements | | | | | | | | | |
| 2 | A | AP1201 General Physics I / BCH1100 Chemistry (3) (if not taken [#]) | MBE2016 Engineering Graphics (3) | MBE2101 Thermo and Fluid Dynamics (3) | MBE2029 Electrical & Electronic Principles I (3) | MBE2020 Engineering Workshop Practice (0) | Free Elective 1 (3) | GE 3 (3) | 15 or 18 |
| | | | MBE2003 Mechanics (3) | MBE2034 Engineering Materials and Processing (3) | MA2177 Engineering Mathematics and Statistics (3) | | | | |
| | B | MBE3019 Metrology and Applications (3) | MBE2003 Mechanics (3) | MBE2034 Engineering Materials and Processing (3) | MA2177 Engineering Mathematics and Statistics (3) | | | GE 4 (3) | 15 |
| | | MBE3010 Mechanical Design (3) | MBE2016 Engineering Graphics (3) | MBE2101 Thermo and Fluid Dynamics (3) | MBE2029 Electrical & Electronic Principles I (3) | | | | |
| S | Reserve for missed courses | | | | | | | | |
| 3 | A | MBE3007 CAD/CAM (3) | MBE3006 Plastics Engineering (3) | SEEM3032 Production and Operations Planning (3) | MBE3010 Mechanical Design (3) | Major Elective 1 (3) | | | 15 |
| | B | MBE4005 Finite Element Analysis (3) | MBE3050 Design for Manufacturing and Manufacturing Systems (3) | SEEM3102 Quality Engineering (3) | MBE2036 Engineering Computing (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 | |
| () indicates number of credits | | | | | | | Total credits required = 120 | | |

[@] 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 BENG4 MFSE 2014-15 Cohort (Optional-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) | GE 2 (3) | 15 | | | | |
| | S | Reserve for missed courses, if available / | | | | | | Reserve for missed courses | | | | | |
| Major Requirements | | | | | | | | | | | | | |
| 2 | A | AP1201 General Physics I / BCH1100 Chemistry (3) (if not taken#) | MBE2016 Engineering Graphics (3) | | MBE2101 Thermo and Fluid Dynamics (3) | | MBE2029 Electrical & Electronic Principles I (3) | | GE 3 (3) | 12 or 15 | | | |
| | | | MBE2003 Mechanics (3) | | MBE2034 Engineering Materials and Processing (3) | | MA2177 Engineering Mathematics and Statistics (3) | | | | | | |
| | B | MBE3019 Metrology and Applications (3) | MBE2003 Mechanics (3) | | MBE2034 Engineering Materials and Processing (3) | | MA2177 Engineering Mathematics and Statistics (3) | | GE 4 (3) | 15 | | | |
| | | MBE3010 Mechanical Design (3) | MBE2016 Engineering Graphics (3) | | MBE2101 Thermo and Fluid Dynamics (3) | | MBE2029 Electrical & Electronic Principles I (3) | | | | | | |
| S | Reserve for missed courses | | | | | | Reserve for missed courses | | | | | | |
| 3 | A | MBE3007 CAD/CAM (3) | MBE3006 Plastics Engineering (3) | | SEEM3032 Production and Operations Planning (3) | | MBE3010 Mechanical Design (3) | | Major Elective 1 (3) | | Major Elective 2 (3) | | 18 |
| | B | MBE4005 Finite Element Analysis (3) | MBE3050 Design for Manufacturing and Manufacturing Systems (3) | | SEEM3102 Quality Engineering (3) | | MBE2036 Engineering Computing (3) | | Major Elective 3 (3) | | Major Elective 4 (3) | | 18 |
| | S | Reserve for IAS or taking some Elective courses, if available / | | | | | | Reserve for missed courses | | | | | |
| 4 | A | MBE4068 Project (3) | MBE3046 Automation Technology (3) | | CES FS4001 (4) | | Major Elective 5 (3) | | Major Elective 6 (3) | | 13 | | |
| | B | MBE4068 Project (6) | MBE4066 Professional Engineering Practice (3) | | CES FS4001 (4) | | Major Elective 5 (3) | | Major Elective 6 (3) | | 16 | | |
| | S | Reserve for missed Elective courses, if available / | | | | | | Reserve for missed courses | | | | | |
| () indicates number of credits | | | | | | | | Total credits required = 122 or 125 | | | | | |

® 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.

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.