*Tentative*
*For Reference Only*

# Model Study Path for BENG Systems Engineering And Management 2016/2017 DSE Entry (non-CES mode)

| Yr | Sem | Major Requirements | | | | | University Requirements | | CUs |
|---|---|---|---|---|---|---|---|---|---|
| 1 | A | College Specified-<br>Mathematics 1<br><br>MA1200<br>Calculus and Basic Linear Algebra I (3) | College Specified -<br>Computing<br><br>CS1102<br>Introduction to Computer Studies (3) | College Requirement-<br><br>BCH1100<br>Chemistry (3) | Department Specified:<br>SEEM2101<br>Introduction to Systems Engineering and Management (3) | Department Specified:<br>GE2319<br>Industrial Engineering and Management of Modern Enterprises –<br>or<br>GE2336<br>Understanding Phenomena Around Us: An Introduction to Systems Thinking (3) | English 1-<br><br>GE1401 University English (3) | | 15 |
| | B | College Specified-<br>Mathematics 2<br><br>MA1201<br>Calculus and Basic Linear Algebra II (3) | College Requirement-<br><br>AP1201<br>General Physics (3) | | | | English 2-<br><br>GE2410<br>English for Engineering (3) | GE1501<br>Chinese Civilisation – History and Philosophy (3) | 15 |
| | S | | | | | | | Gateway Education 1 (3) | 3 |
| 2 | A | MBE2106<br>Basic Engineering Materials and Processing (2) | MBE2107<br>Basics of Mechanical Engineering (2) | MA2172<br>Applied Statistics for Sciences and Engineering (3) | SEEM3032<br>Production and Operations Planning (3) | | Gateway Education 2 (3) | Gateway Education 3 (3) | 16 |
| | B | SEEM2102<br>Data Analytics and Statistical Methods (3) | MBE2108<br>Introduction to Electromechanical Systems (2) | MA2181<br>Mathematical Methods for Engineering (3) | SEEM3102<br>Quality Engineering (3) | | | Gateway Education 4 (3) | 14 |
| | S | | | | | | | | 0 |
| 3 | A | SEEM3027<br>Logistics and Materials Management (3) | SEEM3034<br>Work Design (3) | SEEM3040<br>Engineering Database and Systems (3) | SEEM3053<br>Quality Improvement Methodologies (3) | SEEM3060<br>Operations Research (3) | | | 15 |
| | B | SEEM3024<br>Ergonomics in Workplace Design (3) | SEEM3020<br>Engineering Economic Analysis (3) | SEEM3103<br>Process Analysis and Design (3) | Major Elective 1 (3) | Major Elective 2 (3) | | | 15 |
| | S | | | | | | | | 0 |
| 4 | A | SEEM4109<br>Product and Service Design and Innovation (3) | SEEM4068#<br>Project (Individual) (3) | Major Elective 3 (3) | Major Elective 4 (3) | Major Elective 5 (3) | | | 15 |
| | B | SEEM4066<br>Professional Engineering Practice (3) | SEEM4068#<br>Project (Individual) (3) | Major Elective 6 (3) | Major Elective 7 (3) | | | | 12 |
| ( ) indicates number of credit units | | | | | | | | **Total credits required =** | **120** |

# SEEM4068 Project (Individual) / SEEM4116 Capstone Project II
Note 1: Students can alter the study path and courses can be taken in any order or in year 2-4 of study provided pre-requisite and pre-cursor requirements are satisfied.
Note 2: Students can take Major electives from Year 3 depending on their overall study plan, and some elective courses may be available for study in the evenings only.

*Tentative*
*For Reference Only*

# Model Study Path for BENG Systems Engineering and Management 2016/2017 DSE Entry (Optional CES mode)

| Yr | Sem | Major Requirements | | | | | University Requirements | | CUs |
|---|---|---|---|---|---|---|---|---|---|
| 1 | A | College Specified-<br>Mathematics 1<br><br>MA1200<br>Calculus and Basic Linear Algebra I (3) | College Specified -<br>Computing<br><br>CS1102<br>Introduction to Computer Studies (3) | College Requirement-<br><br>BCH1100<br>Chemistry (3) | Department Specified:<br>SEEM2101<br>Introduction to Systems Engineering and Management (3) | Department Specified:<br>GE2319<br>Industrial Engineering and Management of Modern Enterprises –<br>or<br>GE2336<br>Understanding Phenomena Around Us: An Introduction to Systems Thinking (3) | English 1-<br><br>GE1401 University English (3) | | 15 |
| | B | College Specified-<br>Mathematics 2<br><br>MA1201<br>Calculus and Basic Linear Algebra II (3) | College Requirement-<br><br>AP1201<br>General Physics (3) | | | | English 2-<br><br>GE2410<br>English for Engineering (3) | GE1501<br>Chinese Civilisation – History and Philosophy (3) | 15 |
| | S | | | | | | | Gateway Education 1 (3) | 3 |
| 2 | A | MBE2106<br>Basic Engineering Materials and Processing (2) | MBE2107<br>Basics of Mechanical Engineering (2) | MA2172<br>Applied Statistics for Sciences and Engineering (3) | SEEM3032<br>Production and Operations Planning (3) | | Gateway Education 2 (3) | Gateway Education 3 (3) | 16 |
| | B | SEEM2102<br>Data Analytics and Statistical Methods (3) | MBE2108<br>Introduction to Electromechanical Systems (2) | MA2181<br>Mathematical Methods for Engineering (3) | SEEM3102<br>Quality Engineering (3) | | | Gateway Education 4 (3) | 14 |
| | S | | | | | Major Elective 1 (3) | | | 3 |
| 3 | A | SEEM3027<br>Logistics and Materials Management (3) | SEEM3034<br>Work Design (3) | SEEM3040<br>Engineering Database and Systems (3) | SEEM3053<br>Quality Improvement Methodologies (3) | SEEM3060<br>Operations Research (3) | | | 15 |
| | B | SEEM3024<br>Ergonomics in Workplace Design (3) | SEEM3020<br>Engineering Economic Analysis (3) | SEEM3103<br>Process Analysis and Design (3) | Major Elective 2 (3) | Major Elective 3 (3) | | | 15 |
| | S | | | | Major Elective 4 (3) | Major Elective 5 (3) | | | 6 |
| 4 | A | SEEM4109<br>Product and Service Design and Innovation (3) | SEEM4068#<br>Project (Individual) (3) | CES FS4001 (4) | Major Elective 6 (3) | | | | 13 |
| | B | SEEM4066<br>Professional Engineering Practice (3) | SEEM4068#<br>Project (Individual) (3) | CES FS4001 (4) | Major Elective 7 (3) | | | | 13 |
| ( ) indicates number of credit units | | | | | | | **Total credits required =** | | **128** |

# SEEM4068 Project (Individual) / SEEM4116 Capstone Project II
Note 1: Students can alter the study path and courses can be taken in any order or in year 2-4 of study provided pre-requisite and pre-cursor requirements are satisfied.
Note 2: Students can take Major electives from Year 3 depending on their overall study plan, and some elective courses may be available for study in the evenings only.