

(For students admitted in 2011-12 under the 3-year degree)

## Curriculum for BEng in Mechanical Engineering

### General Requirements

Students are required to complete the following general requirements for graduation in addition to program specific requirements:

*Required Courses in English Communication*

*Common Core Requirements*

*Required Course in Physical Education*

For details please refer to the section "General Requirements" on this website.

### Program Specific Requirements

Credit(s)

#### Required courses

|  |            |  |   |
|--|------------|--|---|
| (1)  | MECH 1990  | Industrial Training                      | 0 |
|  | MECH 2030  | Mechanisms and Dynamics of Machinery     | 3 |
|  | MECH 2310  | Thermodynamics                           | 3 |
|  | MECH 2410  | Engineering Materials I                  | 3 |
|  | MECH 2520  | Design and Manufacturing I               | 3 |
|  | MECH 3010  | Solid Mechanics I                        | 3 |
|  | MECH 3020  | Solid Mechanics II                       | 3 |
|  | MECH 3210  | Fluid Mechanics                          | 3 |
|  | MECH 3310  | Heat Transfer                            | 3 |
|  | MECH 3420  | Engineering Materials II                 | 3 |
|  | MECH 3520  | Design and Manufacturing II              | 4 |
|  | MECH 3610  | Control Principles                       | 4 |
|  | MECH 3630  | Electrical Technology                    | 3 |
|  | MECH 3830  | Laboratory I                             | 3 |
|  | MECH 3840  | Laboratory II                            | 3 |
|  | MECH 4910  | Final Year Design Project                | 9 |
|  | COMP 1022Q | Introduction to Computing with Excel VBA | 3 |
|  | ELEC 2410  | Basic Electronics                        | 4 |
|  | IELM 4110  | Engineers in Society                     | 1 |
|  | ACCT 3650  | Engineering Law                          | 2 |
|  | ECON 2152  | Engineering Economics and Finance        | 2 |
|  | MATH 2011  | Introduction to Multivariable Calculus   | 3 |
|  | MATH 2111  | Matrix Algebra and Applications          | 3 |
|  | MATH 2351  | Introduction to Differential Equations   | 3 |
| <i>For non-School-based admitted students:</i> |            |  |   |
|  | MGMT 1110  | Introduction to Management               | 3 |

Elective courses

|     | Elective types |                                 | Minimum<br>no. of courses | Minimum<br>total credits |
|-----|----------------|---------------------------------|---------------------------|--------------------------|
| (2) | MECH           | Mechanical Engineering Elective | 4                         | 12                       |

Other Requirements

|           |  |   |
|-----------|--|---|
| MECH 1020 | Academic and Professional Development I  | 0 |
| MECH 1030 | Academic and Professional Development II | 0 |

Notes:

- (1) Students are required to complete and pass a prescribed training program within the normal length of study. Details of the program, its requirements and schedule will be announced on the website of the Industrial Training Center (<http://www.ust.hk/itc>) or website of the department in the first year Fall term. Training normally takes place in the Winter and Summer terms starting from the first year of study. For recording the overall training results, students are normally registered for the course in their last term of study.
- (2) All MECH courses at 3000- and 4000-level except ENGG 3000, MECH 3820 and MECH 4800 can be counted as MECH elective. Besides, ENGG 4950 can be used to count toward the MECH elective requirement.

A minimum of 105 credits is required for the BEng program in Mechanical Engineering. For students admitted through the School-based Admission Scheme - Engineering A, a minimum of 104 credits is required for their program completion.