

# Programme Requirements for Bachelor of Engineering with Honours in Civil Engineering

This 3-credit-unit system programme requirements document is applicable to the following student cohorts:

| Year of Entry | Admission cohort       |
|---------------|------------------------|
| Year 1        | 2023/24 and thereafter |
| Year 2        | 2024/25 and thereafter |
| Year 3        | 2025/26 and thereafter |

## 1. Programme Requirement – Year 1 Entry

- 1.1 To be eligible for the award of the degree of Bachelor of Engineering with Honours in Civil Engineering through Year 1 Entry, a student shall:
  - 1.1.1 obtain 120 credit-units as prescribed below, of which no more than 30 credit-units shall be at 1000-level, at least 24 credit-units shall be at 3000-level and at least 24 credit-units shall be at 4000-level:
    - 1.1.1.1 99 credit-units of core courses applicable to Year 1 entry as listed in Table 1;
    - 1.1.1.2 9 credit-units of University Core courses in Table 2;
    - 1.1.1.3 6 credit-units of University English courses in Table 3;
    - 1.1.1.4 6 credit-units of General Education (GE) courses (see <u>www.hkmu.edu.hk/FT\_GE</u> for the updated list of GE courses)

#### and

1.1.2 attain the CGPA for graduation as prescribed in the Regulations for the award of undergraduate degrees.

## 2. Programme Requirement – Year 2 Entry

- 2.1 To be eligible for the award of the degree of Bachelor of Engineering with Honours in Civil Engineering through Year 2 Entry, a student shall:
  - 2.1.1 obtain 93 credit-units as prescribed below, of which at least 24 credit-units shall be at 3000-level and at least 24 credit-units shall be at 4000-level:
    - 2.1.1.1 84 credit-units of core courses applicable to Year 2 entry as listed in Table 1;
    - 2.1.1.2 9 credit-units of University Core courses in Table 2;

and

2.1.2 attain the CGPA for graduation as prescribed in the Regulations for the award of undergraduate degrees.



## 3. Programme Requirement – Year 3 Entry

- 3.1 To be eligible for the award of the degree of Bachelor of Engineering with Honours in Civil Engineering through Year 3 Entry, a student shall:
  - 3.1.1 obtain 66 credit-units as prescribed below, of which at least 24 credit-units shall be at 3000-level and at least 24 credit-units shall be at 4000-level:
    - 3.1.1.1 57 credit-units of core courses applicable to Year 3 entry as listed in Table 1;
    - 3.1.1.2 9 credit-units of University Core courses in Table 2;

and

3.1.2 attain the CGPA for graduation as prescribed in the Regulations for the award of undergraduate degrees.

| Course Code  | Course Title   | Credit- | Year Entry   |   |   |
|--------------|--|---------|--------------|---|---|
| course coue  | Course Inte  | units   | 1            | 2 | 3 |
| ENGG 1001SEF | Engineering Mechanics  | 3       | $\checkmark$ |   |   |
| ENGG 1011SEF | Workplace Safety and Health for Engineers                          | 3       | $\checkmark$ |   |   |
| ENGG 2001SEF | Foundation Engineering   | 3       | $\checkmark$ | ✓ |   |
| ENGG 2002SEF | Fluid Mechanics  | 3       | $\checkmark$ | ✓ |   |
| ENGG 2007SEF | Water and Wastewater Treatment Techniques for<br>Civil Engineering | 3       | ✓            | ~ |   |
| ENGG 2008SEF | Structural Analysis  | 3       | $\checkmark$ | ✓ |   |
| ENGG 2009SEF | Engineering Geology & Soil Mechanics                               | 3       | $\checkmark$ | ✓ |   |
| ENGG 2090SEF | Guided Industrial Training   | 3       | $\checkmark$ | ✓ |   |
| ENGG 3001SEF | Project Management for Engineering                                 | 3       | $\checkmark$ | ✓ | ✓ |
| ENGG 3041SEF | Non-Linear Analysis of Structures                                  | 3       | $\checkmark$ | ✓ | ✓ |
| ENGG 3042SEF | Construction Materials   | 3       | $\checkmark$ | ✓ | ✓ |
| ENGG 3043SEF | Steel Structures   | 3       | $\checkmark$ | ✓ | ✓ |
| ENGG 3091SEF | Industrial Placement   | 3       | $\checkmark$ | ✓ | ✓ |
| ENGG 4003SEF | Construction Information Technology                                | 3       | $\checkmark$ | ✓ | ✓ |
| ENGG 4004SEF | Commissioning of Facilities  | 3       | $\checkmark$ | ✓ | ✓ |
| ENGG 4005SEF | Reinforced Concrete Design   | 3       | $\checkmark$ | ✓ | ✓ |
| ENGG 4006SEF | Geotechnical Design  | 3       | $\checkmark$ | ✓ | ✓ |
| ENGG 4007SEF | Highway and Traffic Engineering                                    | 3       | $\checkmark$ | ✓ | ✓ |
| ENGG 4008SEF | Hydraulics and Hydrology   | 3       | $\checkmark$ | ✓ | ✓ |
| ENGG 4009SEF | Design Project for Civil Engineering                               | 3       | $\checkmark$ | ✓ | ✓ |
| ENGG 4090SEF | Engineering Project  | 6       | $\checkmark$ | ✓ | ✓ |

#### Table 1: Core Courses



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| Course Code  | Course Title   | Credit- | Year Entry   |   |              |
|--------------|--|---------|--------------|---|--------------|
|              | course ritie   | units   | 1            | 2 | 3            |
| ENVR 3008SEF | Design and Management for Green Buildings and Facilities | 3       | ✓            | ~ | $\checkmark$ |
| ENVR 3028SEF | Advances in Environmental Impact Assessment              | 3       | $\checkmark$ | ✓ |              |
| ENVR 4011SEF | Energy Resources and Sustainable Energy Strategies       | 3       | $\checkmark$ | ✓ | ✓            |
| MATH 1410SEF | Algebra and Calculus                                     | 3       | $\checkmark$ |   |              |
| MATH 2150SEF | Linear Algebra   | 3       | $\checkmark$ | ~ |              |
| MATH 2850SEF | Multivariable Calculus                                   | 3       | $\checkmark$ | ~ |              |
| STAT 1510SEF | Probability and Distributions                            | 3       | $\checkmark$ |   |              |
| ST 1020SEF   | Computer Application for Control and Automation          | 3       | $\checkmark$ |   |              |
| TC 3030SEF   | Physical & Mechanical Behaviour of Materials             | 3       | $\checkmark$ | ✓ | ✓            |
| TC 4019SEF   | Quality Management for Science and Technology            | 3       | $\checkmark$ | ~ | ✓            |
| TC 4020SEF   | Professional Practice and Ethics                         | 3       | $\checkmark$ | ~ | $\checkmark$ |

# **Table 2: University Core Courses**

| Course Code | Course Title   | Credit-units |
|-------------|--|--------------|
| UNI 1002ABW | University Core Values                                       | 2            |
| UNI 1012ABW | Social Responsibilities                                      | 1            |
| UNI 2002BEW | Effective Communication and Teamwork                         | 3            |
| UNI 3002BEW | Entrepreneurial Mindset and Leadership for<br>Sustainability | 3            |

# **Table 3: University English Courses**

| Course Code  | Course Title                               | Credit-units |
|--------------|--|--------------|
| ENGL 1101AEF | University English: Reading and Writing    | 3            |
| ENGL 1202EEF | University English: Listening and Speaking | 3            |

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