

# EVE-2024-4YR

## CITY UNIVERSITY OF HONG KONG School of Energy and Environment

### Bachelor of Engineering in Environmental Science and Engineering Recommended Study Plan (for 2024 cohort with normative 4-year degree)

List of 3 School-specified courses:

- (1) CA1167 Engineering Communication
- (2) SEE1003 Introduction to Sustainable Energy and Environmental Engineering
- (3) SEE3002 Energy and Environmental Economics

#### YEAR 1

| Semester A                              |                                                                  | CU <sub>s</sub> | Semester B                                   |                                                      | CU <sub>s</sub> |
|-----------------------------------------|------------------------------------------------------------------|-----------------|----------------------------------------------|------------------------------------------------------|-----------------|
| MA1200 /                                | Calculus and Basic Linear Algebra I /                            | 3               | MA1201 /                                     | Calculus and Basic Linear Algebra II /               | 3               |
| MA1300                                  | Enhanced Calculus and Linear Algebra I                           |                 | MA1301                                       | Enhanced Calculus and Linear Algebra II              |                 |
| CHEM1200                                | Discovery in Biology                                             | 3               | PHY1201                                      | General Physics I                                    | 3               |
| CHEM1300                                | Principles of General Chemistry                                  | 3               | SEE1000                                      | Professional Development: Career Planning Workshop   | 0               |
| SEE1003                                 | Introduction to Sustainable Energy and Environmental Engineering | 3               | SEE1002                                      | Introduction to Computing for Energy and Environment | 3               |
| GE1401                                  | University English                                               | 3               | GE2410                                       | English for Engineering                              | 3               |
| GE Course (Distributional Requirements) |                                                                  | 3               | GE Courses (Distributional Requirements) x 2 |                                                      | 3               |
| Total: 18                               |                                                                  |                 | Total: 18                                    |                                                      |                 |

#### YEAR 2

| Semester A |                                                           | CU <sub>s</sub> | Semester B |                                           | CU <sub>s</sub> |
|------------|-----------------------------------------------------------|-----------------|------------|-------------------------------------------|-----------------|
| SEE2000    | Professional Development I                                | 0               | CA1167     | Engineering Communication                 | 3               |
| SEE2002    | Chemical Sciences for Energy and Environmental Engineers  | 4               | CHEM2004   | Principles of Analytical Chemistry        | 4               |
| SEE2003    | Introduction to Energy and Environmental Data Analysis    | 3               | MA2181     | Mathematical Methods for Engineering      | 3               |
| SEE2203    | Environmental, Safety, and Occupational Health Management | 3               | SEE2101    | Engineering Thermofluids I                | 3               |
| SEE2204    | Principles of Sustainability                              | 3               | SEE2201    | Fundamentals of Environmental Engineering | 3               |
| GE1501     | Chinese Civilisation - History and Philosophy             | 3               |            |                                           |                 |
| Total: 16  |                                                           |                 | Total: 16  |                                           |                 |

#### YEAR 3

| Semester A |                                      | CU <sub>s</sub> | Semester B |                                            | CU <sub>s</sub> |
|------------|--------------------------------------|-----------------|------------|--------------------------------------------|-----------------|
| SEE3002    | Energy and Environmental Economics   | 3               | SEE3003    | Climate Change and Adaptation Strategies   | 3               |
| SEE3101    | Engineering Thermofluids II          | 4               | SEE3203    | Air Pollution                              | 3               |
| SEE4218    | Water and Water Resource Engineering | 3               | SEE4001    | Engineers in Society                       | 1               |
| SYE4024    | Project Management                   | 3               | SEE4204    | Environmental Systems Modelling            | 3               |
|            |                                      |                 | SEE4217    | Waste and Wastewater Treatment Engineering | 3               |
| Total: 13  |                                      |                 | Total: 13  |                                            |                 |

#### YEAR 4

| Semester A                              |                                      | CU <sub>s</sub> | Semester B     |                                                                | CU <sub>s</sub> |
|-----------------------------------------|--------------------------------------|-----------------|----------------|----------------------------------------------------------------|-----------------|
| SEE4002                                 | Environmental Engineering Laboratory | 3               | SEE4004        | Environmental Impact Assessment for Sustainable Development    | 4               |
| SEE4996                                 | Final Year Project                   | 3               | SEE4203        | Advanced Treatment and Management of Solid and Municipal Waste | 3               |
| Major Electives x 2                     |                                      | 6 - 8           | SEE4996        | Final Year Project                                             | 3               |
| GE Course (Distributional Requirements) |                                      | 3               | Major Elective |                                                                | 3 - 4           |
| Total: 15 - 17                          |                                      |                 | Total: 13 - 14 |                                                                |                 |

#### **IMPORTANT NOTES re. SEE2000 Professional Development I and SEE4000 Professional Development II:**

By the time SEE students graduate, they must have successfully completed *SEE2000 Professional Development I* and *SEE4000 Professional Development II*, namely **Career Training Workshops arranged by SEE** plus **160-hour Professional Development experience recognized by SEE**. For details, please refer to the School website at <https://www.cityu.edu.hk/see> >> Programmes >> Undergraduate Programmes.

# EVE-2024-4YR-BSS

## CITY UNIVERSITY OF HONG KONG School of Energy and Environment

List of 3 School-specified courses:  
(1) CA1167 Engineering Communication  
(2) SEE1003 Introduction to Sustainable Energy and Environmental Engineering  
(3) SEE3002 Energy and Environmental Economics

### Bachelor of Engineering in Environmental Science and Engineering Recommended Study Plan (for 2024 cohort with normative 4-year degree taking BSS discipline)

#### YEAR 1

| Semester A                              |                                                                  | CUUs             | Semester B                                   |                                                      | CUUs             |
|-----------------------------------------|------------------------------------------------------------------|------------------|----------------------------------------------|------------------------------------------------------|------------------|
| MA1200 /                                | Calculus and Basic Linear Algebra I /                            | 3                | MA1201 /                                     | Calculus and Basic Linear Algebra II /               | 3                |
| MA1300                                  | Enhanced Calculus and Linear Algebra I                           |                  | MA1301                                       | Enhanced Calculus and Linear Algebra II              |                  |
| CHEM1200                                | Discovery in Biology                                             | 3                | PHY1201                                      | General Physics I                                    | 3                |
| CHEM1300                                | Principles of General Chemistry                                  | 3                | SEE1000                                      | Professional Development: Career Planning Workshop   | 0                |
| SEE1003                                 | Introduction to Sustainable Energy and Environmental Engineering | 3                | SEE1002                                      | Introduction to Computing for Energy and Environment | 3                |
| GE1401                                  | University English                                               | 3                | GE2410                                       | English for Engineering                              | 3                |
| GE Course (Distributional Requirements) |                                                                  | 3                | GE Courses (Distributional Requirements) x 2 |                                                      | 3                |
|                                         |                                                                  |                  |                                              |                                                      | 3                |
|                                         |                                                                  | <b>Total: 18</b> |                                              |                                                      | <b>Total: 18</b> |

#### YEAR 2

| Semester A |                                                           | CUUs             | Semester B |                                           | CUUs             |
|------------|-----------------------------------------------------------|------------------|------------|-------------------------------------------|------------------|
| SEE2000    | Professional Development I                                | 0                | CA1167     | Engineering Communication                 | 3                |
| SEE2001    | Electromagnetic Principles for Energy Engineers           | 3                | CHEM2004   | Principles of Analytical Chemistry        | 4                |
| SEE2002    | Chemical Sciences for Energy and Environmental Engineers  | 4                | MA2181     | Mathematical Methods for Engineering      | 3                |
| SEE2003    | Introduction to Energy and Environmental Data Analysis    | 3                | SEE2101    | Engineering Thermofluids I                | 3                |
| SEE2203    | Environmental, Safety, and Occupational Health Management | 3                | SEE2201    | Fundamentals of Environmental Engineering | 3                |
| SEE2204    | Principles of Sustainability                              | 3                |            |                                           |                  |
| GE1501     | Chinese Civilisation - History and Philosophy             | 3                |            |                                           |                  |
|            |                                                           | <b>Total: 19</b> |            |                                           | <b>Total: 16</b> |

#### YEAR 3

| Semester A |                                      | CUUs             | Semester B                              |                                            | CUUs                  |
|------------|--------------------------------------|------------------|-----------------------------------------|--------------------------------------------|-----------------------|
| CA3712     | Electrical Services                  | 3                | SEE3003                                 | Climate Change and Adaptation Strategies   | 3                     |
| CA3732     | Fire Engineering and Piped Services  | 3                | SEE3203                                 | Air Pollution                              | 3                     |
| SEE3002    | Energy and Environmental Economics   | 3                | SEE4001                                 | Engineers in Society                       | 1                     |
| SEE3101    | Engineering Thermofluids II          | 4                | SEE4204                                 | Environmental Systems Modelling            | 3                     |
| SEE3103    | Energy Efficiency for Buildings      | 3                | SEE4217                                 | Waste and Wastewater Treatment Engineering | 3                     |
| SEE4218    | Water and Water Resource Engineering | 3                | Major Elective                          |                                            | 3 - 4                 |
|            |                                      |                  | GE Course (Distributional Requirements) |                                            | 3                     |
|            |                                      | <b>Total: 19</b> |                                         |                                            | <b>Total: 19 - 20</b> |

#### YEAR 4

| Semester A     |                                      | CUUs                  | Semester B     |                                                                | CUUs                  |
|----------------|--------------------------------------|-----------------------|----------------|----------------------------------------------------------------|-----------------------|
| CA3722         | HVAC Engineering                     | 3                     | CA4718         | Power Electronics and Smart Lighting Controls                  | 3                     |
| CA4737         | Fire Science and Modelling           | 3                     | SEE4004        | Environmental Impact Assessment for Sustainable Development    | 4                     |
| SEE4002        | Environmental Engineering Laboratory | 3                     | SEE4203        | Advanced Treatment and Management of Solid and Municipal Waste | 3                     |
| SEE4996        | Final Year Project                   | 3                     | SEE4996        | Final Year Project                                             | 3                     |
| SYE4024        | Project Management                   | 3                     | Major Elective |                                                                | 3 - 4                 |
| Major Elective |                                      | 3 - 4                 |                |                                                                |                       |
|                |                                      | <b>Total: 18 - 19</b> |                |                                                                | <b>Total: 16 - 17</b> |

#### **IMPORTANT NOTES re. SEE2000 Professional Development I and SEE4000 Professional Development II:**

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