EVE Curriculum (2019 Cohort - Normative 4-year Degree)
[min. no. of CUs for the award: 122]

(1) Gateway Education (GE) Requirement (30 CUs)

GE Requirement			Credit Units
University Requirements	GE1401	University English	3
	GE2410	English for Engineering	3
	GE1501	Chinese Civilisation – History and Philosophy	3
Distributional Requirements	A minimum of 3 credit units from each of the three distributional areas below: - Area 1: Arts and Humanities - Area 2: Study of Societies, Social and Business Organisations - Area 3: Science and Technology		12
School-specified Requirements	MNE2016	Engineering Graphics	3
	SEE1003	Introduction to Sustainable Energy and Environmental Engineering	3
	SEE3002	Energy and Environmental Economics	3
Total			30

(2) School Requirement (18 CUs)

Course		Credit Units	Remarks
BCH1100	Chemistry	3	
BCH1200	Discovery in Biology	3	
MA1200 / MA1300	Calculus and Basic Linear Algebra I / Enhanced Calculus and Linear Algebra I	3	Select either MA1200 or MA1300
MA1201 / MA1301	Calculus and Basic Linear Algebra II / Enhanced Calculus and Linear Algebra II	3	Select either MA1201 or MA1301
PHY1201	General Physics I	3	
SEE1002	Introduction to Computing for Energy and Environment	3	

(3) Major Requirement (74 CUs)

A. Basic Core Courses (20 CUs)

Course		Credit Units
CHEM2004	Principles of Analytical Chemistry	4
MA2181	Mathematical Methods for Engineering	3
SEE2002	Chemical Sciences for Energy and Environmental Engineers	4
SEE2003	Introduction to Energy and Environmental Data Analysis	3
SEE2101	Engineering Thermofluids I	3
SEE2201	Fundamentals of Environmental Engineering	3

B. Major Core Courses (42 CUs)

Course		Credit Units
SEE2203	Environmental, Safety, and Occupational Health Management	3
SEE2204	Principles of Sustainability	3
SEE3003	Climate Change and Adaptation Strategies	3
SEE3101	Engineering Thermofluids II	4
SEE3203	Air Pollution	3
SEE4001	Engineers in Society	1
SEE4002	Environmental Engineering Laboratory	3
SEE4004	Environmental Impact Assessment for Sustainable Development	4
SEE4204	Environmental Systems Modeling	3
SEE4217	Waste and Wastewater Treatment Engineering	3
SEE4218	Water and Water Resource Engineering	3
SEE4996	Final Year Project	6
SEEM4024	Project Management	3

C. Electives (12 CUs) - *select at least **FOUR** courses from the following list*

Course		Credit Units	Remarks
CA3677	Hydraulics and Hydrology	3	Environmental Technology
CHEM4035	Environmental Measurements	4	
SEE4122	Chemical Separations for Energy and Environmental Applications	3	
SEE4203	Advanced Treatment and Management of Solid and Municipal Waste	3	
SEE4216	Combustion and Air Pollution Control	3	
SEE4220	Measurements of Air Pollutants	3	
SDSC3002	Data Mining	3	Sustainability and Environmental Management
SEE3001	Energy and Environmental Policy	3	
SEE3104	Sustainable and Renewable Energy	3	
SEE3204*	Urban Sustainability	3	
SEE3205	Urban Sustainability	3	
SEE3206	Environmental Social Governance	3	
SEE4116	Energy and Carbon Auditing	3	
SEE4205	Design of Smart Cities and Sustainable Building	3	
SEE4206	Social Perspectives of Environmental Science and Engineering	3	
CHEM4022	Environmental Toxicology	4	Environmental Science
CHEM4035	Environmental Measurements	4	
CHEM4039	Environmental Conservation and Resources Management	4	
SEE3201	Atmospheric Science – An Introductory Survey	3	
SEE4202	Atmospheric Chemistry	3	
SEE4219	Air Quality Modeling	3	

**SEE3204 is a summer course (not offered until further notice)*

D. Optional Electives (21 CUs)

Students may choose to enroll in all of the following course(s) if they are interested in being a member of The Hong Kong Institution of Engineers (HKIE) in the Building Services (BSS) discipline. Given the quota restriction, students are required to obtain approval by the School before studying the courses.

Course		**Credit Units**
CA3712	Electrical Services	3
CA3722	HVAC Engineering	3
CA3732	Fire Engineering and Piped Services	3
CA4718	Power Electronics and Smart Lighting Controls	3
CA4737	Fire Science and Modelling	3
SEE2001	Electromagnetic Principles for Energy Engineers	3
SEE3103	Energy Efficiency for Buildings	3

EVE Curriculum (2019 Cohort – Advanced Standing I)

[min. no. of CUs for the award: 95]

(1) Gateway Education (GE) Requirement (21 CUs)

GE Requirement		Credit Units
University Requirements	GE1401 University English	3
	GE2410 English for Engineering	3
	GE1501 Chinese Civilisation – History and Philosophy	3
Distributional Requirements	A minimum of 6 credit units from two of the three distributional areas below: - Area 1: Arts and Humanities - Area 2: Study of Societies, Social and Business Organisations - Area 3: Science and Technology	6
School-specified Requirements	MNE2016 Engineering Graphics	3
	SEE3002 Energy and Environmental Economics	3
Total		21

(2) School Requirement (Not required)

(3) Major Requirement (74 CUs)

A. Basic Core Courses (20 CUs)

Course		Credit Units
BCH2004	Principles of Analytical Chemistry	4
MA2181	Mathematical Methods for Engineering	3
SEE2002	Chemical Sciences for Energy and Environmental Engineers	4
SEE2003	Introduction to Energy and Environmental Data Analysis	3
SEE2101	Engineering Thermofluids I	3
SEE2201	Fundamentals of Environmental Engineering	3

B. Major Core Courses (42 CUs)

Course		Credit Units
SEE2203	Environmental, Safety, and Occupational Health Management	3
SEE2204	Principles of Sustainability	3
SEE3003	Climate Change and Adaptation Strategies	3
SEE3101	Engineering Thermofluids II	4
SEE3203	Air Pollution	3
SEE4001	Engineers in Society	1
SEE4002	Environmental Engineering Laboratory	3
SEE4004	Environmental Impact Assessment for Sustainable Development	4
SEE4204	Environmental Systems Modelling	3
SEE4217	Waste and Wastewater Treatment Engineering	3
SEE4218	Water and Water Resource Engineering	3
SEE4996	Final Year Project	6
SEEM4024	Project Management	3

C. Electives (12 CUs) - *select at least **FOUR** courses from the following list*

Course		Credit Units	Remarks
CA3677	Hydraulics and Hydrology	3	Environmental Technology
CHEM4035	Environmental Measurements	4	
SEE4122	Chemical Separations for Energy and Environmental Applications	3	
SEE4203	Advanced Treatment and Management of Solid and Municipal Waste	3	
SEE4216	Combustion and Air Pollution Control	3	
SDSC3002	Data Mining	3	Sustainability and Environmental Management
SEE3001	Energy and Environmental Policy	3	
SEE3104	Sustainable and Renewable Energy	3	
SEE3204*	Urban Sustainability	3	
SEE3205	Urban Sustainability	3	
SEE3206	Environmental Social Governance	3	
SEE4116	Energy and Carbon Auditing	3	
SEE4205	Design of Smart Cities and Sustainable Building	3	
SEE4206	Social Perspectives of Environmental Science and Engineering	3	
CHEM4022	Environmental Toxicology	4	Environmental Science
CHEM4035	Environmental Measurements	4	
CHEM4039	Environmental Conservation and Resources Management	4	
SEE3201	Atmospheric Science – An Introductory Survey	3	
SEE4202	Atmospheric Chemistry	3	
SEE4219	Air Quality Modeling	3	

**SEE3204 is a summer course (not offered until further notice)*