

EVE Curriculum (2017 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	MBE2016 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
AP1201 General Physics I	3	
BCH1100 Chemistry	3	
BCH1200 Discovery in Biology	3	
MA1200 / MA1300	3	Calculus and Basic Linear Algebra I / Enhanced Calculus and Linear Algebra I Select either MA1200 or MA1300
MA1201 / MA1301	3	Calculus and Basic Linear Algebra II / Enhanced Calculus and Linear Algebra II Select either MA1201 or MA1301
SEE1002	3	Introduction to Computing for Energy and Environment

(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	
SEE4116	Energy and Carbon Auditing	3	
SEE4205	Design of Smart Cities and Sustainable Building	3	
SEE4206	Social Perspectives of Environmental Science and Engineering	3	Environmental Science
CHEM4022	Environmental Toxicology	4	
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)

EVE Curriculum (2017 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
	GE2401 / English for Science / GE2410 English for Engineering	3
	GE1501 Chinese Civilisation – History and Philosophy	3
	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	
School-specified Requirements	MBE2016 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	
SEE4116	Energy and Carbon Auditing	3	
SEE4205	Design of Smart Cities and Sustainable Building	3	
SEE4206	Social Perspectives of Environmental Science and Engineering	3	Environmental Science
CHEM4022	Environmental Toxicology	4	
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	

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