

EVE Curriculum (2020 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
CHEM1200 Discovery in Biology	3	
CHEM1300 Principles of General Chemistry	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	
SEE4000 Professional Development	0	

(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
SEEM4024 Project Management	3
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

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	
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 semester course (not offered until further notice)

EVE Curriculum (2020 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 (0 CU)

Course	Credit Unit
SEE4000 Professional Development	0

(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
SEEM4024 Project Management	3
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

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	
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 semester course (not offered until further notice)*