

ESE-2021-4YR

CITY UNIVERSITY OF HONG KONG School of Energy and Environment

Bachelor of Engineering in Energy Science and Engineering Recommended Study Plan (for 2021 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

<u>Semester A</u>	<u>CUs</u>	<u>Semester B</u>	<u>CUs</u>
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	SEE1002 Introduction to Computing for Energy and Environment	3
GE1401 University English	3	SEE1003 Introduction to Sustainable Energy and Environmental Engineering	3
GE Courses (Distributional Requirements) x 2	3	GE2410 English for Engineering	3
	3	GE Course (Distributional Requirements)	3
Total: 18		Total: 18	

YEAR 2

<u>Semester A</u>	<u>CUs</u>	<u>Semester B</u>	<u>CUs</u>
SEE2001 Electromagnetic Principles for Energy Engineers	3	CA1167 Engineering Communication	3
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
GE1501 Chinese Civilisation - History and Philosophy	3	SEE2201 Fundamentals of Environmental Engineering	3
		GE Course (Distributional Requirements)	3
Total: 13		Total: 15	

YEAR 3

<u>Semester A</u>	<u>CUs</u>	<u>Semester B</u>	<u>CUs</u>
ADSE4024 Project Management	3	SEE3001 Energy and Environmental Policy	3
SEE3002 Energy and Environmental Economics	3	SEE3003 Climate Change and Adaptation Strategies	3
SEE3101 Engineering Thermofluids II	4	SEE3104 Sustainable and Renewable Energy	3
SEE3102 Power Plant Engineering	3	SEE4001 Engineers in Society	1
SEE3103 Energy Efficiency for Buildings	3	SEE4217 Waste and Wastewater Treatment Engineering	3
Total: 16		Total: 13	

YEAR 4

<u>Semester A</u>	<u>CUs</u>	<u>Semester B</u>	<u>CUs</u>
SEE4003 Energy and Environmental Engineering Laboratory	3	SEE4004 Environmental Impact Assessment for Sustainable Development	4
SEE4112 Sustainable Engineering Systems: Modelling and Analysis	3	SEE4997 Final Year Project	3
SEE4997 Final Year Project	3	Major Electives x 2	3
Major Electives x 2	3		3
	3		
Total: 15		Total: 13	

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 **8-hour 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.

ESE-2021-4YR-BSS

CITY UNIVERSITY OF HONG KONG
School of Energy and Environment
Bachelor of Engineering in Energy Science and Engineering
Recommended Study Plan (for 2021 cohort with normative 4-year degree
taking BSS discipline)

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		CUs	Semester B		CUs
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	SEE1002	Introduction to Computing for Energy and Environment	3
GE1401	University English	3	SEE1003	Introduction to Sustainable Energy and Environmental Engineering	3
GE Courses (Distributional Requirements) x 2		3	GE2410	English for Engineering	3
		3	GE Course (Distributional Requirements)		3
Total: 18			Total: 18		

YEAR 2

Semester A		CUs	Semester B		CUs
SEE2001	Electromagnetic Principles for Energy Engineers	3	CA1167	Engineering Communication	3
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
GE1501	Chinese Civilisation - History and Philosophy	3	SEE2201	Fundamentals of Environmental Engineering	3
			GE Course (Distributional Requirements)		3
Total: 13			Total: 15		

YEAR 3

Semester A		CUs	Semester B		CUs
CA3712	Electrical Services	3	SEE3001	Energy and Environmental Policy	3
CA3732	Fire Engineering and Piped Services	3	SEE3003	Climate Change and Adaptation Strategies	3
SEE3002	Energy and Environmental Economics	3	SEE3104	Sustainable and Renewable Energy	3
SEE3101	Engineering Thermofluids II	4	SEE4001	Engineers in Society	1
SEE3102	Power Plant Engineering	3	SEE4217	Waste and Wastewater Treatment Engineering	3
SEE3103	Energy Efficiency for Buildings	3	Major Electives x 2		3
					3
Total: 19			Total: 19		

YEAR 4

Semester A		CUs	Semester B		CUs
ADSE4024	Project Management	3	CA4718	Power Electronics and Smart Lighting Controls	3
CA3722	HVAC Engineering	3	SEE4004	Environmental Impact Assessment for Sustainable Development	4
CA4737	Fire Science and Modeling	3	SEE4997	Final Year Project	3
SEE4003	Energy and Environmental Engineering Laboratory	3	Major Electives x 2		3
SEE4112	Sustainable Engineering Systems: Modelling and Analysis	3			3
SEE4997	Final Year Project	3			
Total: 18			Total: 16		

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