ESE-2021-4YR

CITY UNIVERSITY OF HONG KONG School of Energy and Environment

<u>Bachelor of Engineering in Energy Science and Engineering</u> 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			į		
Semester A		<u>CUs</u>	Semester B		<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	<u> </u>
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		<u>CUs</u>	Semester B		<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			Ī		
Semester A		<u>CUs</u>	Semester B		<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			i		
Semester A		<u>CUs</u>	Semester B		<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 Elect	ives x 2	3
Major Elective	es 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		<u>CUs</u>	Semester B		<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	3	MA1301	Enhanced Calculus and Linear Algebra II	3
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		<u>CUs</u>	Semester B		<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			•		
Semester A		<u>CUs</u>	Semester B		<u>CUs</u>
CA3712	Electrical Services	3	SEE3001	Energy and Environmental Policy	3
G + 2522		3	SEE3003	Climate Change and Adaptation Strategies	
CA3732	Fire Engineering and Piped Services	3	3EE3003	Chinate Change and Adaptation Strategies	3
	Fire Engineering and Piped Services Energy and Environmental Economics	3	SEE3104	Sustainable and Renewable Energy	3 3
SEE3002					
CA3732 SEE3002 SEE3101 SEE3102	Energy and Environmental Economics	3	SEE3104	Sustainable and Renewable Energy	3
SEE3002 SEE3101	Energy and Environmental Economics Engineering Thermofluids II	3 4	SEE3104 SEE4001	Sustainable and Renewable Energy Engineers in Society Waste and Wastewater Treatment Engineering	3
SEE3002 SEE3101 SEE3102	Energy and Environmental Economics Engineering Thermofluids II Power Plant Engineering	3 4 3	SEE3104 SEE4001 SEE4217	Sustainable and Renewable Energy Engineers in Society Waste and Wastewater Treatment Engineering	3 1 3
SEE3002 SEE3101 SEE3102	Energy and Environmental Economics Engineering Thermofluids II Power Plant Engineering	3 4 3	SEE3104 SEE4001 SEE4217	Sustainable and Renewable Energy Engineers in Society Waste and Wastewater Treatment Engineering	3 1 3 3
SEE3002 SEE3101 SEE3102	Energy and Environmental Economics Engineering Thermofluids II Power Plant Engineering	3 4 3 3	SEE3104 SEE4001 SEE4217	Sustainable and Renewable Energy Engineers in Society Waste and Wastewater Treatment Engineering	3 1 3 3 3
SEE3101 SEE3102 SEE3103	Energy and Environmental Economics Engineering Thermofluids II Power Plant Engineering	3 4 3 3	SEE3104 SEE4001 SEE4217	Sustainable and Renewable Energy Engineers in Society Waste and Wastewater Treatment Engineering	3 1 3 3 3
SEE3002 SEE3101 SEE3102 SEE3103 YEAR 4 Semester A	Energy and Environmental Economics Engineering Thermofluids II Power Plant Engineering	3 4 3 3 Total: 19	SEE3104 SEE4001 SEE4217 Major Electi	Sustainable and Renewable Energy Engineers in Society Waste and Wastewater Treatment Engineering	3 1 3 3 3 Total: 19
SEE3002 SEE3101 SEE3102 SEE3103 YEAR 4 Semester A ADSE4024	Energy and Environmental Economics Engineering Thermofluids II Power Plant Engineering Energy Efficiency for Buildings	3 4 3 3 Total: 19	SEE3104 SEE4001 SEE4217 Major Electi	Sustainable and Renewable Energy Engineers in Society Waste and Wastewater Treatment Engineering ives x 2	3 1 3 3 3 Total: 19
SEE3002 SEE3101 SEE3102 SEE3103 YEAR 4 Semester A ADSE4024 CA3722	Energy and Environmental Economics Engineering Thermofluids II Power Plant Engineering Energy Efficiency for Buildings Project Management	3 4 3 3 Total: 19 CUs 3	SEE3104 SEE4001 SEE4217 Major Electi Semester B CA4718	Sustainable and Renewable Energy Engineers in Society Waste and Wastewater Treatment Engineering ives x 2 Power Electronics and Smart Lighting Controls	3 1 3 3 3 Total: 19 <u>CUs</u> 3
SEE3002 SEE3101 SEE3102 SEE3103 YEAR 4 Semester A ADSE4024 CA3722 CA4737	Energy and Environmental Economics Engineering Thermofluids II Power Plant Engineering Energy Efficiency for Buildings Project Management HVAC Engineering	3 4 3 3 Total: 19 CUs 3 3	SEE3104 SEE4001 SEE4217 Major Electi Semester B CA4718 SEE4004	Sustainable and Renewable Energy Engineers in Society Waste and Wastewater Treatment Engineering Eves x 2 Power Electronics and Smart Lighting Controls Environmental Impact Assessment for Sustainable Development Final Year Project	3 1 3 3 3 Total: 19 CUs 3 4
SEE3002 SEE3101 SEE3102 SEE3103 YEAR 4	Energy and Environmental Economics Engineering Thermofluids II Power Plant Engineering Energy Efficiency for Buildings Project Management HVAC Engineering Fire Science and Modeling	3 4 3 3 3 Total: 19 CUs 3 3 3	SEE3104 SEE4001 SEE4217 Major Electi Semester B CA4718 SEE4004 SEE4997	Sustainable and Renewable Energy Engineers in Society Waste and Wastewater Treatment Engineering Eves x 2 Power Electronics and Smart Lighting Controls Environmental Impact Assessment for Sustainable Development Final Year Project	3 1 3 3 3 Total: 19 CUs 3 4 3
SEE3002 SEE3101 SEE3102 SEE3103 YEAR 4 Semester A ADSE4024 CA3722 CA4737 SEE4003	Energy and Environmental Economics Engineering Thermofluids II Power Plant Engineering Energy Efficiency for Buildings Project Management HVAC Engineering Fire Science and Modeling Energy and Environmental Engineering Laboratory	3 4 3 3 Total: 19 CUs 3 3 3 3 3	SEE3104 SEE4001 SEE4217 Major Electi Semester B CA4718 SEE4004 SEE4997	Sustainable and Renewable Energy Engineers in Society Waste and Wastewater Treatment Engineering Eves x 2 Power Electronics and Smart Lighting Controls Environmental Impact Assessment for Sustainable Development Final Year Project	3 1 3 3 3 Total: 19 CUs 3 4 3 3

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