ESE-2020-4YR

CITY UNIVERSITY OF HONG KONG
School of Energy and Environment

Bachelor of Engineering in Energy Science and Engineering
Recommended Study Plan (for 2020 cohort with normative 4-year degree)

List of 3 School-specified courses:
(1) MNE2016 Engineering Graphics
(2) SEE1003 Introduction to Sustainable Energy and Environmental Engineering
(3) SEE3002 Energy and Environmental Economics

YEAR 1

Semester A		CUs	Semester B		CUs
MA1200 / MA1300	Calculus and Basic Linear Algebra I / Enhanced Calculus and Linear Algebra I	3	MA1201 / MA1301	Calculus and Basic Linear Algebra II / 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		CUs	Semester B		CUs
MNE2016	Engineering Graphics	3	MA2181	Mathematical Methods for Engineering	3
SEE2001	Electromagnetic Principles for Energy Engineers	3	SEE2101	Engineering Thermofluids I	3
SEE2002	Chemical Sciences for Energy and Environmental Engineers	4	SEE2201	Fundamentals of Environmental Engineering	3
SEE2003	Introduction to Energy and Environmental Data Analysis	3	GE Course (Distributional Requirements)		3
GE1501	Chinese Civilisation - History and Philosophy	3			
		Total: **16**			Total: **12**

YEAR 3

Semester A		CUs	Semester B		CUs
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

Semester A		CUs	Semester B		CUs
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.

Last modified: 31 January 2023

ESE-2020-4YR-BSS

CITY UNIVERSITY OF HONG KONG
School of Energy and Environment
Bachelor of Engineering in Energy Science and Engineering
Recommended Study Plan (for 2020 cohort with normative 4-year degree taking BSS discipline)

List of 3 School-specified courses:
(1) MNE2016 Engineering Graphics
(2) SEE1003 Introduction to Sustainable Energy and Environmental Engineering
(3) SEE3002 Energy and Environmental Economics

YEAR 1

Semester A		CUs	Semester B		CUs
MA1200 / MA1300	Calculus and Basic Linear Algebra I / Enhanced Calculus and Linear Algebra I	3	MA1201 / MA1301	Calculus and Basic Linear Algebra II / 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		CUs	Semester B		CUs
MNE2016	Engineering Graphics	3	MA2181	Mathematical Methods for Engineering	3
SEE2001	Electromagnetic Principles for Energy Engineers	3	SEE2101	Engineering Thermofluids I	3
SEE2002	Chemical Sciences for Energy and Environmental Engineers	4	SEE2201	Fundamentals of Environmental Engineering	3
SEE2003	Introduction to Energy and Environmental Data Analysis	3	GE Course (Distributional Requirements)		3
GE1501	Chinese Civilisation - History and Philosophy	3			
		Total: **16**			Total: **12**

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 Modelling	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**

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.

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