

Program Curriculum of B.Sc. (Environmental Science and Technology)

Operated by Faculty of Environment at Bang Khan and Kamphaeng Seng Campuses

with total credits of 135 credits

Course's structure

1) General Education Section	at least	30	credits
- Wellness Group	at least	6	credits
- Entrepreneurship Group	at least	3	credits
- Language and Communication Group	at least	13	credits
- Thai Citizen and Global Citizen Group	at least	5	credits
- Aesthetics Group	at least	3	credits
2) Specific Course Section	at least	99	credits
2.1) Core courses		40	credits
2.1.1) Basic courses in Sciences and Mathematics		25	credits
2.1.2) Specific courses in Sciences		15	credits
2.2) Specific Courses Required		47	credits
2.3) Specific Elective Courses	at least	12	credits
3) Free Elective Course	at least	6	credits
4) Internship	at least	150	hours

Program's course information

1) General Education Section	at least	30	credits
1.1) Wellness Group	at least	6	credits
01175xxx	Physical Education Activities		1(0-2-1)
	and select to study at least 2 more credits from the list of course in the Wellness Group		
1.2) Entrepreneurship Group	at least	3	credits
	Select courses from the list of course in the Entrepreneurship Group		
1.3) Language and Communication Group		13	credits
01355xxx	English		9(- -)
	Thai language		3(- -)
	Informatics/Computer		1(- -)
1.4) Thai Citizen and Global Citizen Group	at least	5	credits
01999111	Knowledge of the Land		2(2-0-4)
	and select to study at least 3 more credits from the list of course in the Thai Citizen and Global Citizen Group		
1.5) Aesthetics Group	at least	3	credits
	Select courses from the list of course in the Aesthetics Group		
2) Specific Course Section	at least	99	credits
2.1) Core courses		40	credits
2.1.1) Basic Courses in Science and Mathematic		25	credits
01403113	Basic Chemistry I		3(3-0-6)
01403115	Basic Chemistry II		3(3-0-6)
01403118	Basic Chemistry Laboratory		1(0-3-2)
01417111	Calculus I		3(3-0-6)
01417112	Calculus II		3(3-0-6)
01419211	General Microbiology		3(3-0-6)
01419214	Laboratory in Fundamental Microbiology		1(0-3-2)
01420113	Laboratory in Physics I		1(0-3-2)

01420114	Laboratory in Physics II	1(0-3-2)
01420117	Basic Physics I	2(2-0-4)
01420118	Basic Physics II	2(2-0-4)
01424111	Principles of Biology	3(3-0-6)
01424112	Laboratory in Biology	1(0-3-2)

2.1.2 Specific Courses in Sciences 15 credits

01402311	Biochemistry I	2(2-0-4)
01402312	Laboratory in Biochemistry I	1(0-3-2)
01403222	Laboratory in Organic Chemistry	1(0-3-2)
01403227	Basic Organic Chemistry	4(4-0-8)
01403231	Chemical Quantitative Analysis	2(2-0-4)
01403232	Laboratory in Chemical Quantitative Analysis	2(0-6-3)
01422111	Principles of Statistics	3(3-0-6)

2.2) Specific Courses Required

1) For the Major of Environmental Science and Technology 47 credits

(1) Basic Courses in Environment 9 credits

01651311	Environmental Sampling Techniques and Analysis	3(1-6-5)
01671211	Natural Environment	3(3-0-6)
01671212	Principles of Environmental Science	3(3-0-6)

(2) Environmental Technology Group 18 credits

-Environmental Pollution and Control 12 credits

01651362	Wastewater and Water Pollution Management	3(2-3-6)
0651363	Air Pollution	3(2-3-6)
01651361	Introduction to Solid Waste	3(2-3-6)
01651461	Hazardous Material and Waste Management	3(3-0-6)
	- Environmental Technology	6 credits
01651361	Soil Contamination and Remediation	3(2-3-6)
01651465	Wastewater Treatment Technology	3(2-3-6)

01651464	Solid Waste Treatment Technology and Management	3(3-0-6)
01651465	Noise Pollution and Vibration	3(3-0-6)
01651466	Biodegradation and Bioremediation	3(3-0-6)
01651467	Principles of Environmental Remediation	3(3-0-6)
(3) in Environmental Management Group		
01651314	Urban Environment and Management	3(3-0-6)
01651332	Geospatial Analysis for Pollution Management	3(3-0-6)
01651432	Environment Management Standard	3(3-0-6)
01651433	Environmental Labels for Green Marketing and Business	3(3-0-6)
01651434	Corporate Social and Environmental Responsibility for Sustainable Development	3(3-0-6)
01651435	Environmental Database Management	3(3-0-6)
01651436	Modeling in Environmental Science	3(3-0-6)
01651437	Workplace Safety and Hygiene	3(3-0-6)
01651438	Circular Economy for Sustainable Business	3(3-0-6)
01661353	Health and Social Environmental Impact Assessment	3(3-0-6)
(4) Research and Ethics Group		
01651496	Selected Topics in Environmental Science and Technology	3(3-0-6)
01651498	Special Problems	1-3

3) Free elective course **at least** **6 credits**

4) Internship **at least** **150 hours**