

BNU-HKBU
UNITED INTERNATIONAL COLLEGE

Faculty of Science and Technology
Minor Programme in Environmental
Sustainability and Management

2022-2023

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1. General Information

1.1. Programme Title

Minor Programme in Environmental Sustainability and Management
环境可持续性与管理副修

1.2. Academic Unit Involved in the Delivery of the Programme

The Minor Programme is to be offered by the Environmental Science (ENVS) Programme and administered under the Faculty of Science and Technology with supporting from the Globalisation and Development (GAD) Programme of Faculty of Humanities and Social Sciences.

1.3. Philosophy/Rationale of the Minor Programme

Sustainability of environment and resource utilisation are the hot and critical issues with global consensus. These issues not only become the strategic long-term goals of many businesses and nations, but also closely links to the wellbeing to all humans. To address the necessity and importance of sustainable environment and resource utilisation to the society, many nations including China have formulated environmental-related polices and laws which are applied to the daily activities and/or operations of all the legal entities. Hence, an organisation (including all kinds of business), if it is planned for growing beyond the limits and achieving long-term success, has to fully integrate the knowledge and skills of environmental science and management into the daily operation and organization culture.

The knowledge and skills of environmental sustainability and management can be applied to many professions and industries, such as accounting, administration and business management, culture management, economic development, entrepreneurship and innovation, financial planning, governmental relations, human resource management, market development, media and communication, public and investor relations, and various kinds of manufacturing (e.g. food production) etc., for achieving sustainable development of the society; for understanding how government policy-making impacts and shapes sustainability outcomes. On the other hand, people who has the knowledge of many science subjects such as applied mathematics, computer science and programing, data and information science, statistics etc. could further enhance their competitiveness or enhance their opportunities in personal development if they could have an understand on environmental and resource sustainability management. The annual reports of many nations and listed companies are the solid evidences revealing the great demands and development potential of environmental sustainability and management.

1.4. Programme Aims, Objectives and Programme Intended Learning Outcomes.

The general aim of the Minor Programme is to provide students with foundation knowledge in sustainable environmental and resource management, so as to prepare them to be competitive and interdisciplinary persons by applying those concepts and skills in all positions at various industries. Specifically, the programme objectives are to provide students with:

- (1) the general concepts of sustainable development as well as comprehensive review of causes and consequences of environmental and resource problems of human society in the past, present, and future;

- (2) the principles and practices of management skills and technology to reduce environmental impacts and achieve sustainable resource utilisation in various industries and business; and
- (3) interdisciplinary perspectives through the study of specific topics and cases in environmental sustainability and management.

Table 1 shows the Programme Intended Learning Outcomes (PILOs) of the Minor Programme in Environmental Sustainability and Management whereas Table 2 delineates the alignment of the PILOs with the Graduate Attributes (GAs) of UIC.

Table 1: Programme Intended Learning Outcomes (PILOs)

Upon completion of the Minor Programme, students should be able to:	
PILO 1	Describe the concepts, principles and practices of environmental science skills, environmental management tools as well as the rationale of sustainable resource utilization.
PILO 2	Identify the environmental problems and resource sustainability issues caused by rapid industrialization and urbanization as well as any human activities especially business activities to the nature and human societies.
PILO 3	Formulate management strategies and rational public policies to deal with the issues of complex environmental problems and sustainable resource utilization with an interdisciplinary and inquiring manner.

Table 2: Mapping of the Programme Intended Learning Outcomes (PILOs) with the Graduate Attributes (GAs)

PILOs	Graduate Attributes							No. of Gas addressed by this PILO
	Citizen-ship	Know-ledge	Learn-ing	Skills	Creati- vity	Communi- cation	Team- work	
PILO 1		X	X			X		3
PILO 2		X		X	X			3
PILO 3	X			X	X			3
No. of PILOs addressing this GA	1	2	1	2	2	1		---

1.5. Medium of Instruction

The medium of instruction for the Programme is English.

1.6. Target Students

The Minor Programme will target at all UIC students (except the students who are major in Environmental Science) in particular to the students who wants to enhance their competitiveness by integrating the knowledge of environmental management and sustainable resource management to their major subject.

1.7. Year of Implementation

The Minor Programme in Environmental Sustainability and Management has been offered from the

Academic Year of 2020-21.

2. Programme Requirements and Structure

2.1. Minor Programme Requirements

Students can claim the Minor Programme in Environmental Sustainability and Management if they can fulfil the following criteria:

- a) Complete 15 units in accordance with the stipulated programme structure; and
- b) Attain a minimum cumulative GPA of 2.0 for all the courses.

2.2. Programme Structure

Students of the Minor Programme in Environmental Sustainability and Management are required to complete one Required course and four Elective courses as stipulated in the tables 3, in which at least one course should be at level 3 or above. Students need to select four elective courses of which 3 or 4 courses from the sub-categories A and or 0 or 1 course from sub-categories B, but no more than one course from sub-category B (note: select elective course from sub-category B is not a compulsory).

Table 3: Curriculum Structure of the Minor Programme in Environmental Sustainability and Management

Category	Code	Title	Units	Level	PILO			Pre-requisite(s)
					1	2	3	
Required Course (3 units)	ENV1043/ ENV2003	Introduction to Environmental Science	3	1	X	X		Nil
Elective Courses in sub-category A (9 or 12 units)	BIOL1003	Introduction to World Ecological Problems and Man	3	1		X	X	Nil
	BIOL1013	Biodiversity and the Extinction Crisis	3	1	X	X		Nil
	BIOL2023	Conservation Ecology	3	2	X	X		Nil
	BIOL2083	The Ecology and Bioconservation in China	3	2	X		X	Nil
	ENV1003	Climate Change	3	1	X	X		Nil
	ENV1013	Introduction to Eco-Cities	3	1		X	X	Nil
	ENV3003	Resources and the Environment	3	3		X	X	Nil
	ENV3013	Sustainable Environmental Management	3	3		X	X	Nil
	ENV3073	Introduction to Geographic Information Systems for Environmental Management	3	3	X	X		Nil

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Category	Code	Title	Units	Level	PILO			Pre-requisite(s)
					1	2	3	
	ENV3193	Carbon Technology and Renewable Energy	3	3	X	X		Nil
	ENV4003	Green Business Management	3	4		X	X	Nil
	ENV4013	Integrated Solid Waste Management	3	4		X	X	ENV1043 or ENV2003
	ENV4043	Selected Topics in Environmental Science	3	4		X	X	ENV1043 or ENV2003
Elective Courses in sub-category B (0 or 3 units)	POLS3203	Introduction to Sustainable Development [#]	3	3		X	X	Nil
	POLS3263	Global Environmental Governance [#]	3	3		X	X	Nil

[#] The courses offered by Globalisation and Development (GAD) Programme of FHSS. For students major in GAD, who have taken (or have planned to take) "Introduction to Sustainable Development" and "Global Environmental Governance" as Major Required course for their major programme, could not claim these courses as Minor Elective.