

Curriculum map for 2023 freshmen

Grade	Freshmen		Sophomore		Junior		Senior	
Semester	2023 fall (112-I)	2024 spring (112-II)	2024 fall (113-I)	2025 spring (113-II)	2025 fall (114-I)	2026 spring (114-II)	2026 fall (115-I)	2027 spring (115-II)
Compulsory courses 62 credits	Environmental science/ 環境科學(2)	Natural science II: Chemistry/ 自然科學 II：化學(2)	Scientific writing/ 科學寫作(2)	Exploring scientific issues: methods and practices/ 科學議題探討(3)	Seminars on sustainable development III/ 永續發展專題討論 III(2)	Special topics / 專題實作(3)	Roots & Shoots Internship I/ 根與芽行動實習 I(9)	
	Communication and understanding of environmental issues/ 環境議題-簡報與溝通技巧(2)	Introduction to social science/ 社會科學概論(2)	Seminars on sustainable development II/ 永續發展專題討論 II(2)	Environmental education material and methods/ 環境教育教材教法(2)	Project Design and Evaluation/ 方案設計與評估(2)			
	Natural science I: Biology/ 自然科學 I：生物學(2)	Introduction to computer/ 計算機概論(2)	Environmental education/ 環境教育(2)	Natural science III: Physics/ 自然科學 III：物理(2)				
	Sustainable development for the environment/ 環境永續發展(3)	Experiential learning II/ 校園永續體驗學習 II(3)	Environmental ethics/ 環境倫理(2)	Urban planning and sustainable development/ 都市計畫與永續發展(2)				
	Experiential learning I/ 校園永續體驗學習 I(3)			Urban planning and sustainable development practice/ 都市計畫與永續發展實務(2)				
	Seminars on sustainable development I/ 永續發展專題討論 I(2)			Green Economy/ 綠色經濟(2)				
	total credits 14	total credits 9	total credits 8	total credits 13	total credits 4	total credits 3	total credits 9	total credits 0
Watershed Management		Introduction to watershed management/	Environment sampling and analysis/	Water and wastewater treatment and reuse/	Environmental toxicology/ 環境毒物學(2)	Environmental Impact Assessment/ 環境影響評估(2)		

Grade	Freshmen		Sophomore		Junior		Senior	
Semester	2023 fall (112-I)	2024 spring (112-II)	2024 fall (113-I)	2025 spring (113-II)	2025 fall (114-I)	2026 spring (114-II)	2026 fall (115-I)	2027 spring (115-II)
		流域環境管理概論(2) Watershed management practice/ 流域環境管理實務(2) Introduction to geoscience and earth history/ 地球科學概論(2) Applied ecology/ 應用生態學(2) Applied ecology practice/ 應用生態學實務(2)	環境採樣與分析(2) Site planning and design/ 場域規劃與設計(2) Site planning and design practice/ 場域規劃與設計實務(2) Conservation biology/ 保育生物學(2) Conservation biology practice/ 保育生物學實務(2)	水與廢水處理及再利用(2) Industrial pollution/ 工業污染(2)		Recycling and waste management/ 資源回收與廢棄物管理(2) Environmental remediation/ 環境污染整治(2)		
	total credits 0	total credits 10	total credits 10	total credits 4	total credits 2	total credits 6	total credits 0	total credits 0
Climate Change and Adaptation		Introduction to watershed management/ 流域環境管理概論(2) Watershed management practice/ 流域環境管理實務(2)	Environment sampling and analysis/ 環境採樣與分析(2) Introduction to Meteorology and climatology/ 天氣與氣候學概論(2) Climatological practices 氣候學實務(2) Meteorological data analysis, forecasting and	Mitigation and adaptation to climate change/ 氣候變遷減緩及調適(2) Mitigation and adaptation to climate change practice / 氣候變遷減緩及調適實務(2) Coastal areas, hazards, and society/ 海岸地區之脆弱與社會議題(2) Oceanography and climate change/	Climate change: global challenges and local responses/ 氣候變遷:全球挑戰與在地因應(2) Climate change and public health/ 氣候變遷及公共健康(2) Climate change and health: From theory to practice/ 氣候變遷與健康:從理論到實務(2)	Geographic information system (GIS)/ 地理資訊系統(2)		Climate change resilience in practice/ 氣候變遷脆弱度調查實務(2)

Grade	Freshmen		Sophomore		Junior		Senior	
Semester	2023 fall (112-I)	2024 spring (112-II)	2024 fall (113-I)	2025 spring (113-II)	2025 fall (114-I)	2026 spring (114-II)	2026 fall (115-I)	2027 spring (115-II)
			practice/ 氣候資料分析、 預測及實務(2)	海洋學與氣候變 遷(2) Affordable and Clean Energy/ 可負擔之清潔能 源(2)				
	total credits 0	total credits 4	total credits 8	total credits 10	total credits 6	total credits 2	total credits 0	total credits 2
Community Development		Sustainable landscape and cooperation construction/ 永續地景與協力 營造(2) Sustainable landscape and cooperation construction practice/ 永續地景與協力 營造實務(2) Globalization and humanistic care/ 全球化與人文關 懷(2)	Site planning and design/ 場域規劃與設計 (2) Site planning and design practice/ 場域規劃與設計 實務(2) Becoming a changemaker: Introduction to social innovation/ 成為創變客：談 社會革新概論(2)	Sociology of food and agriculture/ 食農社會學(2) Sociology of food and agriculture practice/ 食農社會學實務 (2) Indigenous economic development strategy/ 原住民經濟發展 策略(2) Coastal areas, hazards, and society/ 海岸地區之脆弱 與社會議題(2)	Introduction to Community Planning/ 社區規劃導論(2)	Community Planning in practice/社區規劃 實務(2) Recycling and waste management/ 資源回收與廢棄 物管理(2) Human rights and sustainable development/ 人權與永續發展 (2)		Climate change resilience in practice/ 氣候變遷脆弱度 調查實務(2) Ecotourism: challenges and opportunities 生態旅遊之挑戰 與機會(2)
	total credits 0	total credits 6	total credits 6	total credits 8	total credits 2	total credits 6	total credits 0	total credits 4
		Environmental Law and Sustainability/ 環境法與可持續 性(2)	Environmental Leadership and Consciousness Development/ 環境領導和意識 發展(2)		Sustainability marketing/ 市場永續性(2)	Cultural and natural heritage conservation/ 文化與自然資產 保存(2)		Green Building Principles and Practices/ 綠建築原則與實 務(2)

Grade	Freshmen		Sophomore		Junior		Senior	
Semester	2023 fall (112-I)	2024 spring (112-II)	2024 fall (113-I)	2025 spring (113-II)	2025 fall (114-I)	2026 spring (114-II)	2026 fall (115-I)	2027 spring (115-II)
IPSD Elective courses		Biostatistics/ 生物統計學(2)	Computer aid design/ 電腦輔助設計(2)		Applied limnology & wetland management/ 應用湖泊學與濕地管理(2)	Plants and Landscape/ 植栽與地景(2)		
		Essential mathematical skills/ 基礎數學(2)				Environmental Security and Sustaining Peace/ 環境安全與和平(2)		
						Behavior-Based Safety and Life/ 行為安全與生活(2)		
	Practice and Education for the Environment I / 環境教育國際實驗微學分 I (1) Practice and Education for the Environment II / 環境教育國際實驗微學分 II (1) Roots & Shoots Deep Bowl credit / 根與芽深碗學分 (2) Basic Roots & Shoots Deep Bowl credit / 根與芽初階深碗課程 (1) Interdisciplinary Microcredit Course I / 跨領域微學分 I (1) Interdisciplinary Microcredit Course II / 跨領域微學分 II (1) Interdisciplinary Microcredit Course III / 跨領域微學分 III (1)							

Compulsory credits

60

Credits from 1 modules

16 (the overlapped credits between 1 modules must be deducted)

IPSD elective credits

37~50 (should include the deducted overlapped credits from modules)

Non-IPSD credits

15 (A minimum of 2 credits and a maximum of 15 credits are required for electives from other departments)

Graduate credits

128