113學年度水資源及環境工程學系課程規畫表(113學年度人學新生適用) Department of Water Resources and Environmental Engineering Curriculum Planning Chart for 113 academic year (2024-2025) incoming freshmen

科目名稱 /subjects				學年	第2學年		第3學年		第4學年		備註 Remarks	
		學分 credits			上	nd academic year 上 下		emic year 下	F L	emic year 下		7 10.22
			1st semester	2nd semester	1st semester	2nd semester	1st semester	2nd semester	1st semester	2nd semester		
	外國語文學門(Q) Foreign Languagae (Field Q)	8	2	2	2	2					大1英文必修、大2外文自由进 Required English in freshman year; elective foreign language sophomore year.	
基本知能課程12學分 12 credits for general education curriculum	中國語文能力表達 ABILITY OF EXPRESSING IN SPOKEN AND WRITTEN CHINESE	2									語文表達 ABILITY OF EXPRESSING	
	大學學習 LEARNING IN UNIVERSITY	1	1								學習與發展 Learning A (Field N)	廷學門(N) nd Development
	社團學習與實作(K) LEARNING AND PRACTICE OF CLUBS	1		1							Extracuricu	活動與團隊發展 curicular Activities and ı-Ship Development (Field
通識核心課程12學分 12 credits for General Education Curriculum	AI與程式語言 AI and Programmiing Language	1	1									· · · · · ·
	探索永續 Exploring Sustainabiltiy	1	1									
	文學經典學門(L) Classics In World Literature (Field L)	2									人文領域 至少2學分 At least 2 credits in	在學門至多修習2 科4學分 Students may take up to 2 courses (4 credits) in each academic field.
	歷史與文化學門(P) History And Culture (Field P)	2										
	哲學與宗教學門(V) Philosophy and Religion (Field V)	2									the Humanitie	
	藝術欣賞與創作學門(M) Arts Appreciation and Invention (Field M)	2									s field.	
	全球視野學門(T) Global Outlook (Field T)	2									社會領域 至少2學分 At least 2 credits in the Social Sciences field.	
	未來學學門® Futures Studies (Field R)	2										
	社會分析學門(W) Social Analysis (Field W) 公民社會及參與學門(S)	2										
	Civil Society And Participation (Field S)	2									neid.	
	資訊教育學門(O) Information & Computer Education (Field O)	2								科學領	科學領域	
	*商管學院學生請另詢所屬學系 Students of the College of Business Management, please consult your respective departments.										至少2學分 At least 2 credits in the Science field.	
	全球科技革命學門(Z) Global Technology Revolution (Field Z)	2										
	自然科學學門(U) Natural Sciences (Field U)	2										
	體育 Physical Education	4	1	1	1	1					不計入畢業 Not counted credits.	美學分 d toward graduation
其他課程 other subjects	全民國防教育軍事訓練(一)-國 防科技 ALL-OUT DEFENSE EDUCATION MILITARY TRAINING(I)- NATIONAL DEFENSE TECHNOLOGY	0									1年級;單學期0學分 First-year; zero credits in a sing semester.	
校園與社區服務學習 CAMPUS AND COMMUNITY SERVICE-LEARNING		2	1	1							計入畢業等 Counted to credits.	型分 ward graduation
■本系必修課程:58學分 Required Courses:58 credits	普通物理 GENERAL PHYSICS	2	2									
	微積分 CALCULUS	3	3									
	環境化學 ENVIRONMENTAL CHEMISTRY	3	3									
	水資源及環境工程概論 INTRORODUCTION TO WATER RESOURCES AND ENVIRONMENTAL ENGINEERING	2	2									
	基礎工程數學 BASIC ENGINEERING MATHEMATICS	3		3								
	水文學 HYDROLOGY	3		3								
	應用力學 APPLIED MECHANICS	3		3								

113學年度水資源及環境工程學系課程規畫表(113學年度人學新生適用) Department of Water Resources and Environmental Engineering Curriculum Planning Chart for 113 academic year (2024-2025) incoming freshmen

科目名稱 /subjects			第1學年		第2學年		第3學年		第4學年		備註 Remarks	
		學分 credits	1st academic year		2nd academic year		3rd academic year		4th academic year			
			上 1st	下 2nd	上 1st	下 2nd	上 1st	下 2nd	上 1st	下 2nd		
	<u> </u>		semester	semester	semester	semester	semester	semester	semester	semester		
	水質實驗 WATER QUALITY ANALYSIS	1		1							實驗課程 Laboratory course	
	工程數學	6			3	3					,	
	ENGINEERING MATHEMATICS	0			3	3						
	流體力學(一) FLUID MECHANICS(I)	3			3							
	工程統計 ENGINEERING STATISTICS	3			3							
	流體力學(二)	3				3						
	FLUID MECHANICS(II) 工程圖學	2				2						
	ENGINEERING GRAPHICS	2				2						
	給水工程 WATER SUPPLY ENGINEERING	3				3						
	明渠水力學 HYDRAULICS AND OPEN	3					3					
	CHANNELS											
	污水工程 WASTEWATER ENGINEERING	3					3					
	土壤力學 SOIL MECHANICS	3					3					
	流體力學實驗										實驗課程	<u> </u>
	FLUID MECHANICS LAB.	1					1				Laboratory	course
	數值方法 NUMERICAL METHOD	3						3				
	水資源工程 WATER-RESOURCES	3						3				
	ENGINEERING	3						3				
	專題實作 PRACTICE OF PROJECTS	2						2				
本系系選修課程:至少須修	工程經濟學	2	2									
24學分以上。 Department Elective Courses: A	ENGINEERING ECONOMICS 水環境生態學											
minimum of 24 credits must be completed.	WATERSHED ECOLOGY AND THE ENVIRONMENT	2	2									
	工程材料學	2	2									
附註: 系選修課程之開設科目,將	ENGINEERING MATERIALS 程式設計	2		2								
依據本校規定可開課學分數 開課。不是每個科目都會開	PROGRAM DESIGN 環境微生物學	2		2								
課。	ENVIRONMENTAL	3		3								
	MICROBIOLOGY 環境永續概論											
Note: The elective courses offered by	INTRODUCTION TO ENVIRONMENTAL	2		2								
the department will be arranged	SUSTAINABILITY											
based on the number of credits permitted under the university's	材料力學 STRENGTH OF MATERIALS	3			3							
regulations. Not all listed courses will necessarily be	水文測量與實習	2			2							
offered.	PRACTICE & SURVEY OF HYDROLOGY	2			2							
	環境土壤學 ENVIRONMENTAL SOIL	2			2							
	SCIENCE 環境毒物學											
	環現毎初学 ENVIRONMENTAL TOXICOLOGY	2			2							
	環境污染物分析(一) ENVIRONMENTAL ANALYSIS(I)	1			1						實驗課程 Laboratory。	course
	中等水文學	3				3					oratory (
	INTERMEDIATE HYDROLOGY 結構學											
	STRUCTURAL THEORY	2				2						
	環境生物技術概論 INTRODUCTION TO	2				_						
	ENVIRONMENTAL BIOTECHNOLOGY	2				2						
	循環經濟	2				2						
	CIRCULAR ECONOMY 水利工程應用軟體	_										
	HYDRAULIC MODELING SOFTWARES	2					2					
	鋼筋混凝土	3					3					
	REINFORCED CONCRETE 固體廢棄物											
	SOLID WASTES TREATMENT	3					3					
	環境儀器分析 ENVIRONMENTAL	2					2					
l	INSTRUMENTAL ANALYSIS											

113學年度水資源及環境工程學系課程規畫表(113學年度人學新生適用) Department of Water Resources and Environmental Engineering Curriculum Planning Chart for 113 academic year (2024-2025) incoming freshmen

		第1學年		第2學年		第3學年		第4學年			
科目名稱 /subjects		1st academic year								備註 Remarks	
		上 1st	下 2nd	上 1st	下 2nd	上 1st	下 2nd	上 1st	下 2nd		
環境污染物分析(二) ENVIRONMENTAL ANAL	YSIS(II)	semester	semester	semester	semester	semester 1	semester	semester	semester	實驗課程 Laboratory	course
水資源規劃 WATER RESOURCES PLA	NNING 3						3				
基礎工程 FOUNDATION ENGINEER	3						3				
防洪工程 FLOOD ENGINEERING	2						2				
渠道水力學實驗 OPEN CHANNEL HYDRAI EXPERIMENTS□	JLICS 1						1			實驗課程 Laboratory	course
空氣污染控制 AIR POLLUTION CONTRO	oL 3						3				
有害廢棄物 HAZARDOUS WASTE	2						2				
資源回收再利用 RESOURCE RECOVERY A REUSE	ND 2						2				
灌溉及排水工程 IRRIGATION AND DRAIN ENGINEERING	AGE 2							2			
環境規劃與管理 ENVIRONMENTAL PLAN AND MANAGEMENT	NING 3							3			
環工專業實務設計 PRACTICAL DESIGN IN ENVIRONMENTAL ENGINEERING FIELD	2							2			
污水工程設計 WASTEWATER ENGINEE DESIGN	RING 2							2			
地理資訊在工程上之應用 GIS AND ITS ENGINEERIN APPLICATION□	NG 2							2			
地下水及土壤污染 GROUNDWATER AND SO POLLUTION	IL 3							3			
企業實習 PRACTICUM IN EDUCATI TECHNOLOGY	ONAL 2							2			
海岸工程 COASTAL ENGINEERING	3								3		
水土保持工程 SOIL AND WATER RESERVATION ENGINEE	2								2		
企業永續管理 CORPORATE SUSTAINAB MANAGEMENT	LE 2								2		
噪音及振動 NOISE AND VIBRATION CONTROL	2								2		

(1)必修科目總學分數:84學分(含通識教育課程26學分) (1)Total Credits for Required Courses: 84 credits (including 26 credits in General Education courses)

(2)最低應修本系選修科目總學分數:24學分 (2)Minimum Credits Required for Departmental Elective Courses: 24 credits

(3)其他選修總學分數:20學分 (3)Minimum Number of Credits Required for Other Elective Courses: 20 credits

畢業總學分數:128學分 Total Number of Credits Required for Graduation: 128 credits