

111學年度水資源及環境工程學系水資源工程組課程規畫表(111學年度入學新生適用)
 Division of Water Resources Engineering, Department of Water Resources and Environmental Engineering
 Curriculum Planning Chart for 111 academic year (2022-2023) incoming freshmen

科目名稱 /subjects	學分 credits	第1學年		第2學年		第3學年		第4學年		備註 Remarks	
		1st academic year		2nd academic year		3rd academic year		4th academic year			
		上 1st semester	下 2nd semester								
基本知能課程12學分 12 credits for general education curriculum	外國語文學門(Q) Foreign Language (Field Q)	8	2	2	2					入1英文必修、入2外文自由選 Required English in freshman year; elective foreign language in sophomore year	
	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							學習與發展學門(N) Learning And Development (Field N)	
	社團學習與實作(K) LEARNING AND PRACTICE OF CLUBS	1		1						課外活動與團隊發展 Extracurricular Activities and Team-Ship Development (Field K)	
通識核心課程14學分 14 credits for General Education Curriculum	AI與程式語言 AI and Programming Language	1	1								
	探索永續 Exploring Sustainability	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 the Humanities 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									
	藝術欣賞與創作學門(M) Arts Appreciation and Invention (Field M)	2									
	全球視野學門(T) Global Outlook (Field T)	2									
	未來學學門® Futures Studies (Field R)	2									
	社會分析學門(W) Social Analysis (Field W)	2									
	公民社會及參與學門(S) Civil Society And Participation (Field S)	2									
	資訊教育學門(O) Information & Computer Education (Field O)									每學門至多修習2科4學分 Students may take up to 2 courses (4 credits) in each academic field.	
	*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.	2									
	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									
其他課程 other subjects	體育 Physical Education	0	0	0	0	0					
	全民國防教育軍事訓練（一）、全民國防教育軍事訓練（一）/護理（一） ALL-OUT DEFENSE EDUCATION MILITARY TRAINING, ALL-OUT DEFENSE EDUCATION MILITARY TRAINING(I)/NURSING (I)	0	0	0							
校園與社區服務學習 CAMPUS AND COMMUNITY SERVICE-LEARNING		0	0	0							
■本系必修課程：76學分 Required Courses : 76 credits											
普通物理 GENERAL PHYSICS		4	2	2							
微積分 CALCULUS		6	3	3							
工程材料學 ENGINEERING MATERIALS		2	2								
環境化學 ENVIRONMENTAL CHEMISTRY		2	2								
水資源工程概論 INTRODUCTION OF WATER RESOURCES ENGINEERING		1	1								
應用力學 APPLIED MECHANICS		3		3							

工程統計 ENGINEERING STATISTICS	3		3						
程式設計 PROGRAM DESIGN	3		3						
水文學 HYDROLOGY	3		3						
工程數學 ENGINEERING MATHEMATICS	6			3	3				
流體力學(一) FLUID MECHANICS(I)	3			3					
材料力學 STRENGTH OF MATERIALS	3			3					
水文測量與實習 PRACTICE & SURVEY OF HYDROLOGY	2			2					
結構學 STRUCTURAL THEORY	3				3				
流體力學(二) FLUID MECHANICS(II)	3				3				
水環境 WATER ENVIRONMENT	2				2				
流體力學實驗 FLUID MECHANICS LAB.	1					1			實驗課程 Laboratory course
數值方法 NUMERICAL METHOD	3					3			
土壤力學 SOIL MECHANICS	3					3			
明渠水力學 HYDRAULICS AND OPEN CHANNELS	3					3			
專題實作 PRACTICE OF PROJECTS	2						2		
海岸工程 COASTAL ENGINEERING	3						3		
水資源工程(一) WATER RESOURCES ENGINEERING(I)	3						3		
渠道水力學實驗 OPEN CHANNEL HYDRAULICS EXPERIMENTS	1						1		實驗課程 Laboratory course
水資源規劃 WATER RESOURCES PLANNING	3						3		
防洪及排水工程 FLOOD CONTROL AND DRAINAGE ENGINEERING	3						3		
地理資訊在工程上之應用 GIS AND ITS ENGINEERING APPLICATION	2						2		
■本系系選修課程：至少須修10學分以上。 Department Elective Courses: A minimum of 10 credits must be completed.									
附註： 系選修課程之開設科目，將依據本校規定可開課學分數開課。不是每個科目都會開課。									
Note: The elective courses offered by the department will be arranged based on the number of credits permitted under the university's regulations. Not all listed courses will necessarily be offered.									
工程材料實驗 EXPERIMENTAL ENGINEERING MATERIALS	1		1						實驗課程 Laboratory course
水質實驗 WATER QUALITY ANALYSIS	1			1					實驗課程 Laboratory course
中等水文學 INTERMEDIATE HYDROLOGY	3				3				
工程圖學 ENGINEERING GRAPHICS	2				2				
專題實作導論 INTRODUCTION TO PRACTICE OF PROJECTS	1					1			
地下水及土壤污染 GROUNDWATER AND SOIL POLLUTION	4					4			
工程地質學 ENGINEERING GEOLOGY	2					2			
基礎工程 FOUNDATION ENGINEERING	3						3		
鋼筋混凝土 REINFORCED CONCRETE	3						3		
水利工程應用軟體 HYDRAULIC MODELING SOFTWARES	3						3		
給水工程 WATER SUPPLY ENGINEERING	3						3		這門課開設於水環系環境工程組 This course is offered by the Division of Environmental Engineering, Department of Water Resources and
水資源工程(二) WATER RESOURCES ENGINEERING(II)	3						3		
污水工程 WASTEWATER ENGINEERING	3						3		這門課開設於水環系環境工程組 This course is offered by the Division of Environmental Engineering, Department of Water Resources and

灌溉及水資源系統分析 IRRIGATION AND WATER RESOURCES SYSTEM ANALYSIS	3						3		
企業實習 PRACTICUM IN EDUCATIONAL TECHNOLOGY	1						1		
水土保持工程 SOIL AND WATER RESERVATION ENGINEERING	2						2		
水利法規 HYDRAULIC REGULATIONS	2						2		

(1)必修科目總學分數：102學分(含通識教育課程26學分)

(1)Total Credits for Required Courses: 102 credits (including 26 credits in General Education courses)

(2)最低應修本系選修科目總學分數：10學分

(2)Minimum Credits Required for Departmental Elective Courses: 10 credits

(3)其他選修總學分數：16學分

(3)Minimum Number of Credits Required for Other Elective Courses: 16 credits

畢業總學分數：128學分

Total Number of Credits Required for Graduation: 128 credits