

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	上 1st semester	下 2nd semester	上 1st semester	下 2nd semester	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 Languages (Field Q)	8	2	2	2	2					大一英文必修、大二外文自由選 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 Programmiing 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.	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.	
	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									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)	2									科學領域 至少2學分 At least 2 credits in the Science field.		
	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)	2											
	*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.												
	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									

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<div>■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.</div> <div>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.</div>	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			
	工程材料實驗 ENGINEERING MATERIALS LABORATORY	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	

■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。
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	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