

112學年度水資源及環境工程學系水資源工程組課程規畫表(112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 112 academic year (2023-2024) 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	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 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.	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		
	未來學學門® Futures Studies (Field R)	2									At least 2 credits in the Social Sciences field.		
	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)	2									科學領域 至少2學分 At least 2 credits in the Science 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.												
	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)-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 single semester.		
校園與社區服務學習 CAMPUS AND COMMUNITY SERVICE-LEARNING		0	0	0									
■本系必修課程：72學分 Required Courses：72 credits	普通物理 GENERAL PHYSICS	4	2	2									
	微積分 CALCULUS	3	3										
	水環境生態學 WATERSHED ECOLOGY AND THE ENVIRONMENT	2	2										
	環境化學 ENVIRONMENTAL CHEMISTRY	2	2										
	水資源工程概論 INTRODUCTION OF WATER RESOURCES ENGINEERING	1	1										
	基礎工程數學 BASIC ENGINEERING MATHEMATICS	2		2									

112學年度水資源及環境工程學系水資源工程組課程規畫表(112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 112 academic year (2023-2024) 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	
<p>■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.</p> <p>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。</p> <p>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.</p>	應用力學 APPLIED MECHANICS	3		3							
	工程統計 ENGINEERING STATISTICS	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						
	程式設計 PROGRAM DESIGN	3				3					
	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				
	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			
	防洪工程 FLOOD ENGINEERING	3						3			
	專題實作 PRACTICE OF PROJECTS	2						2			
	地理資訊在工程上之應用 GIS AND ITS ENGINEERING APPLICATION	2							2		
	工程材料學 ENGINEERING MATERIALS	2	2								
	工程材料實驗 ENGINEERING MATERIALS LABORATORY	1		1							
	工程經濟學 ENGINEERING ECONOMICS	2		2							
	水質實驗 WATER QUALITY ANALYSIS	1			1						實驗課程 Laboratory course
	水資源概論 INTRODUCTION TO HYDROINFORMATICS	3			3						這門課開設於人工智慧學系 This course is offered by the Department of Artificial Intelligence.
	中等水文學 INTERMEDIATE HYDROLOGY	3				3					
	工程圖學 ENGINEERING GRAPHICS	2				2					
	智慧水資源管理概論 INTRODUCTION TO SMART WATER RESOURCES MANAGEMENT	3				3					這門課開設於人工智慧學系 This course is offered by the Department of
	專題實作導論 INTRODUCTION TO PRACTICE OF PROJECTS	2					2				
	工程地質學 ENGINEERING GEOLOGY	2					2				
	地下水及土壤污染 GROUNDWATER AND SOIL POLLUTION	4					4				
基礎工程 FOUNDATION ENGINEERING	3						3				
鋼筋混凝土 REINFORCED CONCRETE	3						3				

112學年度水資源及環境工程學系水資源工程組課程規畫表(112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 112 academic year (2023-2024) incoming freshmen

科目名稱 /subjects		學分 credit s	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	
	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		
	企業實習 PRACTICUM IN EDUCATIONAL TECHNOLOGY	2							2		
	灌溉及排水工程 IRRIGATION AND DRAINAGE ENGINEERING	3							3		
	水土保持工程 SOIL AND WATER RESERVATION ENGINEERING	2							2		
	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
	水利法規 HYDRAULIC REGULATIONS	2								2	
	海岸工程 COASTAL ENGINEERING	3								3	
	水利工程應用軟體 HYDRAULIC MODELING SOFTWARES	3								3	

- (1)必修科目總學分數：98學分(含通識教育課程26學分)
(1)Total Credits for Required Courses: 98 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：20學分
(3)Minimum Number of Credits Required for Other Elective Courses: 20credits

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