

第一學年(115)					第二學年(116)					第三學年(117)									
	科目	上學期		下學期			科目	上學期		下學期			科目	上學期		下學期			
		學分	時數	學分	時數			學分	時數	學分	時數			學分	時數	學分	時數		
校必修	分類通識	2	2	2	2	校必修	分類通識	2	2	2	2	校必修	分類通識	2	2	2	2		
	體育	2	2	2	2		科技英文(三)(四)	2	2	2	2								
	應用中文(一)(二)	2	2	2	2		體育			2	2								
	科技英文(一)(二)	2	2	2	2														
	小計	8	8	8	8		小計	4	4	6	6		小計	2	2	2	2		
院必修	程式設計	2	2			院必修	智慧科技與應用	2	2			院必修							
	人工智慧概論			2	2														
	微積分(一)(二)	3	3	3	3														
	物理(一)(二)	2	2	2	2														
	工程倫理			2	2		小計	2	2	0	0		小計	0	0	0	0		
	小計	7	7	9	9														
專業必修	土壤專業概論	2	2			專業必修	應用數學	3	3			專業必修	鋼筋混凝土	3	3				
	測量與實習(一)	3	3				環境資源規劃與管理	3	3				土壤力學與實驗	3	3				
	電腦繪圖(一)			3	3		混凝土配比與實務	3	3				工程估價	3	3				
	工程材料與實驗			3	3		工程力學	3	3				基礎工程與實務			3	3		
						土木工程學	3	3			營建管理			3	3				
						工程識圖			3	3		實務專題			1	1			
						建築BIM建模			3	3									
						結構學			3	3									
						施工安全			3	3									
	小計	5	5	6	6		小計	15	15	12	12		小計	9	9	7	7		
專業選修						專業選修	測量與實習(二)	3	3			專業選修	環境影響評估	3	3				
							工程測量實務	3	3				永續發展與環境教育	3	3				
							水文學	3	3				工址調查實務	3	3				
							電腦繪圖(二)	3	3				BIM應用與管理	3	3				
							工程地質	3	3				國土計畫與城鄉規劃	3	3				
							環境工程	3	3				景觀設計與實務	3	3				
							地理資訊系統實務			3	3			營建法規	3	3			
							溫室氣體盤查			3	3			工程品質管理與實務			3	3	
							無人機空拍操作實務			3	3			工程污染防治			3	3	
							專案管理			3	3			智慧環境監測實務			3	3	
														工程災害與防治			3	3	
														工程法律			3	3	
											土地資源開發與管理			3	3				
											社區營造			3	3				

第四學年(118)					
	科目	上學期		下學期	
		學分	時數	學分	時數
校必修					
	小計	0	0	0	0
院必修					
	小計	0	0	0	0
專業必修	實務專題	1	1		
	小計	1	1	0	0
專業選修	校外實習	9	9		
	校外實習-職場銜接			9	9
	土環職能實務	2	2		
	營造工程規劃設計	3	3		
	土壤改良實務	3	3		
	工程採購與發包	3	3		
	職業安全衛生法規	3	3		
	非破壞檢測實務	3	3		
	資源再生	3	3		
	綠建築			3	3
	山坡地工程			3	3
	鋼結構工程			3	3
	交通工程			3	3
	水資源工程			3	3
水土保持工程			3	3	
橋梁工程			3	3	
下水道工程			3	3	

【科目類別】			
通識科目、共同科目	校必修	30	30
	院必修	18	18
專業科目	專業必修	55	55
	專業選修	25	25
合計		128	128

【注意事項】

1. 最低畢業學分：128 學分，含必修：96，選修25學分(本系至少13學分，其餘可跨系)。
2. 一、二、三年級每學期修課16-30學分，四年級每學期修課9-30學分。
3. 表列專業選修課程，得依實際情況進行調整。
4. 請依本校「學生基本能力與畢業門檻實施辦法」實施。
5. 校外實習課程，請依相關實施要點辦理。
6. 畢業年級相當於國內高級中等學校二年級之國外或香港、澳門同類同級學校畢業生，以同等學歷修讀本校學士學位者，最低畢業學分：140學分，可延長修業年限三年。
7. 本表建於115年4月29日

土木工程與環境資源管理
課程規劃委員會

副教授 廖淑容

土環系 主任 陳鴻輝

工程學院 院長 張合

MUST Curriculum Planning for Undergraduate Students for Academic Years 2026-2029
Department of Civil Engineering and Environmental Informatics

1 st year(2026)					2 nd year(2027)					3 rd year(2028)									
	Course	1st semester		2 nd semester			Course	1st semester		2 nd semester			Course	1st semester		2 nd semester			
		Cr.	hr.	Cr.	hr.			Cr.	hr.	Cr.	hr.			Cr.	hr.	Cr.	hr.		
MUST Core Required Courses	Classified general Education	2	2	2	2	MUST Core Required Courses	Classified general Education	2	2	2	2	MUST Core Required Courses	Classified general Education	2	2	2	2		
	Physical Education	2	2	2	2		Applied English(III)(IV)	2	2	2	2								
	Applied Chinese(I)(II)	2	2	2	2		Physical Education			2	2								
	Applied English(I)(II)	2	2	2	2														
	Subtotal	8	8	8	8		Subtotal	4	4	6	6		Subtotal	2	2	2	2		
School Professional Required Courses	Introduction to Computers and Programming	2	2			School Professional Required Courses	Smart Technology and Applications	2	2			School Professional Required Courses							
	Introduction to Artificial Intelligence			2	2														
	Calculus(II)	3	3	3	3														
	Physics(III)	2	2	2	2														
	Engineering Ethics			2	2														
	Subtotal	7	7	9	9		Subtotal	2	2	0	0		Subtotal	0	0	0	0		
compulsory courses	Introduction to Civil and Environmental Informatics	2	2			compulsory courses	Applied Mathematics	3	3			compulsory courses	Reinforced Concrete	3	3				
	Surveying and Practice(I)	3	3				Environmental Resource Planning and Management	3	3				Soil Mechanics & Lab	3	3				
	Computer Aided Drafting (I)			3	3		Concrete Mix Design	3	3				Construction Cost Estimating	3	3				
	Engineering Materials & Lab			3	3		Engineering Mechanics	3	3				Foundation Engineering & Practice			3	3		
						Civil Engineering Construction	3	3			Construction Management			3	3				
						Illustration of Engineering Drawings			3	3		Special Topics Practice			1	1			
						Practice and Concept of BIM			3	3									
						Structure Analysis			3	3									
						Construction Safety Measures			3	3									
	Subtotal	5	5	6	6		Subtotal	15	15	12	12		Subtotal	9	9	7	7		
Elective Courses						Elective Courses	Surveying and Practice(II)	3	3			Elective Courses	Environmental Impact Assessment	3	3				
							Engineering Surveying Practice	3	3				Sustainable Development and Environmental Education	3	3				
							Hydrology	3	3				Construction Site Investigation	3	3				
							Computer Aided Drafting(II)	3	3				Application and Management of BIM	3	3				
							Engineering Geology	3	3				Construction Management	3	3				
							Environmental Engineering	3	3				Special Topics Practice	3	3				
							Geographic Information System			3	3			Landscape Design & Practice	3	3			
							Greenhouse Gas (GHG) Inventory			3	3			Engineering Quality Management			3	3	
							UAV Operation Practice			3	3			Engineering Pollution Control			3	3	
							Practical project management			3	3			Planet of Intelligent Environment Learning			3	3	
											Natural Hazard Mitigation			3	3				
											Construction Law			3	3				
											Land Resource Development and Management			3	3				
											Overall Graduate Construction			3	3				

4 th year(2029)					
	Course	1st semester		2 nd semester	
		Cr.	hr.	Cr.	hr.
MUST Core Required Courses					
	Subtotal	0	0	0	0
School Professional Required Courses					
	Subtotal	0	0	0	0
compulsory courses	Special Topics Practice	1	1		
	Subtotal	1	1	0	0
Elective Courses	Off-Campus Practice Training	9	9		
	Off-Campus Practice Training-Workplace transition			9	9
	Engineering Practical Training	2	2		
	BIM Education for Construction Planning and Design	3	3		
	Engineering Planning and Design	3	3		
	Project Procurement & Contract Award	3	3		
	Occupational Safety and Health Regulations	3	3		
	Practice of Non-destructive Testing	3	3		
	Reasonable Resources	3	3		
	Water Pollution Control	3	3		
	Sloped Land Engineering	3	3		
	Steel Structure Construction	3	3		
	Transportation Engineering	3	3		
	Water Resource Engineering	3	3		
	Water and Soil Conservation Engineering	3	3		
	Bridge Engineering	3	3		
Sewer Engineering	3	3			

Cr./hr. =Credit/hour

Remarks:

1. Minimum graduation credits: 128 credits; Compulsory credits: 96credits. Elective credits: 25credits(elective credits include inter-departmental elective credits); the elective credits for majors in the department must not be lower than 3credits.
2. In the first three years, students must take 16-30 credits per semester, and 9-30 credits per semester in the 4th year.
3. Elective courses are subject to change if necessary.
4. Please implement according to the school's "Implementation Measures for Students' Basic Abilities and Graduation Thresholds".
5. Students should take off-campus internship courses, and the relevant measures are handled in accordance with the Implementation of Off-campus Internship Teaching for Students in the Department of Civil Engineering and Environmental Informatics.
6. Students having graduated from a foreign country, including Hong Kong and Macau, with the equivalent of the second year of high school study of the ROC's high school sophomore level, or with a high school equivalent degree, need to take 140 credits including compulsory credits, and at least elective credits (including inter-departmental elective credits),while elective professional course credits shall not be fewer than .The program can be extended up to 3 academic years.
7. This form created in 115/04/29

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