

日間部 110 學年度 土環系原民班中文版備註修正表

修正後	修正前
<p>注意事項：</p> <p>4.最低畢業學分：128 學分；必修學分：97 學分 選修學分：31 學分（選修學分含原住民文化課程選修 10 學分及跨系選修學分）</p>	<p>注意事項：</p> <p>4.最低畢業學分：128 學分；必修學分：98 學分 選修學分：30 學分（選修學分含原住民文化課程選修 10 學分及跨系選修學分）</p>
<p>注意事項：</p> <p>7.建構專業技職原民教育課程原住民專班學生需修滿 10 學分(有標示#符號的課程-原住民智慧與生態工法、部落遊憩資源規劃、原住民族環境防災與復健、部落工程永續觀光實務、原鄉工程實務(校外實習教學)、部落老化與終身學習、原住民工程與管理)。</p>	<p>注意事項：</p> <p>7.建構專業技職原民教育課程原住民專班學生需修滿 10 學分(有標示#符號的課程)。</p>

日間部 110 學年度 土環系原民班英文版備註修正表

修正後	修正前
Department Elective Courses-Tribal Aging and Lifelong Learning2/2	111-2 選修新增
Department Elective Courses-Aboriginal Engineering and Management2/2	113-2 選修新增
<p>Remarks:</p> <p>7. To accomplish the Indigenous Professional Courses, indigenous students require to fulfill 10 credits of Taiwanese Indigenous Culture Courses(Indigenous Intelligent and Ecological Construction、Tribal Recreation Resource Planning、Indigenous Environment Protection &Rebuild、Practice of Tribal Engineering Tourism Sustainability、Hometown Engineering Practice (off-campus practical training)、Tribal Aging and Lifelong Learning、Aboriginal Engineering and Management)</p>	<p>Remarks:</p> <p>7.To accomplish the Indigenous Professional Courses, indigenous students require to fulfill 10 credits of Taiwanese Indigenous Culture Courses .</p>

110學年度日間部 土木工程與環境資源管理系 原住民專班 四技課程規劃表

第一學年(110)					第二學年(111)					第三學年(112)							
	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	英文(一)(二)	2	2	2	2	校必修	當代原住民社會議題	2	2			校必修	原住民族文學與寫作	2	2		
	原住民族傳統藝術活動(一)(二)	1	2	1	2		原住民族文化與國際視野			2	2		民族誌與人類學			2	2
	中文閱讀與表達(一)(二)	2	2	2	2		原住民族傳統祭儀活動			2	2						
	原住民族文化概論	2	2				科技英文(一)(二)	2	2	2	2						
	原住民族政策與法規			2	2		工程倫理	1	1								
	程式設計	3	3														
	人工智慧概論			3	3												
	小計	10	11	10	11		小計	5	5	6	6		小計	2	2	2	2
院必修	邏輯數學	2	2			院必修						院必修					
	物理與實驗			3	3												
	小計	2	2	3	3			小計							小計		
通識教育					通識教育						通識教育						
	小計							小計							小計		
系專業必修	材料試驗	3	3			系專業必修	景觀設計與實務			2	2	系專業必修	結構學	3	3		
	土木工程概論	1	2				混凝土配比與實務	3	3				營建管理	3	3		
	測量與實習(一)(二)	3	3	3	3		工程力學	2	2				土壤力學與實驗	3	3		
	環境資源概論			1	2		工程識圖	3	3				工程估價			3	3
	電腦繪圖(一)			3	3		土木施工學			3	3		鋼筋混凝土			3	3
	土木材料與實驗			3	3		建築BIM建模			3	3		基礎工程與實務			3	3
	小計	7	8	10	11			小計	8	8	8		8	實務專題	1	1	1
系專業選修					系專業選修	環境工程概論	3	3			系專業選修	小計	10	10	10	10	
						營建法規	3	3				工程災害與防治	3	3			
						環境生態學	3	3				工程地質	3	3			
						水文學	2	2				安全衛生管理	3	3			
						環境資源管理			2	2		無人機空拍操作實務	3	3			
						水污染防治			3	3		BIM應用與管理	3	3			
						工程測量實務			3	3		土壤職業實務(一)	2	2			
						材料力學			3	3		工程品質管理與實務			3	3	
						綠建築			3	3		水土保持工程			3	3	
						土壤改良實務			3	3		橋樑工程			3	3	
						#原住民智慧與生態工法	2	2				下水道工程學			3	3	
						#部落遊憩資源規劃			2	2		工程污染防治			3	3	
						電腦繪圖(二)	2	2				地理資訊系統實務			3	3	
						#部落老化與終身學習			2	2		#原住民環境防災與復健	2	2			
												#部落工程永續觀光實務			2	2	
												工址調查實務			3	3	
												智慧環境監測實務			3	3	
												#原住民工程與管理			2	2	

第四學年(113)					
	科目	上學期		下學期	
		學分	時數	學分	時數
校必修	原住民族生活與文化創意	2	2		
	原住民族地方產業發展	2	2		
	小計	4	4		
院必修					
	小計				
通識教育					
	小計				
系專業必修					
系專業選修	小計				
	環境影響評估	3	3		
	工程規劃與管理實務	3	3		
	山坡地工程	3	3		
	環境品質監測實務	3	3		
	非破壞檢測實務	3	3		
	施工安全	3	3		
	隧道工程	3	3		
	土壤職業實務(二)	2	2		
	鋼筋施工			3	3
	水資源工程			3	3
	工程採購與發包			3	3
	溫室氣體盤查			3	3
	資源再生			3	3
	#原鄉工程實務(校外實習教學)			3	3
	工程管理實務(校外實習教學)			3	3
	工業安全衛生實務(校外實習教學)			3	3
	原住民工程與管理	2	2		

專業選修課程開課規劃	
學期	時數
第一學年第一學期	0
第一學年第二學期	0
第二學年第一學期	5
第二學年第二學期	5
第三學年第一學期	6
第三學年第二學期	7
第四學年第一學期	7
第四學年第二學期	9
開課時數總計	39

注意事項：

- 本校訂有學生基本能力與畢業門檻實施辦法。
- 學生需修習勞作教育(0學分4小時)，並於第一學年上下二學期實施。
- 一~三年級每學期應修習16-30學分，四年級每學期應修習9-30學分。
- 最低畢業學分：128學分；必修學分：97 學分
- 選修學分：31學分（選修學分含原住民族文化課程選修10學分及跨系選修學分）
- 本系允許跨系選修，惟本系專業選修學分不得低於20學分
- 參加校外實習教學(以一學期為限)同學應選修「原鄉工程實務」、「工程管理實務」及「工業安全衛生實務」
- 延修專業技職學分課程原住民族班學生需修滿10學分(有修不計時數的課程-原住民族智慧與生態工法、部落遊憩資源規劃、原住民族環境防災與復健、部落工程永續觀光實務、原鄉工程實務(校外實習教學)、部落老化與終身學習、原住民工程與管理)。
- 表列選修課程僅供參考，依實際狀況調整。

副教授廖淑容

土環系主任陳鴻輝

工程學院院長李志鴻

MUST Curriculum Planning for Undergraduate Indigenous Students of Academic Year 2021-2024, Department of Civil Engineering and Environmental Informatics																		
1 st year(110)						2 nd year(111)						3 rd year(112)						
	Course	1 st		2 nd			Course	1 st		2 nd			Course	1 st		2 nd		
		Cr.	hr.	Cr.	hr.			Cr.	hr.	Cr.	hr.			Cr.	hr.	Cr.	hr.	
MUST Core Required Courses	English(I)(II)	2	2	2	2	MUST Core Required Courses	Contemporary Indigenous Social Issues	2	2			MUST Core Required Courses	Indigenous literature & Writing	2	2			MUST Core Required Courses
	Indigenous Physical Education(II)	1	2	1	2		Indigenous Culture & Global Vision			2	2		Ethnography & Anthropology			2	2	
	Chinese Reading and Expression(II)	2	2	2	2		Indigenous Traditional Ritual			1	2							
	Introduction to Taiwanese Indigenous Culture	2	2				Technical English(I)(II)	2	2	2	2							
	Indigenous Policies and Regulations			2	2		Ethics for Engineers	1	1									
	Introduction to programming	3	3															
	Introduction to artificial intelligence			3	3													
	Subtotal	10	11	10	11		Subtotal	5	5	5	6		Subtotal	2	2	2	2	
School Professional Required	Logical mathematics	2	2			School Professional Required						School Professional Required						
	Physics & Lab			3	3													
	Subtotal	2	2	3	3		Subtotal						Subtotal					
General Education						General Education						General Education						
	Subtotal						Subtotal						Subtotal					
Department compulsory courses	Material Lab	3	3			Department compulsory courses	Landscape Design & Practice			2	2	Department compulsory courses	Structure Analysis	3	3			Department compulsory courses
	Introduction of Civil Engineering	1	2				Concrete Mix Design	3	3				Construction Management	3	3			
	General Surveying & Lab(I)(II)	3	3	3	3		Engineering Mechanics	2	2				Soil Mechanics & Lab	3	3			
	Introduction of Environmental Resources			1	2		Illustration of Engineering Drawing	3	3				Construction Cost Estimating			3	3	
	Computer Aided Drafting(I)			3	3		Civil Engineering Construction			3	3		Reinforced Concrete			3	3	
	Civil Engineering Materials & Practice			3	3		Practice and Concept of BIM			3	3		Foundation Engineering & Practice			3	3	
													Special Topic Projects	1	1	1	1	
	Subtotal	7	8	8	10		Subtotal	9	9	10	10		Subtotal	10	10	10	10	
Department Elective Courses						Department Elective Courses	Introduction to Environmental Engineering	3	3			Department Elective Courses	Natural Hazard Mitigation	3	3			Department Elective Courses
							Construction Laws	3	3				Engineering Geology	3	3			
							Environmental Ecology	3	3				Safety & Health Management	3	3			
							Hydrology	2	2				UAV Operation Practice	3	3			
							Environmental Resources Management			2	2		BIM Application and Management	3	3			
							Water Pollution Control			3	3		Engineering Practical Training	2	2			
							Engineering Surveying Practice			3	3		Engineering Quality Management			3	3	
							Mechanics of Materials			3	3		Water and Soil Conservation			3	3	
							Sustainable Building			3	3		Bridge Engineering			3	3	
							Practice of Soil Improvement			3	3		Sewer Engineering			3	3	
							Indigenous Intelligent and Ecological Construction	2	2				Engineering Pollution Control			3	3	
							Tribal Recreation Resource Planning			2	2		Geographic Information System			3	3	
							Computer Aided Drafting(II)	2	2				Indigenous Environment Protection & Rebuild	2	2			
							Tribal Aging and Lifelong Learning			2	2		Practice of Tribal Engineering Tourism Sustainability			2	2	
													Practice of Intelligent Environmental Monitoring			3	3	
													Construction Site Investigation			3	3	
													Aboriginal Engineering and Management			2	2	

4 th year(113)					
	Course	1 st semester		2 nd semester	
		Cr.	hr.	Cr.	hr.
MUST Core Required Courses	Indigenous Life & Cultural Creativity	2	2		
	Indigenous Industrial Business Development	2	2		
	Subtotal	4	4		
School Professional Required Courses					
	Subtotal				
General education					
	Subtotal				
Department compulsory courses					
	Subtotal	1	3		
Department Elective Courses	Environmental Impact Assessment	3	3		
	Practice of Engineering Planning and Management	3	3		
	Sloped Land Engineering	3	3		
	Environmental Quality Monitoring	3	3		
	Practice of Non-destructive Testing	3	3		
	Construction Safety Measures	3	3		
	Tunnel Engineering	3	3		
	Engineering Practical Training (II)	2	2		
	Steel Structure Construction			3	3
	Water Resource Engineering			3	3
	Project Procurement & Contract Award			3	3
	Greenhouse Gas Evaluation			3	3
	Reusable Resources			3	3
	Hometown Engineering Practice (off-campus practical training)			3	3
	Project Management Practices (off-campus practice training)			3	3
	Industrial Safety and Health Practices (off-campus practice training)			3	3
	Indigenous Construction & Management	2	2		

Cr./hr.=Credit/hour

Remarks:

- The university requires students to achieve basic competencies and meet graduation requirements.
- Students are required to take 4 hours of Service Education courses (0 credit) during their first school-year. years, students must take
- Minimum credits required for graduation : 128 credits including 98 required credits and at least 30 elective credits (including elective Taiwanese Indigenous Culture Courses 10 credits and the interdepartmental elective credits)
- Inter-departmental elective credits are transferable. Professional elective course credits shall not be fewer than 20.
- Students who choose (one semester) off-campus internship program shall take the following three courses:
Hometown Engineering Practice, Engineering Management Practice, and Industrial safety and health practices.
These three courses are only available for those students taking practical training as their selective courses
- To accomplish the Indigenous Professional Courses, indigenous students require to fulfill 10 credits of Taiwanese Indigenous Culture Courses (Indigenous Intelligent and Ecological Construction · Tribal Recreation Resource Planning · Indigenous Environment Protection & Rebuild · Practice of Tribal Engineering Tourism Sustainability · Hometown Engineering Practice (off-campus practical training) · Tribal Aging and Lifelong Learning · Aboriginal Engineering and Management)
- The elective courses are subject to change if necessary.

副教授廖淑容

土環系主任陳鴻輝

工程學院院長李志鴻