

Chang Jung Christian University Department of Green Energy and Environmental Resources Curriculum

List

(Curriculum Guides,2023 Academic Year)

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obligatory / elective course	No.	course name(ch)	course name	grade	semester	credit	hours/week		Remark
							instruction	parctice	
common course-obligatory	PE00217	體育 I	Physical Education I	1	1	0	2	0	
	PE00218	體育 II	Physical Education II	1	2	0	2	0	
	PE00219	體育 III	Physical Education III	2	1	0	2	0	
	PE00220	體育 IV	Physical Education IV	2	2	0	2	0	
language course-obligatory	LE00297	英文 I	Freshman English I	1	1	2	2	0	
	LE00298	英文 II	Freshman English II	1	2	2	2	0	
	LE00299	外語初級 I	Foreign Language (basic)I	2	1	2	2	0	
	LE00300	外語初級 II	Foreign Language (basic)II	2	2	2	2	0	
	LE00388	閱讀與表達	Reading and Expression	1	2	2	2	0	
general course-obligatory	GE00206	音樂欣賞	Music Appreciation	1	2	2	2	0	
	GE00567	通識課程		0	1	8	2	0	
	GE00656	體驗學習	Experience Learning	1	2	1	1	2	
	GE00725	淨零永續生活與實踐	Life and Practice : Net Zero and Sustainability	1	1	2	2	0	
dep. course-obligatory	ER00001	微積分	Calculus	1	1	2	2	0	
	ER00091	能源科技概論	Introduction of Energy Technology	1	1	2	2	0	
	ER00003	自然科學概論 I	Introduction to Basic Natrual Sciences I	1	1	2	2	0	
	ER00004	管理概論	Introduction to Management	1	1	2	2	0	
	ER00006	計算機概論	Introduction to Computer	1	1	2	2	0	
	ER00055	電工學	Eletrotechnics	1	1	2	2	0	
	ER00092	永續發展概論	Introduction to Sustainable Development	1	2	2	2	0	
	ER00008	自然科學概論 II	Introduction to Basic Natrual Sciences II	1	2	2	2	0	
	ER00093	環境工程概論	Introduction to Environmental Engineering	1	2	2	2	0	
	ER00050	行動裝置APP程式設計	Mobile Device APP Programming	1	2	2	2	0	
	ER00000	環境倫理	Environmental Ethics	1	2	2	2	0	
	ER00016	電子電路學	Electronic Circuitry	2	1	2	2	0	
	ER00024	電能與發電概論	Introduction to Electrical Energy and Power Generation	2	1	2	2	0	
	ER00094	溫室氣體管理	Greenhouse Gas Management	2	1	2	2	0	
	ER00017	能源系統設計規劃	Planning and Design of Energy System	2	2	2	2	0	

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dep. course-obligatory	ER00014	天氣與氣候學	Weather and Climate	2	2	2	2	0	
	ER00018	統計學	Statistics	2	2	2	2	0	
	ER00095	能源政策與法規	Energy Policy and Regulation	3	1	2	2	0	
	ER00023	環境保護法規	Environmental Regulations	3	1	2	2	0	
	ER00012	環境規劃與管理	Environmental Planning and Management	3	2	2	2	0	
	ER00010	環境教育	Environmental Education	3	2	2	2	0	
	ER00033	地理資訊系統	Geographic Information System	3	2	2	2	0	
dep. course-elective	ZE00000	跨領域微學分 I	Interdisciplinary Microcredit Course I	0	1	1	1	0	
	ZE00001	跨領域微學分 II	Interdisciplinary Microcredit Course II	0	1	1	1	0	
	ZE00002	跨領域微學分 III	Interdisciplinary Microcredit Course III	0	1	1	1	0	
	ER00096	科技英文	Technical English	1	1	2	2	0	
	ER00049	旋翼機基礎實務 I	Rotorcraft Basic I	1	1	2	2	0	
	ER00011	程式設計	Programming	1	1	2	2	0	
	ER00053	科技文章選讀	Selected Readings of Technological Articles	1	2	2	2	0	
	ER00052	旋翼機基礎實務 II	Rotorcraft Basic II	1	2	2	2	0	
	ER00084	綠能與環境講座	Lecture on Green Energy and Environment	1	2	2	2	0	
	ER00090	電力配線實務	Power Wiring Applications	1	2	2	2	0	
	ER00097	專案管理	Project Management	1	2	2	2	0	
	ER00098	企業永續發展	Enterprise sustainable development	1	2	2	2	0	
	ER00099	應用數學	Applied mathematics	2	1	2	2	0	
	ER00025	風能發電系統理論	Theory of Wind Energy Generation	2	1	2	2	0	
	ER00026	風能發電系統實作	Impletementatio of Wind Energy Generation	2	1	2	2	0	
	ER00038	水質分析	Water Quality Analysis	2	1	2	2	0	
	ER00083	生態風險評估	Ecological Risk Assessment	2	1	2	2	0	
	ER00054	專題實作 I	Thematic Implementation I	2	1	2	2	0	
	ER00080	全球氣候變遷	Global Climate Change	2	1	2	2	0	
	ER00089	環境採樣與分析	Environmental sampling and analysis	2	1	2	2	0	
	ER00100	綠能科技區塊鏈	Green Energy Technology Blockchain	2	1	2	2	0	
	ER00013	流體力學	Fluid Mechanics	2	2	2	2	0	

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dep. course-el ective	ER00037	網站建置與實務	Practice of Website Building	2	2	2	2	0	
	ER00047	環境污染物分析	Environmental Pollution Analysis	2	2	2	2	0	
	ER00056	噪音與振動	Noise and Vibration	2	2	2	2	0	
	ER00040	環境微生物學	Environmental Microbiology	2	2	2	2	0	
	ER00058	PYTHON程式設計	Python Programming	2	2	2	2	0	
	ER00059	環境教育教材教法	Materials and Methodologies for Environmental Education	2	2	2	2	0	
	ER00060	材料科學導論	Introduction to Materials Science	2	2	2	2	0	
	ER00031	太陽能發電系統理論	Theory of Solar Energy Generation	2	2	2	2	0	
	ER00032	太陽能發電系統實作	Impletementation of Wind Energy Generation	2	2	2	2	0	
	ER00035	光電導論	Introduction to Optoelectronics	2	2	2	2	0	
	ER00102	能源管理系統	Energy management system	2	2	2	2	0	
	ER00057	專題實作 II	Thematic Implementation II	2	2	2	2	0	
	ER00027	儲能科技	Energy Storage Technology	3	1	2	2	0	
	ER00044	工業與環境毒物	Industrial and Environmental Toxicology	3	1	2	2	0	
	ER00045	環境暴露評估	Environmental Explosure Assessment	3	1	2	2	0	
	ER00103	工程經濟	Engineering economy	3	1	2	2	0	
	ER00062	廢棄物處理	Waste Treatment	3	1	2	2	0	
	ER00063	氣候變遷健康調適	Health Adaptation to Climate Change	3	1	2	2	0	
	ER00064	統計軟體應用	Application of Statistical Software	3	1	2	2	0	
	ER00061	專題討論 I	Seminar I	3	1	2	2	0	
	ER00034	污染監測與分析	Pollution Monitoring and Analysis	3	1	2	2	0	
	ER00042	資料統計與分析	Statistics for Data Analysis	3	1	2	2	0	
	ER00104	綠能科技管理	Green Energy Technology Management	3	1	2	2	0	
	ER00106	環境資料探勘和視覺化設計	Environmental data mining and visualization design	3	1	2	2	0	
	ER00028	工程圖學	Engineering Graphics	3	2	2	2	0	
	ER00030	循環經濟	Circular Economy	3	2	2	2	0	
	ER00041	流域環境管理	Watershed Environmental Management	3	2	2	2	0	
	ER00022	空氣污染概論	Introduction to Air Pollution	3	2	2	2	0	
	ER00046	水文學	Hydrology	3	2	2	2	0	
	ER00066	河川污染	River Pollution	3	2	2	2	0	

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dep. course-el ective	ER00067	感測器理論與應用	Principle and Applications of Sensors	3	2	2	2	0	
	ER00068	氣候變遷調適	Adaptation to climate change	3	2	2	2	0	
	ER00065	專題討論 II	Seminar II	3	2	2	2	0	
	ER00107	環境資源管理	Environmental Resource Management	3	2	2	2	0	
	ER00108	工程力學	Engineering mechanics	3	2	2	2	0	
	ER00109	先進綠能材料	Advanced Green Energy Materials	3	2	2	2	0	
	ER00071	有害廢棄物管理	Hazardous Waste Management	4	1	2	2	0	
	ER00072	永續發展專題	Seminar on Sustainable Development	4	1	2	2	0	
	ER00073	人工智慧導論	Introduction of AI	4	1	2	2	0	
	ER00074	污水工程	Sewage Engineering	4	1	2	2	0	
	ER00085	產業實習	Industrial Practice	4	1	9	0	18	
	ER00077	深度學習實務	Practice of Deep Learning	4	2	2	2	0	
	ER00078	環境影響評估	Environmental Impact Assessment	4	2	2	2	0	
	ER00076	室內空氣品質管理	Management of Indoor Air Quality	4	2	2	2	0	
	ER00086	職場實習	Career Development Practice	4	2	9	0	18	
obligatory 67 elective course 61 credit sum 128 The maximum elective credits from other departments that can be counted is 15									