

「實務專題」(選修) 課程公告

Special Projects (Elective) course announcement

Update: 2021/12/24 更新

※若已與本系其他教師面談完成但未列入以下專題題目，請直接填妥同意函交回即可

※若有其他有興趣的研究主題，請先與老師聯繫後再約時間面談

※You are encouraged to contact our professors to discuss the research direction of your "Special Projects" and submit the agreement letter back to us directly.

教授姓名 Professor's Name	研究方向 Research Direction	所需專題生 人數 Number of Students Required	備註 Remarks
洪嫦闡 Cathy C.W. Hung	探究職業災害與工作環境之影響 Identifying the relationships among safety climate, risk attitude and working environment for construction workers	1	1. A review of construction safety climate Definitions, factors, relationship with safety behavior and research agenda (2021) 2. Relationships among Safety Climate, Safety Behavior, and Safety Outcomes for Ethnic Minority Construction Workers (2018)
李安勸	地盤改良在土壤液化問題之探討	1	實驗為主
	加勁地錨邊坡影響參數量化分析	1	分析為主
盧之偉 Chih-Wei Lu	運用電子元件開發天然災害監控工具 Nature hazard monitoring system development	1	(1) 對電子儀器以及天然災害有興趣 (2)與景美女中同學合作
	利用新方法探討大規模崩塌發生機制 Study of large scale landslide mechanism based on a new approach	1	(1) 數值分析與現勘 (2)對研究與實務有興趣的同學

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	液化災區人孔上浮機制與量的分析 Uplift mechanism and calculation method of manhole due to soil liquefaction	1	物理試驗以及數學推導
	高土壤液化潛勢區域之災害風險分析 Risk analysis for high soil liquefaction potential area	1	現勘，調查與分析
許丁友	強震預警與建築安全 APP 雲端資料庫與展示網頁建置	1	
蕭博謙 Po-Chien Hsiao	鋼結構梁上開孔對其耐震能力之影響研究 The effects of steel beam opening on the seismic performance of the beam	1	
何嘉浚 Chia-Chun Ho	以自然為本的解決方案 Nature-based solution, NBS	3	國際自然保育聯盟(IUCN)倡導「以自然為本的解決方案 (nature-based solution, NBS)」，呼籲各國面對氣候變化、自然災害、水和糧食安全等日益嚴峻威脅和問題時，能夠藉由保護、永續經營和復育自然及半自然生態系的相關行動，有效減緩天災威脅和衝擊，提升人類社群和生物多樣性的福祉與惠益。NbS 概念和作法已獲得許多國際重要公約和協議的重視與採納。
謝佑明 Yo-Ming Hsieh	資訊科技在土木營建工程的應用 Applications of information technology in civil/construction engineering	3	詳細內容面議 (details to be discussed with the professor)

UPTP students only

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Cathy C.W. Hung	Identifying the relationships among safety climate, risk attitude and working environment for construction workers	1	Reference: 1. A review of construction safety climate Definitions, factors, relationship with safety behavior and research agenda (2021) 2. Effects of Safety Climate and Safety Behavior on Safety Outcomes between Supervisors and Construction Workers (2020)
An-Jui Li	AI application to civil problems in Paraguay	2	
	Potential topic based on discussion	1	
Chih-Wei Lu	Solutions for Geo-technical problems in Paraguay	1	Literature review and numerical analysis
	Nature hazard monitoring system development	1	Electronics device, field test, coding
	A new method for control of groundwater table	1	Test design and lab. testing
Po-Chien Hsiao	The effects of steel beam opening on the seismic performance of the beam	1	
Chin-Huai Young	Heat Insulation Solar Glass	3	Solar power testing and energy efficiency assesement
	Application of heat insulation solar glass on zero energy buildings	3	
Chia-Chun Ho	Natural-based Solution (NBS) for SDGS	2	"The International Union for Conservation of Nature (IUCN) advocates ""nature-based solutions (NBS)"" and calls on all

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			countries to take advantage of increasingly serious threats and problems such as climate change, natural disasters, water and food security, etc. Actions related to the protection, sustainable management, and restoration of natural and semi-natural ecosystems effectively mitigate the threats and impacts of natural disasters, and enhance the well-being and benefits of the human community and biodiversity. The concept and practice of NBS has been recognized and adopted by many important international conventions and agreements."
Yo-Ming Hsieh	Applications of information technology in civil/construction engineering	2	details to be discussed with the professor