

## 土木工程學系全英語授課課程地圖 / Department of Civil Engineering all-English course map

### 必修課程 / Required courses

Course code	課程名稱 / Course name		Credits	Remark
CI2011-A	流體力學	Fluid Mechanics	3	
CI2017-A	工程數學 I	Engineering Mathematics I	3	
CI2018-C	工程數學 II	Engineering Mathematics II	3	
CI3003-A	土壤力學 I	Soil Mechanics I	3	
CI3003-B	土壤力學 I	Soil Mechanics I	3	
CI3005-A	鋼筋混凝土學	Reinforced Concrete	3	
CI3010-B	基礎工程	Foundation Engineering	3	
CN5104	營建品質管理	Construction Quality Management	3	
CN5109	論文寫作與發表	Thesis Writing and Issuing	3	

### 選修課程 / Elective courses

Course code	課程名稱 / Course name		Credits	Remark
CI2027	空間資訊學概論	Introduction to Geoinformatics	3	
CI5006	中等土壤力學	Moderate Soil Mechanics	3	
CI5008	數位地形與城市模型	Digital Terrain and City Modeling	3	Take classes together with RS5008
CI5012	衛星測量及導航	Satellite Geodesy and Navigation	3	Take classes together with RS5012
CI5013	環境與防災監測實務	Environment and Disaster Monitoring Practice	3	
CI5016	離心模型試驗技術與資料分析	Centrifuge modeling technique and data analysis	3	Taking classes during summer vacation
CI5017	大地工程可靠度計算與風險分析	Geotechnical reliability and risk assessment	3	
CI5025	結構控制	Structural Control	3	
CI5031	工址調查	Site Investigation	3	
CI5033	深度學習與建築資訊模型程式整合設計	Integrated design and implementation of deep learning and building information modeling	3	
CI5035	衛星遙測概論	Basics of Satellite Remote Sensing	3	Taking classes during summer vacation

Course code	課程名稱 / Course name		Credits	Remark
CI6021	彈性力學	Elasticity	3	
CI6026	實驗土壤力學	Experimental Soil Mechanics	3	
CI6048-B	有限元素法	Finite Element	3	
CI6057	土壤動力學	Soil Dynamics	3	
CI6059	岩石力學	Rock Mechanics	3	
CI6060	地下水與滲流	Groundwater and Seepage	3	
CI6065	瀝青混凝土配合設計	Asphalt Concrete Mix Design	3	Design courses
CI6087	精密儀器在工程材料上之應用	Instrumentation for Material Research	3	
CI7003	環境流體力學	Environmental Fluid Mechanics	3	
CI7006	計算水利學	Computational Hydraulic	3	
CI7025	連體力學	Continuum Mechanics	3	
CI7059	遙測影像處理與分析	Remote Sensing Image Processing and Analysis	3	
CI7065	地理資訊系統	Geographical Information Systems	3	Take classes together with RS7065
CI7076	數位攝影測量	Digital Photogrammetry	3	Take classes together with RS7076
CI7078	空間資訊分析及應用	Spatial Data Analysis and Applications	3	Take classes together with RS7078
CI7105	地震減災通論	Earthquake Disaster Reduction	2	
CI7116	人工智慧在土木工程之應用	Application of Artificial Intelligent in Civil Engineering	3	
CI7119	雲端地理資訊系統	Cloud-based Geographic Information System	3	Take classes together with RS7119
CI7121	空間資訊科學專論I	Special Topics in Geoinformatic Sciences I	4	
CI8035	建築資訊模型理論與應用	Building Information Modeling: Theory and Applications	3	