

朝陽科技大學 098學年度第2學期教學大綱
Concrete Retrofitting and Strengthening 混凝土維修與補強

當期課號	7632	Course Number	7632
授課教師	李明君	Instructor	LEE,MING GIN
中文課名	混凝土維修與補強	Course Name	Concrete Retrofitting and Strengthening
開課單位	營建工程系碩士在職專班二A	Department	
修習別	選修	Required/Elective	Elective
學分數	3	Credits	3
課程目標	讓學生瞭解混凝土行為(包括鋼筋腐蝕、劣化機理、不當人為疏失、水氣、熱、載重影響等)、混凝土評估、混凝土維修及混凝土補強。有關混凝土的問題分析與評估、裂縫修補技術及混凝土補強原理等也包含於此課程。	Objectives	The course covers four parts. Part one is concrete behavior, part two is concrete evaluation, part three is concrete repair, and part four is concrete Retrofitting and Strengthening. Concrete does not always behave as we would like; it can be seen as disintegration, spalling, cracking, leakage, wear, deflection or settlement. The key methods of crack repair and developing effective repair strategies are discussed in this class.
教材	自訂教材 參考 Concrete Repair and Maintenance (Peter H. E.), ACI Manual of Concrete Practice	Teaching Materials	Teaching Materials Compiled by myself. (Concrete Repair and Maintenance, ACI Manual of Concrete Practice)
成績評量方式	homework 20% term paper (presentation) and final exam 70% Class performance 10%	Grading	homework 20% term paper (presentation) and final exam 70% Class performance 10%
教師網頁	http://www.cyut.edu.tw/~ce/departement/teacher1.html		
教學內容	讓學生瞭解混凝土行為包括一般、高性能及特殊混凝土 (PC,HPC,SCC,CLSM and RPC)等材料複雜特性、鋼筋腐蝕、劣化機理、不當人為疏失、水氣、熱、載重影響等；混凝土評估、混凝土維修及混凝土補強。有關混凝土的問題分析與評估、裂縫修補技術、混凝土補強原理及補強案例探討等也包含於此課程。	Syllabus	concrete behavior (PC,HPC,SCC,CLSM and RPC) concrete evaluation surface repair strengthening and stabilization protection case study

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