朝陽科技大學 096學年度第2學期教學大綱
Application in Geotechnical Area of Engineering Software 計算機在大地工程之應用

當期課號	1496	Course Number	1496
授課教師	蔡佩勳	Instructor	TSAI,PEI HSUN
中文課名	計算機在大地工程之應用	Course Name	Application in Geotechnical Area of Engineering Software
開課單位	營建工程系(四日)四A	Department	
修習別	選修	Required/Elective	Elective
學分數	3	Credits	3
課程目標	"本課程介紹有關數值方法之基本觀念及目前在大地工程方面之應用軟體。本課程內容包括有限差分之介紹、EXCEL在壓密問題與邊坡穩定分析之應用、及滲流分析軟體、邊坡穩定分析軟體、深開挖軟體之介紹。使學生能夠 a. 了解有限差分數值方法。 b. 使用相關數值軟體。"	Objectives	This course emphasizes the general concepts of finite difference method and the introduction of geotechnical engineering programs. The topics covered the general concepts of finite difference method, using Excel spreatsheet to slove consolidation problem or slope stability, the introduction of some software problems about geotechnical engineering.
教材	筆記	Teaching Materials	notes
成績評量方式	期末考 (20%) 期中專題(20%) 作業(45%) 出缺席(15%)	Grading	Homework 45% Final Exam 20% Attendance 15% Term paper 20%
教師網頁	_		
教學內容	本課程介紹EXCEL在大地工程之應用以及三個大地工程方面之應用軟體-STABL, TORSA, PLAXIS, 並指定作業使學生熟悉上述軟體之操作。同時, 也將簡述有關相關數值方法之基本觀念。	Syllabus	The course presents the introduction of EXCEL and three geotechnical engineering programs-STABL ,TORSA, and PLAXIS. This course will teach students how to perform them. The course is also concerned with the theories of 2D slope stability analyses of circular slip surfaces using Simplified Bishop methods and introduction of deep excavation. Besides, several excises will make students become familiar with the operation of these programs.

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