朝陽科技大學 098學年度第2學期教學大綱
Decision Making and Risk Management 決策分析與風險管理

當期課號	7156	Course Number	7156
授課教師	周慧瑜	Instructor	CHOU,HUI YU
中文課名	決策分析與風險管理	Course Name	Decision Making and Risk Management
開課單位	營建工程系碩士班二A	Department	
修習別	選修	Required/Elective	Elective
學分數	3	Credits	3
課程目標	本課程目的在使學生瞭解決策分析的意義並應用決策分析技巧在不確定因素的環境下作適當的決策。教導學生如何利用多目標決策分析之理論作出最適當的決策，當現今與未來均是不確定。課程內容包括：現今電腦輔助決策系統之發展，多目標效用決策分析、AHP、及灰色理論之理論與應用	Objectives	The objective of this course is to study the meaning and application of analystic decision making techniques for technical decision making under uncertainty. Provides the student with background and practice in applying tools for multiple attribute decision making when present or future states of nature are uncertain. Includes exploration of current research in developing computer aids to decision making under risk, multi-attribute utility analysis, AHP, and gray theory from theoretical foundations through assessment procedures.
教材	1.決策分析：方法與應用，翁振益、周瑛琪等著，2007年初版，華泰文化。 2.決策分析與管理：全面決策品質提升之架構與方法，簡禎富，2007年2月初版，雙葉書廊有限公司。	Teaching Materials	1.Weng, J. Y. et al. (2007). Decision Analysis: Methods and Applications, Hwa Tai Publishing Co. Ltd.. 2.J.Jiang (2007). Decision analysis and Management- A Unison Framework for Total Decision Quality Enhancement, Yeh Yeh Book Gallery.
成績評量方式	學習態度 20%； 隨堂作業或測驗 30%； 期中報告 25%； 期末報告 25%	Grading	Learning attitude 20%; Course work or exam 30%; Mid-term report 25%; Term report 25%
教師網頁			
教學內容	1.決策分析與風險管理緒論 2.理性決策過程 3.決策者與決策問題定義 4.目標層級結構的建立 5.決策屬性的訂定與權重分配 6.決策屬性的衡量與風險評估 7.結合風險管理的替選方案規劃 8.個人決策方法：賽局理論等 9.群體決策方法：層級分析法(AHP)等 10.社會層面決策方法：期望效用理論等 11.電腦輔助決策工具：資料挖礦(Data Mining) 12.決策行爲的不理性 13.決策行爲的複雜性	Syllabus	1.Introduction 2.Rational decision making process 3.Decision maker and problem definition 4.Objective hierarchy building 5.Attribute definition and weighting 6.Atrribute measurement risk evaluation 7.Risk-based alternatives 8.Tools for personal decision making: Game Theory etc. 9.Tools for multiperson decision making: AHP etc. 10.Tools for decision making in social issues: Expected Utility Theory etc. 11.Computer-aided decision making system: Data Mining etc. 12.Irrationality of decision making 13.Complexity of decision making

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