朝陽科技大學 096學年度第1學期教學大綱
Fuzzy Theory and Application 模糊理論與應用

當期課號	7451	Course Number	7451
授課教師	林正堅	Instructor	LIN,CHENG JIAN
中文課名	模糊理論與應用	Course Name	Fuzzy Theory and Application
開課單位	資訊科技研究所博士班一A	Department	
修習別	選修	Required/Elective	Elective
學分數	3	Credits	3
課程目標	由於模糊理論近年來大量的被應用於各類實務研究及產品上，故本課程旨在介紹模糊理論之基本原理及其相關之應用領域，除了課程教授之外，亦包含應用主題之研討，課程內容將涵蓋： 1.導論 2. 模糊集3.模糊邏輯4.模糊運算5. 模糊法則6.模糊推理7.模糊控制8.應用問題研討。	Objectives	The goal of this class is to introduce the fuzzy set theory and its corresponding applications. The important topics includes logic concepts, set theory, fuzzy set theory, fuzzy relation, fuzzy mathematics, fuzzy logics , fuzzy inference rules, fuzzy logic control and other important theories and their applications.
教材	Text Book Fuzzy Logic: Intelligence, Control, and Information John Yen and Reza Langari Prentice Hall (高立圖書代理) Ref. Book Neural Fuzzy Systems: A Neuro-Fuzzy Synergism to Intelligent Systems C.-T. Lin and C. S. G. Lee Prentice Hall (高立圖書代理)	Teaching Materials	Text Book Fuzzy Logic: Intelligence, Control, and Information John Yen and Reza Langari Prentice Hall (高立圖書代理) Ref. Book Neural Fuzzy Systems: A Neuro-Fuzzy Synergism to Intelligent Systems C.-T. Lin and C. S. G. Lee Prentice Hall (高立圖書代理)
成績評量方式	Midterm: 40% Homework: 30% Project (simulation, presentation, and report) : 30 %	Grading	Midterm: 40% Homework: 20% Project (simulation, presentation, and report) : 40 %
教師網頁			
教學內容	Introduction Basic Concepts of Fuzzy Logic Fuzzy Sets Fuzzy Relations, Fuzzy Graphs, and Fuzzy Arithmetic Fuzzy If-Then Rules Fuzzy Implications and Approximate Reasoning Fuzzy Logic and Probability Fuzzy Logic in Identification and Control Engineering Hierarchical Intelligent Control Fuzzy Logic in Database and Information Systems Neuro-Fuzzy Systems Genetic Algorithms and Fuzzy Logic	Syllabus	Introduction Basic Concepts of Fuzzy Logic Fuzzy Sets Fuzzy Relations, Fuzzy Graphs, and Fuzzy Arithmetic Fuzzy If-Then Rules Fuzzy Implications and Approximate Reasoning Fuzzy Logic and Probability Fuzzy Logic in Identification and Control Engineering Hierarchical Intelligent Control Fuzzy Logic in Database and Information Systems Neuro-Fuzzy Systems Genetic Algorithms and Fuzzy Logic

尊重智慧財產權，請勿非法影印。