朝陽科技大學 094學年度第2學期教學大綱
Intelligent Manufacturing Systems 智慧型製造系統

當期課號	7103	**Course Number**	7103
授課教師	鄭宗明	**Instructor**	CHENG,TZONG MING
中文課名	智慧型製造系統	**Course Name**	Intelligent Manufacturing Systems
開課單位	工業工程與管理系碩士班二A	**Department**	
修習別	選修	**Required/Elective**	Elective
學分數	3	**Credits**	3
課程目標	本課程將介紹構成智慧型製造系統之流程管理機制與決策機制，以及相關之智慧型計算方法，並以實例探索系統建構之過程且討論之。	**Objectives**	This course will introduce the workflow management and decision making mechanisms of an intelligent manufacturing system. Related intelligent/computational algorithms and their implementations will also be presented and discussed.
教材	Computation Intelligence in Design and Manufacturing, Kusiak, Prentice Hall 講義 Handouts	**Teaching Materials**	
成績評量方式	期中考 30% 期末考 30% 學期報告 40%	**Grading**	Midterm 30% Final 30% Term Project 40%
教師網頁	_		
教學內容	當今產業面對多樣少量之需求模式，除了以電腦整合系統之技術輔以自動化的生產設施來處理製造程序外，最終仍須仰賴智慧型的快速決策機構，有彈性地處理與產生生產過程之操作細節。此種智慧型機制可使用系統化的工具來建構或連結，例如演算法、裘式網與代理人，而使複雜且離散之生產資訊的整合決策能達到邏輯正確、快速且富彈性。本課程即教導智慧型機構之建構原理、工具與案例。	**Syllabus**	The use of computer-integrated technologies and automated processing facilities in production has reached the point where processing parameters must be evaluated by computation intelligence for ultimate system performance and flexibility. Such intellignece can be built within systematic elements, such as algorithms, Petri nets, and agents, to handle discrete events with complicated logical interactions. This course will introduce the theories, tools, and cases for the intelligence elements.