

**朝陽科技大學 095學年度第2學期教學大綱**  
**AI Application in Engineering Analysis 人工智慧在工程分析上之應用**

<b>當期課號</b>	7145	<b>Course Number</b>	7145
<b>授課教師</b>	王裕仁	<b>Instructor</b>	WANG,YU REN
<b>中文課名</b>	人工智慧在工程分析上之應用	<b>Course Name</b>	AI Application in Engineering Analysis
<b>開課單位</b>	營建工程系碩士班二A	<b>Department</b>	
<b>修習別</b>	選修	<b>Required/Elective</b>	Elective
<b>學分數</b>	3	<b>Credits</b>	3
<b>課程目標</b>	從工程之觀點，介紹人工智慧基本原理及其應用實例，使學習者能實際地學習如何利用人工智慧技術，解決工程分析上的問題。課程內容包括：基因演算法、類神經網路、模糊理論及應用範例介紹。	<b>Objectives</b>	Introduction course of the application of artificial intelligence in engineering analysis and design. Covers genetic algorithms, neural network and fuzzy set theory and their applications in construction engineering and management.
<b>教材</b>	a.Negnevitsky, Michael (2002), Artificial Intelligence – A guide to Intelligent Systems, Addison-Wesley  b.蘇木春、張孝德編著 (2004), 機器學習－類神經網路、模糊系統以及基因演算法則, 全華科技圖書	<b>Teaching Materials</b>	Negnevitsky, Michael (2002), Artificial Intelligence – A guide to Intelligent Systems, Addison-Wesley
<b>成績評量方式</b>	考試 40% ; 作業 30% ; 課堂表現 10% ; 報告20%	<b>Grading</b>	Quizzes 40% Assignment 20 points Class participation 40 points Reports 20 points
<b>教師網頁</b>	-		
<b>教學內容</b>	本課程主要教授基因演算法、模糊理論、類神經網路等人工智慧分析方法。	<b>Syllabus</b>	Mainly covers the basic concepts and application of Genetic Algorithm, Fuzzy Logic, and Neural Network.

尊重智慧財產權，請勿非法影印。