

101-1 Preliminary Syllabus, Da-Yeh Univ

Information			
Title	人工智慧	Serial No. / ID	1782 / EDR5193
Dept.	電機工程學系博士班	School System / Class	研究所博士班1年1班
Lecturer	吳幸珍	Full or Part-time	專任
Required / Credit	Optinal / 3	Graduate Class	No
Time / Place	(二)234 / H726	Language	Chinese

Introduction
<p>This course is to provide graduate student with practical understanding of the field of artificial intelligent systems. Student will develop small rule-based expert system, design a fuzzy system, explore artificial neural network and implement a simple problem as a genetic algorithm. Matlab Fuzzy Logic and Neural Network Toolbox are used in this coursed.</p>

Outline
<p>I. Introduction to knowledge-based intelligent systems</p> <ol style="list-style-type: none"> 1. Introduction to AI/neuroscience (TJ_1/K_1,2) ; ITS(viedo) 2. Introduction to fuzzy systems (K_14) 3. Introduction to neural network and soft computing paradigm (K_15) 4. Introduction to Intelligent Agents (TJ_11) <p>II. Optimization</p> <ol style="list-style-type: none"> 5. Derivative-based optimization (J_6) 6. Evolution-based computation (TJ_7,N_7) <p>III. Recurrent Neurodynamical Systems</p> <ol style="list-style-type: none"> 7. Artificial neural network (TJ_8-9,N_6.1) 8. (Supervised Learning) Support Vector Machine (K_8) 9. (Recurrent Learning) Adaptive Resonance Theory (K_11) 10. Unsupervised Learning (N_6.2,K_12) <p>III. Hybrid Intelligent Systems</p> <ol style="list-style-type: none"> 11. Integrated Neural Fuzzy Systems (TJ_12,N_8.1,anfis, sonfin) 12. Evolution-based Neural/Fuzzy Systems (N_8.2) <p>Final Examination</p>

Prerequisite
no