



課 綱 Course Outline  
資訊管理學系一般組

|  |  |                         |                  |  |                |
|--|--|-------------------------|------------------|--|----------------|
| 中文課程名稱<br>Course Name in Chinese       |  | 人工智慧                    |                  |  |                |
| 英文課程名稱<br>Course Name in English       |  | Artificial Intelligence |                  |  |                |
| 科目代碼<br>Course Code                    |  | IM__50210               | 班 別<br>Degree    | 碩士班<br>Master' s   |                |
| 修別<br>Type                             |  | 選修<br>Elective          | 學分數<br>Credit(s) | 3.0  | 時 數<br>Hour(s) |
| 先修課程<br>Prerequisite                   |  | 無                       |                  |  |                |
| 課程目標<br>Course Objectives              |  |                         |                  |  |                |
| 介紹智慧型系統之理論、設計、實作與應用。                   |  |                         |                  |  |                |
| 系教育目標<br>Dept.' s Education Objectives |  |                         |                  |  |                |
| 1                                      | 培育具備資訊技術解決問題思維能力之高級人才<br>Cultivate senior personnel with the capability of information technology to solve problems with thinking skills       |                         |                  |  |                |
| 2                                      | 以資訊技術為核心，培育具有高度專業能力之技術人才<br>Cultivate professional personnel with the capability of information technology                                     |                         |                  |  |                |
| 3                                      | 以管理為對象，培育具有創新、研發、企劃整合能力之高級人才<br>Cultivate senior personnel with the capability of innovation, research and development and integrated planning |                         |                  |  |                |
| 4                                      | 提供數位內容、電子商務與知識管理所需之人才<br>Cultivate personnel with the capability of digital content, electronic commerce and knowledge management              |                         |                  |  |                |
| 5                                      | 培育符合國家與區域發展所需之資訊管理人才<br>Cultivate information management personnel to meet the needs of national and regional development                      |                         |                  |  |                |
| 系專業能力<br>Basic Learning Outcomes       |  |                         |                  | 課程目標與系專業能力相關性<br>Correlation between Course Objectives and Dept.' s Education Objectives |                |
| A                                      | 培育具備創造與思考能力、服務精神、團隊合作以及國際觀<br>Nurture ability regarding creativity and thinking, spirit of service, teamwork and international view            |                         |                  | ○  |                |

|   |  |   |
|---|--|---|
| B | 培養具備資訊專業知識與技能<br>Nurture professional ability and skill regarding information  | ● |
| C | 培養具備資訊科技與管理領域之知識整合應用能力<br>Nurture integrated ability regarding information technology and management   | ● |
| D | 培養具備解決問題之資訊剖析、組織、整合、應用以及表達的能力<br>Nurture ability of information analysis, organization, integration, application, and expression regarding problem solving | ● |
| E | 培養具備獨立研究、領導智能與資訊創新能力<br>Nurture ability regarding independent research, leadership and information innovation  | ○ |

圖示說明Illustration：● 高度相關 Highly correlated ○ 中度相關 Moderately correlated

### 課程大綱 Course Outline

1. 人工智慧理論、應用、程式語言與發展。
2. 人工智慧語言簡介。
3. 智慧型遊戲。
4. 知識表示法。
5. 專家系統。
6. 電腦視覺。
7. 機器學習。
8. 類神經網路。

資源需求評估（師資專長之聘任、儀器設備的配合．．．等）  
Resources Required (e.g. qualifications and expertise, instrument and equipment, etc.)

具資訊管理或資訊工程專長之師資與相關軟體工具。

### 課程要求和教學方式之建議 Course Requirements and Suggested Teaching Methods

課堂講授為主，輔以LISP, Prolog 等人工智慧語言及類神經網路之系統習作

### 其他 Miscellaneous

參考書目：

1. "Artificial Intelligence / Structures and Strategies for Complex problem Solving"
2. Artificial intelligence, 3rd ed