



課 綱 Course Outline  
資訊工程學系國際組

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|--|---|------------------|------------------|--|-----|
| 中文課程名稱<br>Course Name in Chinese   | 推薦系統  |                  |                  |  |     |
| 英文課程名稱<br>Course Name in English   | Recommender System  |                  |                  |  |     |
| 科目代碼<br>Course Code  | CSIEM0520   | 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)   | 3.0 |
| 先修課程<br>Prerequisite   |   |                  |                  |  |     |
| 課程目標<br>Course Objectives  |   |                  |                  |  |     |
| The goal of this course is to teach the basic methods and theories of recommender systems, and to cultivate the practical ability to develop basic recommender systems |   |                  |                  |  |     |
| 系教育目標<br>Dept.' s Education Objectives   |   |                  |                  |  |     |
| 1  | 探究學科知識，善用專業技能<br>Explore academic knowledge, utilize professional skills.                                       |                  |                  |  |     |
| 2  | 訓練評析思考，創新解決問題<br>Exercise analytical thinking, enhance creative problem solving skills.                         |                  |                  |  |     |
| 3  | 學習團隊分工，強化溝通表達<br>Participate in teamwork, strengthen communication skills.                                      |                  |                  |  |     |
| 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  | 統合資工知識技術之能力<br>Ability to integrate knowledge and technologies of computer science and information engineering. |                  |                  | ●  |     |
| B  | 設計技術理論驗證實驗之能力<br>Ability to design and conduct science experiments and to validate hypotheses.                  |                  |                  | ●  |     |
| C  | 資訊軟硬體設計開發之能力<br>Ability to design and develop computer software and hardware.                                   |                  |                  | ○  |     |
| D  | 團隊專案開發之能力<br>Ability to design and develop team projects.   |                  |                  | ●  |     |

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| E  | 批判性思考與創新研發之能力<br>Ability of analytical thinking, creative research planning, and innovative development. | ● |
| 圖示說明Illustration：● 高度相關 Highly correlated ○ 中度相關 Moderately correlated   |  |   |
| 課程大綱<br>Course Outline   |  |   |
| 1. Introduction<br>2. Basic concepts<br>2.1 collaborative recommendation<br>2.2 content-based recommendation<br>2.3 knowledge-based recommendation<br>2.4 hybrid recommendation<br>3. Evaluating recommender systems<br>4. Advanced issues in recommendation<br>5. Tools for building a recommender system |  |   |
| 資源需求評估（師資專長之聘任、儀器設備的配合．．．等）<br>Resources Required (e.g. qualifications and expertise, instrument and equipment, etc.)  |  |   |
| Existing suitable full-time teachers   |  |   |
| 課程要求和教學方式之建議<br>Course Requirements and Suggested Teaching Methods   |  |   |
| Class lectures, assignments, lab sessions and term project   |  |   |
| 其他<br>Miscellaneous  |  |   |
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