



課 綱 Course Outline
資訊工程學系國際組

中文課程名稱 Course Name in Chinese		資料探勘				
英文課程名稱 Course Name in English		Data Mining				
科目代碼 Course Code		CSIEM0240	班 別 Degree	碩士班 Master' s		
修別 Type		選修 Elective	學分數 Credit(s)	3.0	時 數 Hour(s)	3.0
先修課程 Prerequisite						
課程目標 Course Objectives						
Introduce the purpose, principles, methods and applications of data mining						
系教育目標 Dept.' s Education Objectives						
1	探究學科知識，善用專業技能 Explore academic knowledge, utilize professional skills.					
2	訓練評析思考，創新解決問題 Exercise analytical thinking, enhance creative problem solving skills.					
3	學習團隊分工，強化溝通表達 Participate in teamwork, strengthen communication skills.					
系專業能力 Basic Learning Outcomes				課程目標與系專業能力相關性 Correlation between Course Objectives and Dept.' s Education Objectives		
A	統合資工知識技術之能力 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 Ability to design and conduct science experiments and to validate hypotheses.			○		
C	資訊軟硬體設計開發之能力 Ability to design and develop computer software and hardware.					
D	團隊專案開發之能力 Ability to design and develop team projects.			○		

E	批判性思考與創新研發之能力 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 Course Outline		
1. Introduction 2. Data preprocessing 3. Data mining methods — Association rules mining — Classification and prediction — Cluster analysis 4. Applications and trends in data mining		
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.)		
Existing suitable full-time teachers		
課程要求和教學方式之建議 Course Requirements and Suggested Teaching Methods		
Class lectures, assignments, lab sessions and term project		
其他 Miscellaneous		