

課 綱 Course Outline

理工學院 碩士班

中文課程名稱 Course Name in Chinese	資料探勘與應用				
英文課程名稱 Course Name in English	Data Mining : Concepts, Techniques, and Applications				
科目代碼 Course Code	TCAI5006	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	建議學生需已修過 Python 程式設計、有基本機率概念				
課程目標 Course Objectives					
<p>This course is designed to equip you with the foundational knowledge and hands-on experience needed to delve into the expansive world of data mining. Whether you are looking to enhance your skill set or embark on a new career path, this course will serve as a stepping stone to achieving your goals. The curriculum encompasses a range of topics that will introduce you to the core concepts and techniques prevalent in the field of data mining. These include: ·</p> <p>(1) Association Rules: Understand the principles behind identifying rules that highlight relationships between seemingly independent data in a database.</p> <p>(2) Clustering: Learn about grouping a set of objects in such a way that objects in the same group are more similar to each other than to those in other groups.</p> <p>(3) Classification: Gain knowledge on the procedures for identifying the predefined class of a new observation.</p> <p>(4) Text Mining: Equip yourself with the skills needed to analyze and interpret large collections of text data to extract meaningful information.</p> <p>Data Mining Applications: Explore the various practical applications of data mining across different industries and sectors.</p>					
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1. Introduction 2. Overview and Data 3. Lab For Data Exploration And Management (Make up for Mid-Autumn Festival) 4. Classification 5. Text Mining & Project Progress Report 6. Lab 2 7. Text Mining 8. DM Clustering 9. DM Clustering & Project Progress Report 10. Association 11. Student Paper Presentation (同時段同步報告)
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.)
課程要求和教學方式之建議 Course Requirements and Suggested Teaching Methods
評量方式 Evaluation methods ●平時報告：10% ●期末考成績：35% ●作業成績：20% ●其他：35%
其他 Miscellaneous