



課 綱 Course Outline

管理學院管理科學與財金國際學士學位學程學士班

中文課程名稱 Course Name in Chinese	商業資料分析				
英文課程名稱 Course Name in English	Business Analytics				
科目代碼 Course Code	MSF_10490	班 別 Degree	學士班 Bachelor' s		
修別 Type	學程 Program	學分數 Credit(s)	3.0	時 數 Hour(s)	3.0
先修課程 Prerequisite					
課程目標 Course Objectives					
This course provides a broad understanding and knowledge of important business analytic topics and how they can be used to support decision making in all business areas such as management, education, and marketing. Emphasis will be placed on the technical procedures that are used to describe, predict, and prescribe data into information for decision making. Students will learn how data exploration results in a sequence of descriptive, predictive and prescriptive processes to result in unique and new information on which decisions can be made.					
系教育目標 Dept.' s Education Objectives					
1	培育具備良好數量分析能力之管理人才。 Cultivating management professionals with outstanding ability in quantitative analysis.				
2	培育具備財務金融專業知識之人才。 Cultivating professionals with finance-specific knowledge.				
3	培育具備國際視野與外語溝通能力之人才。 Cultivating professionals with a global vision and the ability in foreign-language communication.				
4	培育具備決策分析與問題解決之技能的管理人才。 Cultivating management professionals with knowledge and skills in decision analysis and problem solving.				
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	能以數量方法分析與解決問題。 Using quantitative methods to analyze and solve problems.				○

B	具備財務金融領域之分析能力。 Equipped with the ability to analyze finance.	●
C	能善用資訊科技進行資料分析、統整與呈現。 Using information technology to analyze, integrate, and present data.	●
D	具備國際視野與專業外語能力。 Equipped with a global vision and specialized foreign language proficiency.	●
E	具備掌握財經時事議題及研判財經趨勢之能力。 Equipped with the ability to master topics of finance and economy, and other current news, and to diagnose financial and economic tendencies.	○
F	具備一般管理的基礎知識。 Equipped with basic knowledge of management in general.	○

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

課程大綱
Course Outline

1	Chapter 1 Introduction to Business Analytics
2	Chapter 2 Data Management and Wrangling
3	Chapter 3 Data Visualization and Summary Measures
4	Chapter 4 Probability and Probability Distribution & Review for Test I
5	Test I
6	Chapter 5 Statistical Inference
7	Chapter 6 Regression Analysis
8	Chapter 7 Advanced Regression Analysis & Review for Test II
9	期中考試週 Midterm Exam (Test II)
10	Chapter 8 Introduction to Data Mining
11	Chapter 9 Supervised Data Mining: K-Nearest Neighbors and Naive Bayes
12	Chapter 10 Supervised Data Mining: Decision Tree
13	Chapter 10 Supervised Data Mining: Decision Tree & Review for Test III
14	Test III
15	Chapter 11 Unsupervised Data Mining
16	Chapter 12 Forecasting with Time Series Data
17	Chapter 12 Forecasting with Time Series Data & Review for Test IV
18	期末考試週 Final Exam (Test IV)

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.)

Computer Labs and Statistical Software.

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

Course Requirements and Suggested Teaching Methods

Lectures, Labs, and Project

Title: Business Analytics

Authors: Sanjiv Jaggia and Alison Kelly and Kevin Lertwachara and Leida Chen

Edition: 1st

Publisher: McGraw Hill Education

ISBN: 9781260785005

其他
Miscellaneous

