



## 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<br>Course Name in Chinese  | 大數據決策支援系統  |                  |                    |  |     |
| 英文課程名稱<br>Course Name in English  | Big Data Decision Support System   |                  |                    |  |     |
| 科目代碼<br>Course Code   | MSF_10470  | 班 別<br>Degree    | 學士班<br>Bachelor' s |  |     |
| 修別<br>Type  | 學程<br>Program  | 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   |  |                  |                    |  |     |
| Big Data Decision Support System (BDDSS) is an umbrella term that combines finance architectures, management tools, information databases, financial analytical tools, applications, and methodologies. Its major objective is to enable interactive access to real time data, enable manipulation of these data in the field of finance and management science, and to provide business managers and analysts the ability to conduct appropriate analysis. |  |                  |                    |  |     |
| 系教育目標<br>Dept.' s Education Objectives  |  |                  |                    |  |     |
| 1   | 培育具備良好數量分析能力之管理人才。<br>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。<br>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。<br>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。<br>Cultivating management professionals with knowledge and skills in decision analysis and problem solving. |                  |                    |  |     |
| 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   | 能以數量方法分析與解決問題。<br>Using quantitative methods to analyze and solve problems.  |                  |                    |  | ●   |

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|---|--|---|
| B | 具備財務金融領域之分析能力。<br>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。<br>Using information technology to analyze, integrate, and present data.  | ○ |
| D | 具備國際視野與專業外語能力。<br>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。<br>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。<br>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

BDDSS have major components: the data warehouse with source data in finance, business analytics including a collection of tools for financial data manipulating, data mining, and analyzing financial data in data warehouse, business performance management for monitoring and analyzing performance, and the user interface design. Data analytics in finance is the process of developing BDDSS actionable decisions or recommendations for actions based upon insights generated from historical and real time data. The purpose of this course is to let students having financial background understand how to look at all the data in BDDSS and investigate what is happening about BDDSS with close connection to finance and management science, what will happen, and how to make the right choice of BDDSS at the right time.

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.)

Finance analytics software and on-line data base.

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

Lecture notes and status quo literature reviews.

其他  
Miscellaneous

1. Textbook: Analytics, Data Science, & Artificial Intelligence: Systems for Decision Support, 11th Edition. Sharda, Delen and Turban 2020; Person.
2. <http://www.elearn.ndhu.edu.tw/moodle>