

管院碩士班(含碩專班)課程大綱

MS/MA Program Syllabus

2023.09.26 修訂

系所 Department	資管所 IM	必選修 compulsory/elective	選修 Elective
課程名稱 Course title	Business Intelligence and Data Analytics (商業智慧與數據分析)	學分數 Credit(s)	3
課號 Course Code	5307159	全英文授課 English Taught (EMI)	是(Yes)
學年/學期 academic year/Semester	115/01	上課地點 Classroom	College of Management616A
講授教師 Instructor	Kankham Sarawut (沙拉溫)	上課時間 Time	Wednesday, 13:10 to 16:00
教師辦公室&諮詢時間 Instructor office & office hour	By appointment (Room 621)	教師聯絡資訊 Instructor Contact	Phone: 05-2720411#34604 Email: bensarawut@ccu.edu.tw
助教 Teaching assistant		助教 聯絡資訊 TA contact	Email:
先修課程 Pre-requisite courses	- Introduction to Information Management		
學習目標 Learning Objective	- Understand the foundational principles, concepts, and frameworks underpinning business intelligence, analytics, and data-driven decision making. - Identify and apply various analytics methods, techniques, and tools essential for developing effective business intelligence solutions. - Gain hands-on experience through practical applications, focusing on real-world deployment, management, and evaluation of business intelligence and analytics systems within business contexts.		
課程概述 Course Descriptions	This course introduces foundational concepts, principles, and managerial perspectives associated with Business Intelligence (BI), Analytics, and Data Science. The course covers key BI and analytics methodologies, including data mining, predictive analytics, data visualization, dashboards, and performance management. Graduate students will explore practical BI applications within organizational contexts and learn about relevant tools, technologies, and processes that transform data into strategic business decisions.		

	Throughout the course, emphasis is placed on real-world business cases, hands-on analytics experiences, and implications to equip graduate students with both theoretical understanding and practical skills essential for leveraging data-driven insights effectively in managerial perspective.			
對應 AOL 職能素養(AOL Competency)				
職能素養 4(Competency 4): 全球視野 Global Perspective			職能素養 1(Competency 1): 知識整合 Knowledge Integration	
課程類別 Course Attributes	☐ 人文關懷課程(Humanities Caring) ☐ 競賽專題課程(Competition) ☒ 問題導向課程(Problem-solving) ☒ 專題導向課程(Project-based) ☒ 實作課程(Practice-based) ☒ 總整課程(Capstone)			
教材編選 Teaching materials	☒ 自製簡報(self-made PPTs) ☐ 課程講義(Teaching Notes) ☐ 自編教科書(self-made textbooks) ☒ 教學程式(programming) ☐ 自製教學影片(self-made video) ☐ 其他(Others)			
教學資源 Teaching Resources	☐ 課程網站(Website) ☐ 實習網站(Intern Web) ☒ 教材電子檔供下載(Downloadable Files)			
教科書/參考書 Textbooks/References	- (Main) Sharda, Delen, & Turban (2018). <i>Business Intelligence, Analytics, and Data Science: A Managerial Perspective</i> (4th Edition). Pearson. - (Supplement) Delen (2020). <i>Predictive Analytics: Data Mining, Machine Learning and Data Science for Practitioners</i> (2nd Edition). Pearson.			
評量方式(請填百分比) Assessment	課堂參與 Participation	15%	個案討論 Case study	%
	作業 Homework	%	專題 Project	35%
	小考 Quiz	%	其他 1 other ()	%
	期中考 Midterm Presentation	20%	其他 2 other ()	%
	期末考 Final Exam	30%	其他 3 other ()	%
	報告 Presentation	%	其他 4 other ()	%
其他說明 Other description	- The instructor reserves the right to make changes to this syllabus, such as class schedule, grading policy, etc., if necessary. - The tools for data analytics covered in this course include Excel, SPSS, RapidMiner (Altair AI Studio), Power BI, and so on.			

課程規劃表 Course Schedule

週次 week	日期 Date	內容 Description	教材章 節 Textbook	其他說明 Remark
1.		Course Overview		
2.		An Overview of Business Intelligence, Analytics, and Data Science	Chapter 1	
3.		Descriptive Analytics: Nature of Data, Statistical Modeling, and Visualization	Chapter 2	
4.		Interactive Session (I)		Computer Room
5.		Descriptive Analytics: Business Intelligence and Data Warehousing	Chapter 3	
6.		Interactive Session (II)		Computer Room
7.		Predictive Analytics: Data Mining Process, Methods, and Algorithms	Chapter 4	Assign Midterm Presentation
8.		Interactive Session (III)		Computer Room
9.		<u>Midterm Presentation</u>		
10		Predictive Analytics: Text, Web, and Social Media Analytics	Chapter 5	Assign Final Project
11.		Interactive Session (IV)		Computer Room
12.		Prescriptive Analytics: Optimization and Simulation; Big Data Concepts and Tools	Chapter 6 & 7	
13.		Interactive Session (V)		Computer Room; Deadline for First Submission of Final Project
14.		<u>Final Project Presentation</u>		
15.		<u>Final Project Presentation</u>		
16.		<u>Final Exam</u>		(Chapter 1-7)

*The schedule and content may be subject to change.