



教學計畫表 Syllabus

課程名稱(中文) Course Name in Chinese	大數據概論			學年/學期 Academic Year/Semester	113-2
課程名稱(英文) Course Name in English	Introduction to Big Data			授課教師 Instructor	陳玉佳 Mike Chen
科目代碼 Course Code	IM__33620	系級 Department & Year	學士班	開課單位 Course-Offering Department	資管系
修別 Type	☐ 必修 Required ☐ 選修 Elective ☒ 學程 Program	學分數/時數 Credit(s)/ Hour(s)		3/3	
先修課程 Prerequisite					
課程描述 Course Description	Introductory course to big data concepts, tools and methods. Students will be exposed to and work with big data sets and derive business solutions from their analyses.				

課程目標 Course Objectives	1.Developed knowledge, skills and understanding around a range of subjects in the field of big data analytics. 2 Understand techniques for storing and processing large amounts of structured and unstructured data. 3 Be able to design and build big data applications through highly scalable systems capable of collecting, processing, storing and analyzing large volumes of data. 4 Be able to apply concepts and principles from science and business to analyze and interpret using analytic and computer-based techniques. 5 Understand how to effectively interpret and communicate their ideas through written and oral reports.
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系專業能力 Basic Learning Outcomes	A.Cultivate the personnel with the capability of basic and interdiscipline information management B.Cultivate professional personnel with international perspective and the capability of using information technology C. Cultivate senior personnel with the capability of innovation,research and development and integrated planning D.Cultivate the personnel with the capability of computerization of enterprises E. Cultivate the personnel with the capability of multimedia applications, website operations, and information marketing F. Cultivate the personnel with the capability for the emerging information industry						
課程目標與系專業能力 相關性 Correlation between Course Objectives and Basic Learning Outcomes	A	B	C	D	E		
	●	○	●	●	●		
圖示說明 Illustration：● 高度相關 Highly correlated ○ 中度相關 Moderately							
授 課 進 度 表 Teaching Schedule & Content							
週次 week	內 容 (Subject/Topics)					備註 Remarks	
1	Introduction to the World of Big Data						
2	Big Data Storage Concepts						
3	Big Data Storage Concepts (II)						
4	NoSQL Database (I)						
5	NoSQL Database (II) (Test I)						
6	Processing, Management Concepts, and Cloud Computing						
7	Driving Big Data with Hadoop Tools and Technologies						
8	Driving Big Data with Hadoop Tools and Technologies						
9	期中考試週 Midterm Exam (Test II)						
10	Big Data Analytics						
11	Big Data Analytics (II)						
12	Data mining methods (I)						
13	Data mining methods (II)						
14	Cluster Analysis (I) (Test III)						
15	Cluster Analysis (II)						
16	Big Data Visualization						
17	Big Data Visualization (II)						
18	期末考試週 Final Exam (Test IV)						
教 學 策 略 Teaching Strategies	√ 課堂講授 Lecture □分組討論 Group Discussion □參觀實習 Field Trip □其他 Miscellaneous: Labs						

學期成績計算及多元評量方式 Grading& assessments-nts										
	配分項目 Items	配分比例 Percentage	多元評量方式 assessments							
			測驗/ 會考	實作/ 觀察	口頭 發表	專題 研究	創作 展演	卷宗 評量	證照 檢定	其他
	平時成績 General Performance									
	期中考成績 Midterm Exam	21.25	V							
	期末考成績 Final Exam	21.25	V							
	Test I and III	42.5								V
	<u>Labs</u> <u>Assignments</u>	15								V
教科書與參考書目（書名、作者、書局、代理商、說明） Textbook & Other References (Title, Author, Publisher, Agents, Remarks, etc.) Big Data: Concepts, Technology, and Architecture Author(s):Balamurugan Balusamy, R Nandhini Abirami, Seifedine Kadry, Amir H. Gandomi Print ISBN:9781119701828 Online ISBN:9781119701859 DOI:10.1002/9781119701859 課程教材網址（教師個人網址請列在本校內之網址） Teaching Aids & Teacher's Website (Personal website can be listed here.)										