

明新科技大學 114學年第2學期教學大綱

Minghsin University of Science and Technology

【四技四年級選修】

科目名稱	Course Title
個人理財分析	Personal Financial Analysis
教學目標	Course Objective
上完課你將能具備完整且健全的終身理財觀念，包括(1) 個人或家庭的收支、儲蓄及投資該如何進行(2) 了解最新的金融科技之發展與在理財上的應用(3)了解貨幣的時間價值之真諦並激起立即投資的迫切性(4) 認識生命過程中人身保險與財產保險的重要性並立即檢視與規劃您個人或家庭所需要的保險(5) 了解投資商品的標的與性質，規劃您合適的風險與報酬並立即進行投資(6) 了解退休後的經濟需求並檢視您將會有的退休金和可能的退休金缺口(7) 了解自己未來或是家中長輩可能會有的遺產規模，進而規劃合適的財產移轉以及節稅行動。	when you have finished this personal finance course, you will have the following gains: (1) understanding the family income and expenditure or savings for the planning of necessary investments. (2) understanding the recent financial technology and its use in your personal financing. (3) understanding the time value of money and inspiring you to make some immediate investment planning. (4) understanding the contents of personal insurance and property insurance and reviewing your necessary insurance. (5) understanding the risk and return of various commodities and adapting some appropriate investment strategy for yourself. (6) understanding the economic requirement and possible economic gap of your retirement life. (7) finally, if you or your family will have much estate, you will be able to consider some property transferring action and tax saving strategy.

科目名稱	Course Title
深度學習	Deep Learning
教學目標	Course Objective
本課程主要探討深度學習理論與進階技術，包含深度學習網路的設計，以及實務上應用的教學。另外介紹深度學習最新應用現況。針對生成式人工智慧，與大型語言模型進行介紹，與微調練習	This course primarily explores deep learning theories and advanced technologies, including the design of deep learning networks and practical application teaching. Additionally, it introduces the latest applications of deep learning, including generative artificial intelligence, large language models, and fine-tuning practices.

【四技三年級選修】

科目名稱	Course Title
物聯網技術與應用	IoT Technology and Application
教學目標	Course Objective
1. 介紹物聯網的概念、趨勢與發展。 2. 藉由範例探討與實作，快速掌握物聯網的技術與應用	1. Introduces the Internet of Things(IoTs) concept, trend and development. 2. Use examples discussion and implementation, to familiar with the technology and application of the Internet of Things.

科目名稱	Course Title
網路規劃與管理	Network Planning and Management
教學目標	Course Objective
導入 Cisco Networking Academy (思科網路學院) CCNAv7: Introduction to Networks (網路概論) 及 CCNA R&S: Routing and Switching Essentials (路由及交換基礎) 官方課程模組作為本科目主要教材，帶領學生進入網路的世界，不趕進度，重視扎實，希望藉由微型投影片+微型作業的方式，以仿 MOOCs 的教學法，幫助學生對網路的世界開始產生興趣，甚至激發學生對於網路的熱情而想要更深入地自學。 重要備註：以下教學內容僅為預計進度，實際進度會依照當學期實際教學狀況彈性調整，會以「不趕進度，重視扎實」為最高準則。	* Based on Cisco Networking Academy - "CCNAv7: Introduction to Networks" & "CCNA R&S: Routing and Switching Essentials" Official Course Modules * Entry level * MOOCs-like micro-slides + micro-assignments * Aim at igniting students' interest and even passion on studying this subject of networks * Note that the following planning of Topics arrangement will be flexibly adjusted according to actual teaching and learning circumstances during the semester. The top guideline is "slow and solid rather than rushing but shallow."

科目名稱	Course Title
資訊安全管理	Information Security Management
教學目標	Course Objective
認識資訊安全管理系統基本概念與實務	Understand the basic concepts and practices of information security management systems

科目名稱	Course Title
行銷管理	Marketing Management
教學目標	Course Objective
依次介紹基本行銷概念與行銷管理程序、分析行銷環境、發展行銷策略和行銷組合，以及探討國際行銷和社會責任。	The text maintains its emphases on delivering a clear, concise explanation of the basic principles of marketing and impact of globalization, diversity, ethics, and small businesses on marketing.

科目名稱	Course Title
機器學習	Machine Learning
教學目標	Course Objective
本課程介紹機器學習相關議題，包含機器學習理論，機器學習演算法	The course pays attention on the topics of Machine Learning, including the fundamental theory and the algorithm of machine learning.

科目名稱	Course Title
AI 應用創新實務	Practical Innovation in AI Applications
教學目標	Course Objective
本課程專為資管系學生設計，帶你掌握 AI 工具的實戰應用，從資料分析、內容生成、到流程自動化，全面提升你在 AI 時代的專業競爭力。課程不只教工具，更著重於用 AI 解決真實問題，結合程式思維、管理觀點與創新應用，打造跨域整合能力。 🎯 課程目標 1. 熟悉多種 AI 工具與應用情境，靈活運用於專案與決策。 2. 培養 AI 輔助下的創新思維與問題解決能力。 3. 學會將 AI 技術融入資訊管理、行銷、服務與創業領域。 4. 建立持續學習與創新的態度，強化職場競爭力。 教學特色 • 實作導向：以專題任務為主軸，從概念到成果全程實作。 • 跨域應用：整合 ChatGPT、生成式 AI、資料分析等實務案例。 • 成果導向：期末完成 AI 創新應用專案，打造	Designed for Information Management students, this course equips you with hands-on skills in applying AI tools for data analysis, content generation, and process automation. You'll learn not just how to <i>use</i> AI, but how to <i>solve real-world problems</i> with it. By integrating programming logic, management perspectives, and creative thinking, you will develop the ability to combine technology and business for innovative solutions. 🎯 Course Objectives 1. Gain proficiency in various AI tools and understand their application in business and decision-making. 2. Cultivate innovative thinking and problem-solving skills in AI-assisted environments. 3. Integrate AI technologies into information management, marketing,

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service design, and entrepreneurship.

4. Build a mindset of continuous learning and innovation to enhance professional competitiveness.

Teaching Features

- **Hands-on Learning:** Project-based practice from concept to implementation.
- **Cross-domain Integration:** Real-world applications combining ChatGPT, generative AI, and data analytics.
- **Outcome-Oriented:** A final AI innovation project to showcase your skills and create a personal portfolio.

【四技二年級選修】

科目名稱	Course Title
商用程式設計	Database Application Language Programming
教學目標	Course Objective
本課程介紹商用程式語言 python 與其撰寫方法，並且帶領學生透過 python 語言進階機器學習與大數據領域	This course takes a closer look at the most popular programming language Python and learn how to program it. Students are anticipated to advance into machine and big data domain through python

科目名稱	Course Title
進階 JAVA 程式設計	Advanced JAVA Programming
教學目標	Course Objective
使學生了解物件導向程式設計 並能夠利用物件導向程式語言開發程式	Enable students to understand Object-Oriented programming and use it to develop software programs

科目名稱	Course Title
多益課程(一)	TOEIC Bridge (一)
教學目標	Course Objective
1. 增進學生新多益考試應試能力 2. 教導聽力及閱讀能力 3. 提昇新多益測驗成績	1.To increase students' skill for the TOEIC Test 2.To help students' TOEIC Listening & Reading ability. 3.To improve students' new TOEIC Test scores.

科目名稱	Course Title
應用會計學	Applied Accounting
教學目標	Course Objective
1. 介紹資產負債表、損益表及現金流量表的基本概念與特色。 2. 介紹財務報表的概念，以了解驅動獲利的因素。 3. 介紹資本結構，如何影響到利潤以及風險。 4. 如何找出並估計決策的相關成本。 5. 如何評價投資項目，並進行現金流分析。 6. 整合會計相關知識，建立優化的企業策略。	1.Introduce the basic concepts and characteristics of Balance Sheet, Income Statement and Cash Flow Statement. 2. Introduce the concept of financial statements to understand the factors driving profitability. 3. Introduce the capital structure, how it affects profits and risks. 4. How to find and estimate the costs associated with the decision. 5. How to evaluate investment projects and

	perform cash flow analysis. 6. Integrate accounting related knowledge and establish an optimized corporate strategy.
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科目名稱	Course Title
資料結構	Data structure
教學目標	Course Objective
我們將用全新的方式讓「資料結構」變得「看得見、玩得懂、學得會」！課程以**視覺化思考 (Visual Thinking) 與遊戲式學習 (Learning Through Play) **為核心，帶領學生從陣列、鏈結串列、堆疊、佇列，到樹與圖的世界，一步步看見資料在記憶體中的真實樣貌，並透過動畫與互動遊戲，理解每個結構背後的邏輯與應用。 不只是看，更要「動手玩」！你將化身為資料搬運員、迷宮探險家或排序高手，透過卡牌、棋盤與桌遊體驗各種資料結構的運作方式，學習如何使用 AI 實作出高效的解決方案。 這門課不僅幫你打好程式設計與演算法的基礎，更讓你在「玩中學、學中樂」的過程中，體驗運算思維的樂趣，成為能用邏輯與創意解決問題的資訊高手！	We' ll transform the way you see Data Structures—literally! This course uses Visual Thinking and Learning Through Play as its core strategies to make abstract concepts come alive. You' ll journey from arrays and linked lists to stacks, queues, trees, and graphs, visualizing how data truly moves and stores in memory. Through animations and interactive games, you' ll uncover the logic and purpose behind each structure in a fun, intuitive way. This isn' t just about watching—it' s about <i>playing and doing</i>! You' ll take on roles like a data mover, maze explorer, or sorting master, using cards, boards, and tabletop games to experience how different data structures operate. Along the way, you' ll also learn to apply AI tools to implement efficient solutions to real-world problems. This course doesn' t just build a strong foundation in programming and algorithms—it invites you to learn through play and play through learning, discovering the joy of computational thinking. By the end, you' ll be able to use logic, creativity, and code to solve problems like a true information technology professional.

【四技一年級選修】

科目名稱	Course Title
網際網路實務	Internet Practice
教學目標	Course Objective
學習利用 HTML5, CSS, jQuery, Bootstrap 製作網頁程式	Use HTML5, CSS, jQuery Bootstrap for Web programming

科目名稱	Course Title
科技溝通軟實力	Effective Communication through Technology
教學目標	Course Objective
在數位與高度連結的時代中，有效的溝通需要同時具備科技應用能力與人際互動技巧。本課程旨在培養學生在面對面與科技媒介情境下的溝通軟實力。學生將學習如何運用數位工具強化簡報設計、資料視覺化與線上協作，同時提升口語表達與非語言溝通的能力。透過實作練習、小組討論與專題學習，學生將發展出同理心、批判思考與專業自信，能在多元環境中靈活運用科技與人際互動，達成有效且具影響力的溝通。	In today' s digital and interconnected world, effective communication requires both technological fluency and strong interpersonal skills. This course equips students with essential soft skills for communication in both face-to-face and technology-mediated contexts. Students will learn how to use digital tools to enhance presentations, visualize data, and collaborate across virtual platforms, while also strengthening verbal and nonverbal communication for in-person interactions. Through practical exercises, group discussions, and project-based learning, students will develop empathy, critical thinking, and professional confidence to communicate effectively in diverse situations. By the end of the course, students will be able to integrate digital competence with human connection to achieve impactful communication.