



## 教學計劃表 Syllabus

課程名稱(中文) Course Name in Chinese	計算機概論	學年/學期 Academic Year/Semester	113/1
課程名稱(英文) Course Name in English	Introduction to Computer Science		
科目代碼 Course Code	DMSI10030	系級 Department & Year	學一 Course-Offering Department
修別 Type	學程 Program	學分數/時間 Credit(s)/Hour(s)	3.0/3.0
授課教師 Instructor	/張漢利		
先修課程 Prerequisite			

### 課程描述 Course Description

This course is designed to provide students with the essential introductory concepts of computer science, aiming to equip them with the knowledge of applications relevant to business and management. Covering essential materials such as computer systems, the internet, number systems, and logic, the curriculum also introduces modern topics like the Internet of Things (IoT), machine learning, and artificial intelligence at an introductory level. Targeted at those with limited exposure to computer science, the course prepares students for globalized business and technology environments, focusing on leveraging computer science to enhance management strategies and operations. The course is also delivered in English.

### 課程目標 Course Objectives

This course provides a comprehensive overview of fundamental topics in computer science. Students will gain basic knowledge about computers, data manipulation and abstraction, computer architecture and organization, software development, operating systems, databases, networks, multimedia, and artificial intelligence. By the end of the course, students will have a solid foundation and knowledge in computer science, making them well-prepared for further advanced studies in advanced fields.

	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	具備以資訊技術協助企業運作與商業管理之知識與應用能力	●
B	具備邏輯思考、問題分析與解決之能力	○
C	具備溝通協調與團隊合作之能力	○
D	具備創新思維之能力	○
E	具備國際視野及外語溝通之能力	○

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

### 授課進度表 Teaching Schedule & Content

週次 Week	內容 Subject/Topics	備註 Remarks
1	Orientation	
2	Computer Systems	

3	Number Systems 1	
4	Number Systems 2	
5	Data Operations and Storage 1	
6	Data Operations and Storage 2	
7	Computer Networks	
8	Algorithms	
9	期中考試週 Midterm Exam	
10	Data Structure	
11	Introduction to Database Management	
12	Introduction to Cybersecurity	
13	Introduction to Internet-of-Things	
14	Introduction to Artificial Intelligence	
15	Introduction to Machine Learning	
16	Introduction to Data Science and Data Mining	
17	Social Media and Digital Marketing	
18	期末考試週 Final Exam	

### 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:

### 教學創新自評 Teaching Self-Evaluation

#### 創新教學(Innovative Teaching)

- 問題導向學習(PBL)
  團體合作學習(TBL)
  解決導向學習(SBL)  
 翻轉教室 Flipped Classroom
  磨課師 Moocs

#### 社會責任(Social Responsibility)

- 在地實踐 Community Practice
  產學合作 Industry-Academia Cooperation

#### 跨域合作(Transdisciplinary Projects)

- 跨界教學 Transdisciplinary Teaching
  跨院系教學 Inter-collegiate Teaching

- 業師合授 Courses Co-taught with Industry Practitioners

其它 other:

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學期成績計算及多元評量方式 Grading & Assessments

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									
期末考成績 Final Exam									
作業成績 Homework and/or Assignments									
其他 Miscellaneous (_____)									

評量方式補充說明

Grading & Assessments Supplemental instructions

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.)

課程教材網址(含線上教學資訊, 教師個人網址請列位於本校內之網址)

Teaching Aids & Teacher's Website(Including online teaching information.  
Personal website can be listed here.)

其他補充說明 (Supplemental instructions)