

國立台灣科技大學 114學年 第2學期 課程大綱

Spring 2026 NTUST Course Outline

授課教師：林敬舜

Instructor:Ching-Shun Lin

課程名稱：計算機科學導論

Course Title : Introduction to Computer Science

2026/6/22

課程代號： ET2400701 Course Code	必選修：選修/半學年 Required/Electve:Elective/Half Yr.
學分數： 3 Credits	先修課程： Prerequisites
節次教室： M6(IB-510-2) M7(IB-510-2) T1(IB-510-2) Time/Location	
專業核心能力： Core Professional Competencies	
課程網址： Course Website https://www.et.ntust.edu.tw/et/faculty.php?user=chingshl	
課程宗旨： Course Objectives	The purpose of this course is to provide students with a basic understanding of the history, principles, development, and coverage of computers. In particular, the software and hardware applications of personal computers, the trends of multimedia and the Internet, and the impact of computers on modern society are introduced and discussed one by one, so that students can have a certain understanding of various fields of information science to cope with computer-related lectures later.
課程大綱： Outline of Lectures	<ol style="list-style-type: none"> 1. Introduction. 2. Data Representation. 3. Basic Computer Architectures. 4. Input/Output Technologies. 5. Storage Devices. 6. Operating Systems. 7. Basic Data Structure and Algorithms. 8. Computer Communications and Networks. 9. Databases and Information Management. 10. Computers and Society, Information Security, and Information Ethics. 11. Multimedia Systems. 12. Programming Languages. 13. Computer Careers and Certifications.
授課方式： Method of Instruction	講授 Lecture : 80% 分組討論 Group discussion : 10% 案例研討 Case study : 5% 操做練習 Practical exercises : 5% 講授 Lecture : Some supplementary materials will be handed out in the lecture.%
教科書： Textbooks	J. Glenn Brookshear and Dennis Brylow, Computer Science: An Overview, Pearson FT Press, 2019.
參考書目： References	

1. Behrouz A. Forouzan, Foundations of Computer Science - From Data Manipulation to Theory of Computation, Thomson Brooks/Cole, 2002.
2. Robert W. Sebesta, Concepts of Programming Languages, 8th Ed., Addison Wesley, 2007.
3. Pauline Cushman and Ramon Mata-Toledo, Schaum's Outline of Introduction to Computer Science, McGraw-Hill, 1999.

修課須知： Teaching assistant is available.
Notice

評量方式： Midterm: 40 %,
Grading Final exam: 40 %, Quiz: 10 %, Attendance and participation: 10 %

備註說明： Tips for success in this class:
Notes

- Familiarity with programming, such as the C language, is a plus.
- Don' t miss class.
- Read in advance.
- Start homework early.
- Don' t ignore the homework, and quizzes.
- Ask questions.
- Don' t arrive late for class.