

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：羅士哲

Instructor:Shih-Che Lo

課程名稱：計算機程式

Course Title : Computers Programming

2026/6/22

<p>課程代號： IM1201301 Course Code</p> <p>學分數： 2 Credits</p>	<p>必選修：必修/半學年 Required/Elective:Required/Half Yr.</p> <p>先修課程： Prerequisites</p>
<p>節次教室： M6(MA-417) M7(MA-417) Time/Location</p>	
<p>專業核心能力： Core Professional Competencies</p>	
<p>課程網址： moodle2.ntust.edu.tw Course Website</p>	
<p>課程宗旨： Course Objectives</p>	<p>This course aims to provide students with an in-depth understanding of fundamental programming concepts, emphasizing their practical implementation using Python. Throughout the course, students will explore core programming principles, including data structures, algorithms, control flow, and object-oriented programming. The curriculum is designed to highlight the essential features of programming languages, enabling students to develop efficient solutions to complex problems encountered in engineering, management, and related fields.</p>
<p>課程大綱： Outline of Lectures</p>	<p>This course is a comprehensive, one-semester (16-week) program designed specifically for first-year undergraduate students in the School of Management.</p> <ol style="list-style-type: none"> <li>1. Scratch</li> <li>2. An introduction to Python</li> <li>3. Simple Numerical Programs</li> <li>4. Functions and Scoping</li> <li>5. Recursive</li> <li>6. Global Variable, Modules and File</li> <li>7. Tuples, Lists and Mutability</li> <li>8. Functions as Object, Sequence Types, and Dictionaries</li> <li>9. Testing and Debugging</li> <li>10. Exceptions and Assertions</li> <li>11. Class and Object-Oriented Programming I</li> <li>12. Class and Object-Oriented Programming II</li> <li>13. Algorithm Complexity</li> <li>14. Searching, Sorting, and Hash Table</li> </ol>
<p>授課方式： Method of Instruction</p>	<p>講授 Lecture : 100%</p> <p>分組討論 Group discussion : 0%</p> <p>案例研討 Case study : 0%</p> <p>操做練習 Practical exercises : 0%</p> <p>講授 Lecture : N/A%</p>
<p>教科書： Textbooks</p>	<p>Introduction to Python for Computational Science and Engineering, Hans Fangohr, April 14, 2024.</p>

參考書目： N/A  
References

修課須知： 第三週開始，每次上課課末皆有隨堂測驗，測驗內容為前一週之課程。  
Notice

評量方式： - 30% Midterm Exam  
Grading - 30% Final Exam  
- 40% Quiz

備註說明： N/A  
Notes