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：劉孟昆

Instructor:Meng-Kun Liu

課程名稱：Python程式語言與應用

Course Title：Python Programming and Applications

2026/11/3

課程代號： ME2014302 Course Code 學分數： 3 Credits	必選修：必修/半學年 Required/Electve:Required/Half Yr. 先修課程： Prerequisites
節次教室： Time/Location	F1(E1-223) F2(E1-223) F3(E1-223)
專業核心能力： Core Professional Competencies	1.運用數學、科學及工程知識的能力 2.執行工程實務所需技術、技巧及使用現代化工具的能力 3.能發掘、分析、應用研究成果及因應複雜且整合性工程問題的能力
課程網址： Course Website	
課程宗旨： Course Objectives	This course introduces students to fundamental programming concepts using Python, with a focus on writing efficient, readable, and well-structured code. Students will gain hands-on experience with Visual Studio Code, data types, control structures, loops, functions, and object-oriented programming. By the end of the course, students will be able to apply Python programming skills to solve computational problems, use built-in libraries, and develop modular, reusable code.
課程大綱： Outline of Lectures	Introduction of Python and Visual Studio Code Chapter 2: Types, Values, Variables, and Names Chapter 3: Numbers Chapter 4: Choose with If Chapter 5: Text String Chapter 6: Loop with While and For Chapter 7: Tuples and Lists Chapter 8: Dictionaries and Sets Chapter 9: Functions Chapter 10: Objects and Classes Chapter 11: Modules, Packages, and Goodies
授課方式： Method of Instruction	講授 Lecture：60% 分組討論 Group discussion：0% 案例研討 Case study：0% 操做練習 Practical exercises：40% 講授 Lecture：%
教科書： Textbooks	Bill Lubanovic, Introducing Python: Modern Computing in Simple Packages, 2nd Edition, O'Reilly. 精通Python: 運用簡單的套件進行現代運算 賴屹民 譯
參考書目： References	
修課須知： Notice	

評量方式： Grading	Attendance and Classroom Exercises 50% Homework Project 30% Final Exam 20%
備註說明： Notes	