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：王紹睿

Instructor:Peter S. Wang

課程名稱：演算法

Course Title：Algorithms

2026/11/3

課程代號： CS3001302 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： M2(TR-409-1) M3(TR-409-1) M4(TR-409-1) Time/Location	
專業核心能力： Core Professional Competencies	
課程網址： Course Website	
課程宗旨： Course Objectives	I. Introduction to algorithms and analysis of algorithms II. Advanced data structures III. Basic algorithms: sorting, graph algorithms, etc. IV. Advanced design and analysis techniques: greedy algorithms, divide and conquer, dynamic programming, etc.
課程大綱： Outline of Lectures	I. Introduction to algorithms and analysis of algorithms II. Advanced data structures III. Basic algorithms: sorting, graph algorithms, etc. IV. Advanced design and analysis techniques: greedy algorithms, divide and conquer, dynamic programming, etc.
授課方式： Method of Instruction	講授 Lecture：100% 分組討論 Group discussion：0% 案例研討 Case study：0% 操做練習 Practical exercises：0% 講授 Lecture：%
教科書： Textbooks	*Kleinberg and Tardos, Algorithm Design, Addison Wesley. *Cormen, Leiserson, Rivest, Stein, Introduction to Algorithms, McGraw Hill/MIT Press
參考書目： References	Recent journal and conference papers
修課須知： Notice	
評量方式： Grading	*Final and Midterm Exam: 100% *Bonus (interaction in class, …)
備註說明： Notes	This class recommends that students have basic English skills.