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：陳怡伶

Instructor:Yi-Ling Chen

課程名稱：社群媒體資料分析實務

Course Title：Practice of Social Media Analytics

2026/11/3

課程代號：CS5128701 Course Code 學分數：3 Credits	必選修：選修/半學年 Required/Electve:Elective/Half Yr. 先修課程： Prerequisites
節次教室：F3(TR-213) F4(TR-213) F5(TR-213) Time/Location	
專業核心能力： Core Professional Competencies	
課程網址：https://moodle.ntust.edu.tw/ Course Website	
課程宗旨： Course Objectives	In this course, we will cover certain important topics and algorithms used in social network analysis, such as link prediction and community detection. Students are expected to implement some of these algorithms as programming assignments. In the final project, students can leverage the skills learned in this course to build interesting and useful applications.
課程大綱： Outline of Lectures	We will first introduce the following important topics, and then provide suitable practices to help students get familiar with the learned materials. 1. Introduction to social networks 2. Models of social networks 3. Ranking tasks in social networks 4. Link prediction 5. Community detection 6. Influence maximization
授課方式： Method of Instruction	講授 Lecture：70% 分組討論 Group discussion：15% 案例研討 Case study：0% 操做練習 Practical exercises：15% 講授 Lecture：%
教科書： Textbooks	(N/A)
參考書目： References	Network Science, by A.-L. Barabasi, Cambridge University Press, 2016 Social Network Data Analytics, edited by C. C. Aggarwal, Springer, 2011 Selected papers from journals and conferences
修課須知： Notice	Slides and other course materials will be provided on the Moodle platform.
評量方式： Grading	Programming Assignments: 60% / Final Project: 40% (Final grades will be adjusted based on overall scores.)

備註說明： Notes	Students are expected to have programming experience (e.g., C, C++, Java, Python, or R).