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：鄧惟中

Instructor:Teng, Wei-Chung

課程名稱：網路通訊協定

Course Title：Network Communication Protocols

2026/11/3

課程代號：CS5089701 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：T2(華夏恆毅樓D402) T3(華夏恆毅樓D402) T4(華夏恆毅樓D402) Time/Location	
專業核心能力： Core Professional Competencies	
課程網址： Course Website	
課程宗旨： Course Objectives	The "Network Communication Protocols" postgraduate course is an intensive program focusing on the protocols fundamental to computer network communication. It offers comprehensive coverage of the TCP/IP protocol suite, including key protocols like IP, TCP, and UDP, and application layer protocols such as HTTP, SMTP, and FTP. A significant emphasis is placed on cybersecurity for networks, introducing students to secure data transmission, encryption, and authentication methods within these protocols. The course also touches on wireless and IoT protocols, providing a contemporary perspective.
課程大綱： Outline of Lectures	1. Network Architectures and Protocols 2. TCP/IP Protocol Suite and Request for Comments 3. Protocol Specification: the Formal Description Techniques 4. Application protocols and cybersecurity issues 5. Multistakeholder governance for Internet
授課方式： Method of Instruction	講授 Lecture：90% 分組討論 Group discussion：0% 案例研討 Case study：0% 操做練習 Practical exercises：10% 講授 Lecture：%
教科書： Textbooks	N/A
參考書目： References	1. Adrian Farrel, The Internet and Its Protocols, Morgan Kaufmann. 2. William Stallings, Cryptography and Network Security – principles and practices, 8/e., Pearson.
修課須知： Notice	
評量方式： Grading	Midterm Examination: 50% Final Report: 50%
備註說明： Notes	prerequisite: Introduction to Computer Networks