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：王蒼容

Instructor:Wang, Chun-Long

課程名稱：電磁相容

Course Title：Electromagnetic Compatibility

2026/11/4

課程代號：ET5510701 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：W2(IB-511-2) W3(IB-511-2) W4(IB-511-2) Time/Location	
專業核心能力： Core Professional Competencies	
課程網址： Course Website	
課程宗旨： Course Objectives	This course aims to equip the students with the fundamentals of electromagnetic compatibility.
課程大綱： Outline of Lectures	Chapter 1　Introduction to Electromagnetic Compatibility (EMC) Chapter 2　EMC Requirements for Electronic Systems Chapter 3　Signal Spectra—the Relationship between the Time Domain and the Frequency Domain Chapter 4　Transmission Lines and Signal Integrity Chapter 5　Nonideal Behavior of Components Chapter 6　Conducted Emissions and Susceptibility Chapter 7　Antennas Chapter 8　Radiated Emissions and Susceptibility Chapter 9　Crosstalk
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	Introduction to Electromagnetic Compatibility, 2nd edition, Clayton R. Paul, John Wiley & Sons.
參考書目： References	Noise Reduction Techniques in Electronic Systems, 2nd edition, H. W. Ott, Wiley-Interscience, New York, 1986.
修課須知： Notice	
評量方式： Grading	Midterm (40%) Final Examination (40%) Special Report (20%)
備註說明： Notes	None