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：黃琴雅

Instructor:CHIN-YA HUANG

課程名稱：線性系統

Course Title：Linear System

2026/11/3

課程代號： ET3105302 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	T4(E2-102) W6(EE-406) W7(EE-406)
專業核心能力： Core Professional Competencies	
課程網址： Course Website	Moodle
課程宗旨： Course Objectives	(1)Signals and Systems (2)Linear Time-Invariant Systems (3)Fourier Series Analysis (4)Continuous-Time Fourier Transform (5)Laplace Transform (6)Discrete-Time Fourier Transform (7)Z-transform (8)Sampling, Filtering, and Modulation
課程大綱： Outline of Lectures	(1)Signals and Systems (2)Linear Time-Invariant Systems (3)Fourier Series Analysis (4)Continuous-Time Fourier Transform (5)Laplace Transform (6)Discrete-Time Fourier Transform (7)Z-transform (8)Sampling, Filtering, and Modulation
授課方式： Method of Instruction	講授 Lecture：90% 分組討論 Group discussion：0% 案例研討 Case study：10% 操做練習 Practical exercises：0% 講授 Lecture：%
教科書： Textbooks	1. S. Haykin, Signals and Systems, 2nd Ed., Wiley, 2003. 2. A. V. Oppenheim, Signals and Systems, 2nd Ed., Pearson, 1997.
參考書目： References	N/A
修課須知： Notice	N/A
評量方式： Grading	Homework 10%, Midterm 45%, Final 45%
備註說明： Notes	

This is EML course so that students need to have basic listening, speaking, reading and writing skills.
This course also requires the fundamental knowledge of the following courses, Calculus, Differential Equation, Circuit.