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：汪向榮

Instructor:Shiang-Jung Wang

課程名稱：耐震設計

Course Title：Earthquake-Resistant Design

2026/11/4

課程代號：CT6005703 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：W6(IB-601-2) W7(IB-601-2) W8(IB-601-2) 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 explains the development, principles, and provisions of the seismic design codes for buildings in the US and Taiwan. After taking this course, the participant students can understand the philosophy of the US and Taiwan seismic design codes and should be capable of designing a building structure in accordance with these design codes.
課程大綱： Outline of Lectures	1. Basic Seismology 2. Response Spectra and Design Earthquakes 3. Response Spectrum Analysis 4. Basic Concepts in Earthquake Resistant Design 5. Introduction to US Seismic Design Codes 6. Minimum Design Loads and Associated Criteria for Buildings and Other Structures, ASCE/SEI 7 7. Taiwan Seismic Design Code for Buildings
授課方式： Method of Instruction	講授 Lecture：80% 分組討論 Group discussion：10% 案例研討 Case study：10% 操做練習 Practical exercises：0% 講授 Lecture：%
教科書： Textbooks	Minimum Design Loads and Associated Criteria for Buildings and Other Structures, ASCE Standard ASCE/SEI 7, American Society of Civil Engineers.
參考書目： References	Chopra Anil K. Dynamics of Structures: Theory and Applications to Earthquake Engineering, 4th ed., Prentice Hall.
修課須知： Notice	N/A
評量方式： Grading	Homework and Project (40%), Midterm Exam (30%), Final Exam (30%)
備註說明： Notes	Pre-required Courses: Dynamics, Dynamics of Structures, Advanced Structural Theory