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：歐治均

Instructor:OU CHIHCHUN

課程名稱：鋼結構構件行為學

Course Title：Behavior of Steel Members

2026/11/3

課程代號：CT6301701 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：R2(IB-610) R3(IB-610) R4(IB-610) Time/Location	
專業核心能力： Core Professional Competencies	
課程網址：https://drive.google.com/drive/u/1/home Course Website	
課程宗旨： Course Objectives	鋼結構構件之彎曲、剪力與扭力分析，結構穩定介紹，柱構件之結構行為，梁－柱構件之結構行為，梁構件之結構行為。 Elastic behavior, inelastic behavior, instability, and ultimate strength of steel structural members under bending, shear, axial force, and torsion is covered. Instability of frames is introduced. The theory and development benind design specification are discussed.
課程大綱： Outline of Lectures	鋼結構構件之彎曲、剪力與扭力分析，結構穩定介紹，柱構件之結構行為，梁－柱構件之結構行為，梁構件之結構行為。 Elastic behavior, inelastic behavior, instability, and ultimate strength of steel structural members under bending, shear, axial force, and torsion is covered. Instability of frames is introduced. The theory and development benind design specification are discussed.
授課方式： Method of Instruction	講授 Lecture：30% 分組討論 Group discussion：25% 案例研討 Case study：20% 操做練習 Practical exercises：25% 講授 Lecture：(None)%
教科書： Textbooks	1. W. F. Chen and E. M. Lui, Structural Stability - Theory and Implementation, 1987. 2. A. P. Boresi, R. J. Schmidt, Advanced Mechanics of Materials, 5th Edition, John Wiley & Sons, INC.
參考書目： References	S. P. Timoshenko and J. M. Gere, Theory of Elastic Stability, 2nd Edition, 1961.
修課須知： Notice	(None)
評量方式： Grading	Grade:(25%each) • Assignments&Inclass • Mid-termexam • Finalexam • Presentation
備註說明： Notes	

Requirements:
1. Mechanics of materials
2. Theory of structures
3. Differential equations and partial differential equations
4. Steel structural design