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：蕭博謙

Instructor:Po-Chien Hsiao

課程名稱：高等鋼結構行為與設計

Course Title：Advanced Behavior and Design of Steel Structure

2026/11/3

課程代號：CT6303701 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-601-2) W3(IB-601-2) W4(IB-601-2) Time/Location	
專業核心能力： Core Professional Competencies	
課程網址：N/A Course Website	
課程宗旨： Course Objectives	To introduce and train students to have the capability of performing advanced design of steel structures, and to build their comprehensive understanding of the seismic design methodology of steel structures covering the aspects of the mechanics, design codes, and practical applications.
課程大綱： Outline of Lectures	1.Eccentric Connections - Welded and Bolted 2.Composite Beams and Columns 3.Moment Resisting Connections 4.Overview of Seismic Design of Steel Structures 5.Special Moment Resisting Frame Systems (SMRF) 6.Special Concentrically Braced Frame Systems (SCBF) 7.Eccentrically Braced Frame Systems (EBF) 8.Buckling Restrained Braced Frame Systems (BRBF)
授課方式： Method of Instruction	講授 Lecture：80% 分組討論 Group discussion：0% 案例研討 Case study：20% 操做練習 Practical exercises：0% 講授 Lecture：N/A%
教科書： Textbooks	・Class Notes ・W.T. Segui, Steel Design, 5th Edition.
參考書目： References	・C.G. Salmon and J.E. Johnson, Steel structures - Design and Behavior, 4th Edition. ・ASCE/SEI 7, Minimum Design Loads for Buildings and Other Structures ・AISC 360, Specification for Structural Steel Buildings ・AISC 341, Seismic Provisions for Structural Steel Buildings ・鋼結構行為與設計，陳生金編著，科技圖書出版。
修課須知： Notice	TA Office: T2-104-5
評量方式： Grading	

	Homework and class performance 20% Mid-term examination 25% Final examination 25% Final Project (Oral Presentation and Written Report) 30%
備註說明： Notes	N/A