

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：林子仁

Instructor:Tzu-Jen Lin

課程名稱：材料力學

Course Title : Mechanics of Materials

2026/5/6

課程代號：TX4303301 Course Code 學分數：3 Credits	必選修：必修/半學年 Required/Elective:Required/Half Yr. 先修課程： Prerequisites
節次教室：M6(TR-310-1) R3(TR-310-1) R4(TR-310-1) Time/Location	
專業核心能力： Core Professional Competencies	
課程網址： Course Website https://www.youtube.com/playlist?list=PLwwTz0GVILdJHAXS4i3wXZAC7ngXIRZl1	
課程宗旨： Course Objectives	使學生瞭解材料受拉力、壓力、扭力與彎矩等負載時所產生之應力及應變。 This course provides students with an understanding of the relation between the loads applied to a structural member and the resulting stresses and strains. The main topics covered are the analysis and design of the structural member subjected to tension, compression, torsion, and bending.
課程大綱： Outline of Lectures	使學生瞭解材料受拉力、壓力、扭力與彎矩等負載時所產生之應力及應變。 This course provides students with an understanding of the relation between the loads applied to a structural member and the resulting stresses and strains. The main topics covered are the analysis and design of the structural member subjected to tension, compression, torsion, and bending.
授課方式： Method of Instruction	講授 Lecture：80% 分組討論 Group discussion：0% 案例研討 Case study：0% 操做練習 Practical exercises：20% 講授 Lecture：%
教科書： Textbooks	Statics and Mechanics of Materials 5/E (SI Units) Author: R. C. Hibbeler
參考書目： References	Less Boring Lectures: Statics: Engineering Mechanics https://www.youtube.com/playlist?list=PLd-0K-8ZyMOVjXkFKsQjJMFkh7_bgRJhN Less Boring Lectures: Mechanics of Materials https://www.youtube.com/playlist?list=PLd-0K-8ZyM0XchoS2-i9DCR-MD951RQNG Jeff Hansion: Online Statics Course https://www.youtube.com/playlist?list=PLRqDfxcafc23LXGoItpkYMKtUdHaQwSDC Jeff Hansion: Online Mechanics of Materials (Solids) Course https://www.youtube.com/playlist?list=PLRqDfxcafc21wlI3E56IkDmRJ-33apMjv

修課須知：
Notice

評量方式：
Grading Midterm exam 25%
Final exam 25%
Homework 30%
Attendance 5%
Class Activity 15%

備註說明：
Notes