# 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：蔡孟廷

Instructor:Meng-Ting Tsai

課程名稱：結構行為(一)

Course Title：Structure Behavior (1)

2026/11/3

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| 課程代號： AD2401301<br>Course Code<br>學分數： 3<br>Credits | 必選修：必修/半學年<br>Required/Electve:Required/Half Yr.<br>先修課程：<br>Prerequisites |
| 節次教室：<br>Time/Location | M2(T4-303) M3(T4-303) M4(T4-303) |
| 專業核心能力：<br>Core Professional Competencies | |
| 課程網址：<br>Course Website | |
| 課程宗旨：<br>Course Objectives | 質點作用力、剛體作用力、力之分布與平衡、結構內力之解析、桁架結構、梁結構、剛框結構、吊索結構、摩擦力、面積之慣性矩。<br>This course mainly teaches the fundmental knowledge of structural behavior, including the distribution of the force, recation of the support, truss analysis, and so on. Students will learn the force distribution and calculation in the single component of the sturctural system, hence, integrating the focre distribution in the structural elements to the whole structural system, understanding how force flows in a structire system in a Architecture. |
| 課程大綱：<br>Outline of Lectures | 質點作用力、剛體作用力、力之分布與平衡、結構內力之解析、桁架結構、梁結構、剛框結構、吊索結構、摩擦力、面積之慣性矩。 |
| 授課方式：<br>Method of Instruction | 講授 Lecture：%<br>分組討論 Group discussion：%<br>案例研討 Case study：%<br>操做練習 Practical exercises：%<br>講授 Lecture：% |
| 教科書：<br>Textbooks | |
| 參考書目：<br>References | |
| 修課須知：<br>Notice | |
| 評量方式：<br>Grading | |
| 備註說明：<br>Notes | |