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：黃雅慧

Instructor:HUANG, YA-HUI

課程名稱：化學工程實習(二)

Course Title：Chemical Engineering Lab. (2)

2026/6/22

課程代號： TE3042301 Course Code 學分數： 1 Credits	必選修：必修/半學年 Required/Electve:Required/Half Yr. 先修課程： Prerequisites
節次教室： W2(E2-001) W3(E2-001) W4(E2-001) Time/Location	
專業核心能力： Core Professional Competencies	規劃與執行實驗，並具解析數據之能力。 執行工程實務所需技術、技巧及使用現代化工具及儀器操作的能力。 能發掘、分析、應用研究成果及因應複雜且整合性工程問題之能力。
課程網址： Course Website	
課程宗旨： Course Objectives	Student will operate the machine independently and organize the results after experiment. And students could apply the professional knowledge includes unit operation and transport phenomenon during the operation and data orgnization.
課程大綱： Outline of Lectures	The experimental topics include unit operation experiments and dynamic process simulation. The schedule of the experimental topics for each group will be announced in the Lab. 1. Calibration of air flow rate 2. Pressure drop of packed tower 3. Heat transfer in an agitation tank 4. Drying of solids 5. Wetted wall column 6. Temperature Control 7. Reverse osmosis 8. Distillation of ethanol water mixture
授課方式： Method of Instruction	講授 Lecture：30% 分組討論 Group discussion：10% 案例研討 Case study：0% 操做練習 Practical exercises：60% 講授 Lecture：%
教科書： Textbooks	Chemical Engineering Experiment Manual (Self-Compiled) Department of Chemical Engineering National Taiwan University of Science and Technology.
參考書目： References	1.Geankoplis, C. J., Hersel, A. A., Lepek, D. H., Transport Processes and Separation Process Principles, 5th ed., Pearson Education Limited (2018). 2.Geankoplis, C. J., Transport Processes and Separation Process Principles, 4th ed., Pearson Education Limited (2014).
修課須知： Notice	

評量方式： Grading	1.10% Attendance & punctuality 2.15% Oral Q&A 3.25% Pre-report 4.35% Final report 5.5% Team members evaluate each other 6.10% Performance
備註說明： Notes	