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：高夢瑤

Instructor:Mengyao Gao

課程名稱：化工實務

Course Title：Field work

2026/11/3

課程代號： CH4819301 Course Code 學分數： 2 Credits	必選修：必修/半學年 Required/Electve:Required/Half Yr. 先修課程： Prerequisites
節次教室： Time/Location	T6(IB-508) T7(IB-508)
專業核心能力： Core Professional Competencies	1.須具備三年的化工基礎訓練 2.實務學習經驗，培養同學實作能力 3.團隊合作之能力 4.溝通與表達: 定期口頭與書面報告 1.Trained at least 3 years from Chemical Engineering 2.Practical work and hands on skills 3.Team player 4.Communication in both oral presentation and writing reports
課程網址： Course Website	NONE.
課程宗旨： Course Objectives	This lecture is designed to provide practical training for senior students who have completed three years of foundational coursework in chemical engineering. Students will develop hands-on skills and receive professional training through placements in companies, factories, or laboratories across various chemical engineering-related industries. In addition, strong emphasis will be placed on teamwork and professional communication skills, both oral and written. Student performance will be evaluated through oral presentations and written reports.
課程大綱： Outline of Lectures	

2026 Field Work Schedule
1. Company: Taiwan Semiconductor Manufacturing Company 台灣積體電路製造公司

Date Time Course / Section Person in Charge
March 17, 2026 12:20 - 14:30 搭遊覽車去新竹
Going to Hsinchu
14:30 - 14:50 公司介紹
Introduction of company
15:00 - 15:50 實地考察及說明
Site Visit and Explanation
16:00 - 16:50 總結/結束
Conclusion / Closing
17:00 - 19:00 搭遊覽車回台北
Back to Taipei

2. Company: Trade Wind Biotech 全瑩生技股份有限公司

Date Time Course / Section Person in Charge
March 24, 2026 12:20 - 13:30 搭遊覽車去宜蘭
Going to Yilan
13:30 - 13:50 歡迎致辭&介紹短片
Welcome Speech & Introduction Video Clip
14:00 - 14:50 公司介紹
Introduction of company
15:00 - 15:50 實地考察及說明
Site Visit and Explanation
16:00 - 16:50 總結/結束
Conclusion / Closing
17:00 - 19:00 搭遊覽車回台北
Back to Taipei

3. Company: Chungtai Resource Technology Corp.中台資源科技股份有限公司一廠 （王經理分機：505）

Date Time Course / Section Person in Charge
April 28, 2026 12:20 - 13:30 搭遊覽車去桃園
Going to Taoyuan
13:30 - 13:50 歡迎致辭&介紹短片
Welcome Speech & Introduction Video Clip
14:00 - 14:50 公司介紹
Introduction of company
15:00 - 15:50 實地考察及說明
Site Visit and Explanation
16:00 - 16:50 總結/結束
Conclusion / Closing
17:00 - 19:00 搭遊覽車回台北
Back to Taipei

4. Company: CHIEH AN Company Ltd. 潔安環保工程有限公司

Date Time Course / Section Person in Charge
May 5, 2026 12:20 - 14:30 搭遊覽車去苗栗
Going to Miaoli
14:30 - 14:50 公司介紹
Introduction of company
15:00 - 15:50 實地考察及說明
Site Visit and Explanation
16:00 - 16:50 總結/結束
Conclusion / Closing
17:00 - 19:00 搭遊覽車回台北
Back to Taipei

授課方式： Method of Instruction	講授 Lecture：20% 分組討論 Group discussion：40% 案例研討 Case study：40% 操做練習 Practical exercises：0%

	講授 Lecture：NONE.%
教科書： Textbooks	NONE.
參考書目： References	NONE.
修課須知： Notice	NONE.
評量方式： Grading	Industry/Fieldwork Performance (40%) Evaluation by the on-site supervisor based on professionalism, technical competence, responsibility, and teamwork. Written Technical Report (30%) A structured report documenting the background, methodology, problem analysis, and reflection on the practical experience. Oral Presentation (20%) Formal presentation summarizing the field experience, technical insights, and learning outcomes. Participation and Discussion (10%) Active engagement in scheduled discussions and peer feedback sessions.
備註說明： Notes	To ensure students are adequately prepared for professional training in industry or laboratory settings, the following prerequisites are required: 1. Academic Prerequisites: Completion of at least three years of core Chemical Engineering coursework, including:Transport Phenomena. Thermodynamics. Chemical Reaction Engineering. Unit Operations. Process Control (recommended).