

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

2026/6/22

<p>課程代號： CH4819301 Course Code</p> <p>學分數： 2 Credits</p>	<p>必選修：必修/半學年 Required/Elective: Required/Half Yr.</p> <p>先修課程： Prerequisites</p>
<p>節次教室： T6(IB-508) T7(IB-508) Time/Location</p>	
<p>專業核心能力： Core Professional Competencies</p> <ol style="list-style-type: none"> 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 <ol style="list-style-type: none"> 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 	
<p>課程網址： NONE. Course Website</p>	
<p>課程宗旨： Course Objectives</p> <p>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.</p>	
<p>課程大綱： Outline of Lectures</p>	

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: 講授 Lecture: 20%
Method of Instruction 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	<p>Industry/Fieldwork Performance (40%) Evaluation by the on-site supervisor based on professionalism, technical competence, responsibility, and teamwork.</p> <p>Written Technical Report (30%) A structured report documenting the background, methodology, problem analysis, and reflection on the practical experience.</p> <p>Oral Presentation (20%) Formal presentation summarizing the field experience, technical insights, and learning outcomes.</p> <p>Participation and Discussion (10%) Active engagement in scheduled discussions and peer feedback sessions.</p>
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).