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：鄭政利

Instructor:Cheng-Lee Cheng

課程名稱：綠色建築計劃

Course Title：Planning of Green Architecture

2026/11/3

課程代號：AD4307701 Course Code 學分數：3 Credits	必選修：選修/半學年 Required/Electve:Elective/Half Yr. 先修課程： Prerequisites
節次教室：M2(TR-310-2) M3(TR-310-2) M4(TR-310-2) Time/Location	
專業核心能力： Core Professional Competencies	
課程網址： Course Website	

課程宗旨：Course Objectives

「綠色建築計劃」並不是在建築上種樹植栽的綠化工作而已，而是一種對於居住環境進行全面性、系統性的環保設計理念的實現，也是一種強調與地球環境共生共榮的建築環境設計觀念。本課程希望加強同學這方面的設計理念與專業知識。課程將從建築物理環境控制的手法介紹，到風土氣候環境條件的考慮應用與理解學習著手。課程內容包括地球環境背景、綠建築、淨零排放、低碳能源的新時代、綠建築標章制度、手冊修訂更新、建築能效評估系統、近零能源建築、低碳零能源建築，同時也將讓同學練習綠建築設計的各種操作手法應用，與介紹國內外之綠建築實際案例。

The "Green Building Planning" is not just a greening project of planting trees on buildings, but a realization of a comprehensive and systematic environmental design concept for the living environment. It is also a building environment design concept that emphasizes co-existence and prosperity with the earth's environment. This course hopes to strengthen students' design concepts and professional knowledge in this area. The course will start with an introduction to the techniques of controlling the physical environment of buildings, and then move on to the consideration, application and understanding of local climate and environmental conditions. The course content includes the earth's environmental background, green buildings, net zero emissions, the new era of low-carbon energy, the green building label system, manual revision and update, building energy efficiency assessment system, near-zero energy buildings, and low-carbon zero energy buildings. At the same time, students will also be allowed to practice the application of various operational techniques in green building design and introduce actual green building cases at home and abroad.

課程大綱：Outline of Lectures

「綠色建築計劃」並不是在建築上種樹植栽的綠化工作而已，而是一種對於居住環境進行全面性、系統性的環保設計理念的實現，也是一種強調與地球環境共生共榮的建築環境設計觀念。本課程希望加強同學這方面的設計理念與專業知識。課程將從建築物理環境控制的手法介紹，到風土氣候環境條件的考慮應用與理解學習著手。課程內容包括地球環境背景、綠建築、淨零排放、低碳能源的新時代、綠建築標章制度、手冊修訂更新、建築能效評估系統、近零能源建築、低碳零能源建築，同時也將讓同學練習綠建築設計的各種操作手法應用，與介紹國內外之綠建築實際案例。

授課方式：Method of Instruction

講授 Lecture：%

分組討論 Group discussion：%

案例研討 Case study：%

操做練習 Practical exercises：% 講授 Lecture：%
教科書： Textbooks
參考書目： References
修課須知： Notice
評量方式： Grading
備註說明： Notes