

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：廖硃岑

Instructor:ChuTsenLiao

課程名稱：建築構法計畫

Course Title : Building Construction Planning

2026/5/6

<p>課程代號： AD3202701 Course Code</p> <p>學分數： 3 Credits</p>	<p>必選修：選修/半學年 Required/Electve:Elective/Half Yr.</p> <p>先修課程： Prerequisites</p>
<p>節次教室： T6(IB-504) T7(IB-504) T8(IB-504) Time/Location</p>	
<p>專業核心能力： Core Professional Competencies</p>	
<p>課程網址： NA Course Website</p>	
<p>課程宗旨： The building construction process is a series of building production, from raw materials, planning, design, construction, maintenance, demolition, and reconstruction. Building construction planning aims to enable learners to understand learning construction logically through the production process and then connect it with practice. Course Objectives Workshop topic--Regeneration Design of Motomachi High-Rise Housing: Addressing the challenges faced by Motomachi High-Rise Housing (an 80-year postwar urban public housing community) through spatial design strategies. This course takes the real Japanese social housing project, Motomachi High-Rise Housing, as its primary case study, guiding students to understand housing planning and design in Japan. Through on-site investigations and user interviews, students will identify key issues faced by aging social housing communities. Design proposals will be developed to address housing problems, from renovation strategies to operational management. Topics include large-scale renovation of the lower floors (Levels 1-4) adjacent to the ground, modification of structural building units, and improvement of lower-level zones in high-rise housing to promote neighborhood revitalization.</p>	
<p>課程大綱： Outline of Lectures</p>	

Workshop in Hiroshima

Day 1 (6/14):Arrival at Hiroshima International Airport, travel by bus to Miyajima Itsukushima Shrine.

Day 2 (6/15):Course session at the Motomachi High-Rise Housing community hall:(1) Introduction to the project theme and postwar Hiroshima architecture(2) Presentation on the current conditions and issues of Motomachi High-Rise Housing(3) On-site visit to Motomachi High-Rise Housing

12:00 - 19:00 Design work and nearby architectural visits:(1) Visit to buildings in the Hiroshima Peace Memorial Park area(2) Group discussions on design concepts (six groups)(3) Presentation of design concepts

Day 3 (6/16):09:00 - 12:00 Group design work and discussions in the Architectural Drawing Studio, Faculty of Engineering, Hiroshima University.12:00 - 18:00 Continued studio work with instructors, who provided feedback and revision suggestions for each group.

Day 4 (6/17):09:00 - 18:00 Group design work and discussions in the Architectural Drawing Studio, Faculty of Engineering, Hiroshima University.

Day 5 (6/18):Final preparation for design presentations at the Motomachi High-Rise Housing community hall.13:00 - 19:00 Final presentations by six groups. Each group: 15-minute presentation + 25-minute review and discussion (40 minutes total).

Day 6 (6/19):Take the airport bus from Saijo Station to Hiroshima International Airport.

授課方式： 講授 Lecture：10%  
Method of Instruction 分組討論 Group discussion：40%  
案例研討 Case study：20%  
操做練習 Practical exercises：30%

講授 Lecture：Class Time and Location:  
National Taiwan University of Science and Technology IB504: 3 weeks(beginning and end of semester, February - June 2026)  
Hiroshima University, Japan: 6 days(Week 17th, June 14 - June 19, 2026)%

教科書： Shuichi Matsumura, Open architecture for the people - Housing development in Post-War Japan, Routledge, 2020.

參考書目： Yositika Utida, The construction and culture of architecture today: a view from Japan, Ichigaya Pubilshing Co., Ltd, 2009.

修課須知： A teaching assistant (TA) is assigned to this course.  
Notice

評量方式： Design Deliverables:Design concepts with corresponding conceptual diagrams.Basic drawings such as plans, elevations, sections, and perspectives should be included to present the final proposal.  
Grading Presentation:Final presentations will be delivered using PowerPoint.If time permits, physical models may be produced as supplementary materials.

備註說明： Students are required to have completed a Building Construction course prior to enrollment.  
Notes