



**HOW CAN MTR BUILD COMMUNITIES BUT NOT JUST REAL ESTATES THAT NO ONE CAN AFFORD?
TSUEN WAN LINE COMMUNITY TRUST**

INSTRUCTOR
Dr. Tat LAM
tat@shanzhai.city

ASSISTANT
--

DESCRIPTION

Inspired by the award-winning project of New York Community Trust, this studio attempts to imagine the future development along one of the earliest subway lines in Hong Kong, Tsuen Wan Line, to explore more inclusive urban development strategies, bottom-up financing schemes, and public-private partnership models, so that public companies like the MTR can contribute to a more equitable public infrastructure development paradigm in Hong Kong. Tsuen Wan Line Community Trust is a proposal to the government of Hong Kong and the MTR Company to work closely with the grassroots communities along the subway line. This project takes Tsuen Wan Line as a starting point and aims at proposing the ideas to all future developments of subway lines in Hong Kong.

Tsuen Wan Line runs through districts where either underwent gentrification historically or are currently facing challenges of poverty and urban renewal. Other than top-down urban renewal policy and market-driven real estate developments, we would like to explore alternative models that the general public and the grassroots communities in these regions can participate in the decision-making processes, mitigate the risk of the inevitable displacement of themselves and even share long-term benefits from the redevelopment financially and socially. More importantly, MTR Company, as a private company listed on the stock exchange but influencing people's everyday life, can do more than developing real estate housing. Thus, the studio will study international cases and design local practical solutions about how infrastructural development can benefit the grassroots through a public-private partnership.

This year, we will build on the knowledge generated from the last studio in 2020 and 2021, about the collective social housing scheme. We will depart from simply researching and reacting to the needs of the grassroots, and move towards exploring potential financing schemes to realize the concepts through involving MTR as an imaginary funder for the realization. In the studio, we will touch multidisciplinary knowledge from urban design, architectural design, development finance, public policy, social entrepreneurship, and financial technologies.

You will research and design the following potential sites for urban development and architectural solutions. (students can also propose other topics or sites following the subway line and based on specific collective development model):

- Central Station: public-private partnership for culture and heritage, such as Central Market
- Yau Ma Tei Station: public-private partnership for market
- Sham Shui Po Station: public-private partnership for low-income housing
- Lai Chi Kok Station: public-private partnership for industrial building renewal
- Tsuen Wan Station: public-private partnership for public space-making

Additional to architecture, if you are interested in the topics of urbanism of just, innovative development models, development economics, development finance, decentralized technologies, and fintech, please join us.

PROCESS

The studio will try to blend research, community engagement, and design throughout the whole year. Students are expected to research, engage and design at the same time for each task mentioned later on. At the beginning of the studio (first half of 1st semester), we will collectively develop the framework for 'Tsuen Wan Line Community Trust' as a common backbone to link all different projects, followed by urban design solutions to illustrate the Trust in the second half of 1st semester. In the 2nd semester, we will propose specific architectural interventions to solve problems along the subway line on behalf of the Trust.

1_Research Topics

Students are expected to get familiar about urban development models, particular to those existing cases related to subway development strategies:

1. MTR Urban development strategy in Hong Kong
2. MTR Urban development strategy in Shenzhen and other cities
3. Other cases globally
 - a. MRT investment in Singapore
 - b. Line no. 7 investment and development in New York
 - c. Neom/The line in Saudi Arabia
 - d. Other cases by the students

Students will also work on innovative cases for urban development:

1. Real estate investment trust
2. Cooperative housing or development
3. Cryptocurrency and crypto economics for real estate development
4. Social entrepreneurship for space making, etc.

2_Tasks

2.1_ Tasks (Semester 1) – Urban design solutions

1. Task 1 – Community Engagement (2 weeks)
Site visits, community engagement focus groups, expert consultation
2. Task 2 – Community Workshops (2 weeks)
Community workshops, expert workshops
3. Task 3 – Development model research (3 weeks)
Research topics mentioned in 1
4. Task 4 – Urban Design Solutions (2 weeks)
Developing plans for sites at urban scale to address the findings from research
5. Task 5 – Development Strategy Proposal to MTR (2 weeks)
Development model design

2.2_ Tasks (Semester 2) – Architectural design solutions

1. Task 1 – Design brief development (3 weeks)
Working in groups to develop multiple design brief based on outcomes of semester 1
2. Task 2 – Technical Report (3 weeks)
Select a Construction System. Research Case studies and develop a sectional model of the system.
3. Task 3 – Architectural Definition (4 weeks)
Developing architectural solutions
4. Task 4 – Final Presentation (3 weeks)
Plans, Sections, Elevations, Axonometric, Model and views
5. Task 5 - Process Portfolio (1 week)
Evolution of the project

3_Teamwork and individual work

The students will both work in group and individually to finish all tasks during the 1-year long studio.

1. During the first semester, you will work in teams of 2-3 students (5-6 teams)
2. Collectively you will perform each of the tasks of the first semester
3. In the second semester, students will develop multiple design brief together (up to 4)
4. You will pursue **individual projects** for architecture design

4_Sites

The studio is recommending the following sites, but during the process, students are free to propose other sites.

- Central Station: public private partnership for culture and heritage, such as Central Market
- Yau Ma Tei Station: public private partnership for market
- Sham Shui Po Station: public private partnership for low income housing
- Lai Chi Kok Station: public private partnership for industrial building renewal
- Tusen Wan Station: public private partnership for public space making

DELIVERABLES

1. **Research Report**
Collective materials from all groups about the Community Trust proposal
Publication/book/website
2. **Urban Design Proposals**
Slides or drawings
3. **Site Models (Urban Design)**
Site models of the districts for urban design
6. **Concept**
Architectural design drawings
A2x6 panels
7. **Technical Report**
Technical report A3x 30 pages
8. **Architectural Definition**
Develop using experimental and scale models
Series of models studies, multiple scales
A2x6 Photos of models
9. **Final Presentation**
A2x8 panels
Plans, Sections, Elevations, Axonometric, Model and views
10. **Process Portfolio**
Process Report A3x 30 pages
Evolution of the project

LEARNING OUTCOME

1. Ability to create architectural designs that satisfy both aesthetic and technical requirements.
2. Adequate knowledge of the histories and theories of architecture and the related arts, technologies and human sciences.
3. Knowledge of the fine arts as an influence on the quality of architectural design.
4. Understanding of the relationship between people and buildings, and between buildings and their environment, and the need to relate buildings and the spaces between them to human needs and scale
5. Understanding of the methods of investigation and preparation of the brief for a design project.
6. Ability to generate complex design proposals showing understanding of current architectural issues, originality in the application of subject knowledge and, where appropriate, to test new hypotheses and speculations.
7. Ability to evaluate and apply a comprehensive range of visual, oral and written media to test, analyses, critically appraise and explain design proposals.
8. Awareness of the theories and methods of inquiry that seek to show the relationship between human behaviour and the physical environment.
9. Understanding of the basic principles of sustainable development and architects' responsibilities with respect to the social, economic and environmental sustainability in architecture and urban design.
10. Understanding of the principles of structural behaviour in withstanding gravity and lateral forces, and the range and appropriate applications of contemporary structural system.

11. Ability to assemble a comprehensive programme for an architecture project, including:
12. Ability to respond to natural and built site characteristics in the development of a programme and design of a project.
13. Ability to work cooperatively with others in a team setting. Ability to discuss architectural ideas with non-architects, to listen objectively to their opinions and to consider those opinions in designing.
14. Ability to speak and write effectively on subject matters contained in the professional curriculum in English.
15. Ability to use appropriate representational media, such as drawings, models, diagrams, charts, including computer technology, to convey essential design information at each stage of the programming and design process.

ASSESSMENT SCHEME

1_Midterm Reviews (30%)

1. Midterm Review 1, October (10%)
2. Midterm Review 2, December (10%)
3. Midterm Review 3, March (10%)

2_Final Review (50%)

1. Final Project Presentation, May (50%)

3_Project Book (20%)

1. Project Book to have three parts: Position/ Technology / Process
2. To be started at the beginning of the year and reviewed throughout.

COURSE FORMAT

1_Group Work

1. Students are allowed to work in groups only the first semester.
2. The second semester will be all individual projects.

2_Teaching Days

1. The Design Studio will be taught two days a week Monday and Thursday 13:30 to 18:00

3_Studio Spaces

1. Each Studio will have their own space, accommodating a desk for each student
2. Layouts will be issued at the start of the academic year

FIELD TRIP

At present all foreign trips are suspended until further notice. If the COVID-19 situation improves, the school will inform the Design Studio tutors.

REQUIRED READINGS

Jeffrey Johnson, Tat Lam, Cressica Brazier (eds), China Lab Guide to Megablock Urbanism, Actar, 2020.

Neville Mars, Adrian Hornsby, The Chinese Dream: A Society Under Construction, nai010 publishers, 2013

New York Community Trust Reports, <https://www.nycommunitytrust.org/publications/>

IMPORTANT NOTE TO STUDENTS

Attendance

Class attendance is required in all courses. For an excused absence, the instructor must be notified and presented with documentation of illness or personal matter. Please note: **Three (3)** or more unexcused absences may result in a failing grade for the course.

Academic Honesty

Attention is drawn to University policy and regulations on honesty in academic work, and to the disciplinary guidelines and procedures applicable to breaches of such policy and regulations. Details may be found at: <http://www.cuhk.edu.hk/policy/academichonesty/>. With each assignment, students may be required to submit a statement that they are aware of these policies, regulations, guidelines and procedures.

Student Work

Submission of studio documentation must be complete and correctly formatted. Missing or incomplete submission of the documentation folder will result in the grade for the course being withheld. This will prevent registration for the following term or delay graduation. In addition, a grade deduction of *one letter grade* will be made.

SCHEDULE

Important Dates

SEMESTER 1

1_Midterm Reviews (30%)

Midterm Review 1, 25-29 October 2021 (10%)

Midterm Review 2, 06-10 December 2021(10%)

SEMESTER 2

Midterm Review 3, 01-04 March 2022 (10%)

2_Final Review (50%)

Final Project Presentation, 09-13 May 2022 (50%)

3_Project Book (20%)

Project Book to have three parts: Position/ Technology / Process, 13 May 2022 (20%)

Term 1: 6 September 2021 (Mon) – 4 December 2021 (Sat)

WEEK 01		
06.09	INTRODUCTION	STUDIO SELECTION
09.09		Results Announced, studio introduction
WEEK 02		
13.09	COMMUNITY ENGAGEMENT	Site visit
16.09		Workshop with community

WEEK 03		
20.09		Site visit
23.09		Workshop with expert
WEEK 04		
27.09	RESEARCH	Introduction of research topics
30.09		Presentation: Alternative development models
WEEK 05		
04.10		Desk crit
07.10		Desk crit
WEEK 06		
11.10		Presentation of research findings (internal)
14.10		Chung Yeung Festival
WEEK 07		
18.10	URBAN DESIGN	Ideation
21.10		Presentation: crypto economics and urban development
WEEK 08		
25.10 – 29.10		MIDTERM REVIEW 1 (10%)
WEEK 09		
01.11	DESIGN DEVELOPMENT	Desk crit
04.11		Presentation: realizing the concept
WEEK 10		
08.11		Desk crit
11.11		Desk crit

WEEK 11		
15.11		Desk crit
18.11	URBAN DESIGN WRAP UP	Desk crit

WEEK 12		
22.11	DEVELOPMENT MODEL DESIGN	Desk crit
25.11		Desk crit

WEEK 13		
29.11		Desk Crit
02.12		Desk crit

WEEK 14		
06.12 – 10.12		MIDTERM REVIEW 2 (10%)

Term 2: 10 January 2022 (Mon) – 23 April 2022 (Sat)

WEEK 15 (2022)		
10.01	ARCHITECTURAL PROBLEM IDENTIFICATION	Group workshop
13.01		Group workshop

WEEK 16		
17.01	TECHNICAL RESEARCH	Technical research
20.01		Technical research

WEEK 17		
24.01	DESIGN PROPOSAL	Desk crit
27.01		Presentation: Urban entrepreneurship

WEEK 18		
31.01 – 05.02		Lunar New Year Vacation

WEEK 19		
07.02		Desk crit
10.02		Desk crit
WEEK 20		
14.02		Desk crit
17.02		Desk crit
WEEK 21		
21.02		Desk crit
24.02		Desk crit
WEEK 22		
01.03 – 04.03		MIDTERM REVIEW 3 (10%)
WEEK 23		
07.03	DESIGN DEVELOPMENT	Desk crit
10.03		Desk crit
WEEK 24		
14.03		Desk crit
17.03		Desk crit
WEEK 25		
21.03		Desk crit
24.03		Desk crit
WEEK 26		
28.03		Desk crit
31.03	DESIGN FINALIZATION	Desk crit

WEEK 27		
04.04	PRODUCTION	Desk crit
07.04		Desk crit
WEEK 28		
11.04		Desk crit
14.04		Desk crit
WEEK 29		
18.04		Easter Monday
WEEK 30		
25.04		Desk crit
28.04		Desk crit
WEEK 31		
02.05		The day following Labour Day
03.05-06.05		FINAL REVIEW (50%)
WEEK 32		
09.05		
13.05		PROJECT BOOK (20%)
		Project Book to have three parts: Position/ Technology / Process