SCHOOL OF ARCHITECTURE · CUHK · 2O20 - 2O2I

Message from the Director

Over the past year we have re-imagined learning pathways in architecture. Building on the strongest of foundations, we have created a brand new learning journey that we hope will set new directions for architectural education in the region, opening up imaginations, embracing skills for future practice and radical connections to cross-disciplinary research and design innovation.

The courses herein map a narrative that is founded on the perception of architecture as a creative discipline, human-focused and technology enabled. Embedded in the Faculty of Social Science, the School of Architecture nurtures cross-disciplinary design thinking and its application in the societies of our region. Its Architecture and Urbanism programmes share a focus on environmental and social responsibility. Research-led and design-oriented, our work is grounded in the historical and cultural contexts of East Asia. We celebrate the relationship between design practice and the histories, environments, traditions and technologies of the places we work. Our creative practices celebrate East Asia's regions, their diverse cultures, transforming landscapes and burgeoning cities.

Our School of Architecture sits at the threshold of mainland China and in one of the world's most wonderful cities. Density, spatial, energy and environmental innovation in the Greater Bay Area are set to be globally leading and we are uniquely positioned to contribute to a transformational programme of regeneration. Our classroom is the world's most exciting urban network.

Our graduates must have the capacity to think through the design of fine buildings that respond to the pragmatic needs of our time, that engage the technologies of the day – entering a world of design and spatial practice that addresses today's complex environmental and urban challenges head on. To that end, the School embraces the multiplicity of disciplines and complexity of application inherent to the profession: it nurtures an open, pluralistic environment.

Above all, I want our graduates to be independent, agile thinkers, habitually experimental and relentlessly rigorous. They are creative people who can synthesise complex problems with a high degree of technical expertise. They are practical, articulate – team players, driven by an ethical commitment and a sense of social responsibility, educated to lead the design professions in the societal contexts of the region.

David Dernie
Director and Professor of Architecture
School of Architecture

Contents

Programme Overview

Professional Programmes

BSSc (AS)
Architectural Studies

The Bachelor of Social Science (Architectural Studies) – BSSc (AS) – is the first part of a two-degree sequence in professional architectural education. This sequence is designed to provide a basis for education in general and preparation for professional work as an architect in particular. Students are encouraged to enrich their core of studies in architecture by exploring lateral relationships with other subjects and disciplines as well as through independent study and experience of other cultures. The core of studies consists of design studios in addition to courses offered in humanities, technology and profession.

MArch
Architecture

The Master of Architecture programme – MArch – is the second part of a two-degree sequence in professional architectural education. It is a taught postgraduate programme for students who intend to become architects upon their graduation. The programme offers a series of research-based advanced studios and independent design explorations which both articulate an intellectual position and demonstrate the impact of that position in design. Applicants should have a pre-professional architecture degree (equivalent to HKIA or CAA accreditation), such as the BSSc (AS) from CUHK, and relevant work experience.

Joint Programme

BSSc (US)
Urban Studies

The Bachelor of Social Science (Urban Studies) – BSSc (US) – is designed for students to explore the complexities and challenges of the rapidly evolving urban world, global urbanisation processes and various strands of urbanism. It is jointly organised by the Department of Geography and Resource Management and the School of Architecture, with input from various departments in the Faculties of Social Science and Arts. Besides the learning of theories of urban development, the rigorous application of skills and techniques for urban analysis, and the contextual understanding of sustainable practices, students are required to develop expertise in concentration areas such as urban planning and design, urban environment, urban policy and governance.

Postgraduate Programmes

MSc
Urban Design

Over the past decades, Hong Kong and the Pearl River Delta have been a laboratory for urbanism. Rapid urban growth, mass migration and new policies have led to new urban forms, but environmental deterioration and social imbalance have also increased. Urban design can play an important role to create more liveable and sustainable cities if it is able to integrate knowledge about ecological, economic, and social issues and is based on a clear set of values. The MSc programme in Urban Design is based on a fundamental understanding of environmental and urban economics as well as urban history. Combining design studios and focused course modules, it aims to integrate specific knowledge about urban processes, complex ecosystems and transport networks. The modules act as catalysts for the studio projects, and are organised as think tanks in which students discuss with experts from academia and practice. After an additional period of professional experience, graduates can apply for professional registration from the Hong Kong Institute of Urban Design (HKIUD).

MPhil and PhD

The MPhil and PhD are research postgraduate degrees. Students learn primarily by conducting independent original research, usually through participating in the work of the School's design studios or design research units in Chinese architectural heritage, community participation, computation and simulation, sustainable and environmental design, housing, etc. In some cases, students may also pursue their own topics if feasibility of the topic can be demonstrated upon application.

Curriculum

	Studio	Humanities	Technology	Design Computation	Professional Practice	Electives and Year 1 Faculty Package
BSSc(AS) 1		*arch 1001* Introduction to Architecture: People and Places				Students elect two non-architecture courses from the Social Science Faculty Package (except advanced standing students who elect one).
BSSc(AS) 2	*arch 2111 / arch 2112* Introduction to Architectural Design I & II [Explore I / Explore II]	*arch 2221* Visual Studies *arch 2322* Cultural Contexts I *arch 2323* Cultural Contexts II	*arch 2413* Building Technology I (Materials and Construction) *arch 2422* Building Technology II (Materials and Construction)	*arch 2222* Digital Media		
BSSc(AS) 3	*arch 3113 / arch 3114* Architectural Design Studios I & II [Studio A / Studio B]	*arch 3321* Architecture and Global Culture *arch 3721* Land and City	*arch 3424* Building Technology III (Environmental Technology)			
BSSc(AS) 4	*arch 4115 / arch 4116* Architectural Design Studios III & IV [Studio C / Studio D]		*arch 4425* Building Systems Integration		*arch 4426* Future Practice and Sustainable Response	

total units 78   30   12   18   12   3   3   12

Year Out

	Studio	Humanities	Technology	Design Computation	Professional Practice	Electives and Year 1 Faculty Package
MArch 1	*arch 5111 / arch 5112* Advanced Architectural Design Studios I	*arch 5321* Architectural Theory and Criticism *urbd 5703* Urban History & Theory	*arch 5421* Advanced Building Systems I *arch 5422* Advanced Building Systems II			*arch 5131* Topical Studies in Design Theory *arch 5231* Topical Studies in Computational Design *arch 5331* Topical Studies in History, Theory and Criticism *arch 5431* Topical Studies in Building Technology *arch 5531* Topical Studies in Professional Practice and Management: Future Practice and Sustainable Response *arch 5731* Topical Studies in Urbanism
MArch 2	*arch 6113 / arch 6114* Advanced Architectural Design Studios II				*arch 6521* Professional Practice and Management	

total units 52   28   6   6   3   9

Calendar

2020-21 Term 1

week	event	date
1	First teaching day	07.09 M
2		14.09 M
3		21.09 M
4		28.09 M
	National Day	01.10 Th
	Day following Mid-Autumn Festival	02.10 F
5		05.10 M
6		12.10 M
7		19.10 M
8	Day following Chung Yeung Festival	26.10 M
9		02.11 M
10		09.11 M
11		16.11 M
12		23.11 M
13		30.11 M
14		07.12 M
	Examination period begins	09.12 W

2020-21 Term 2

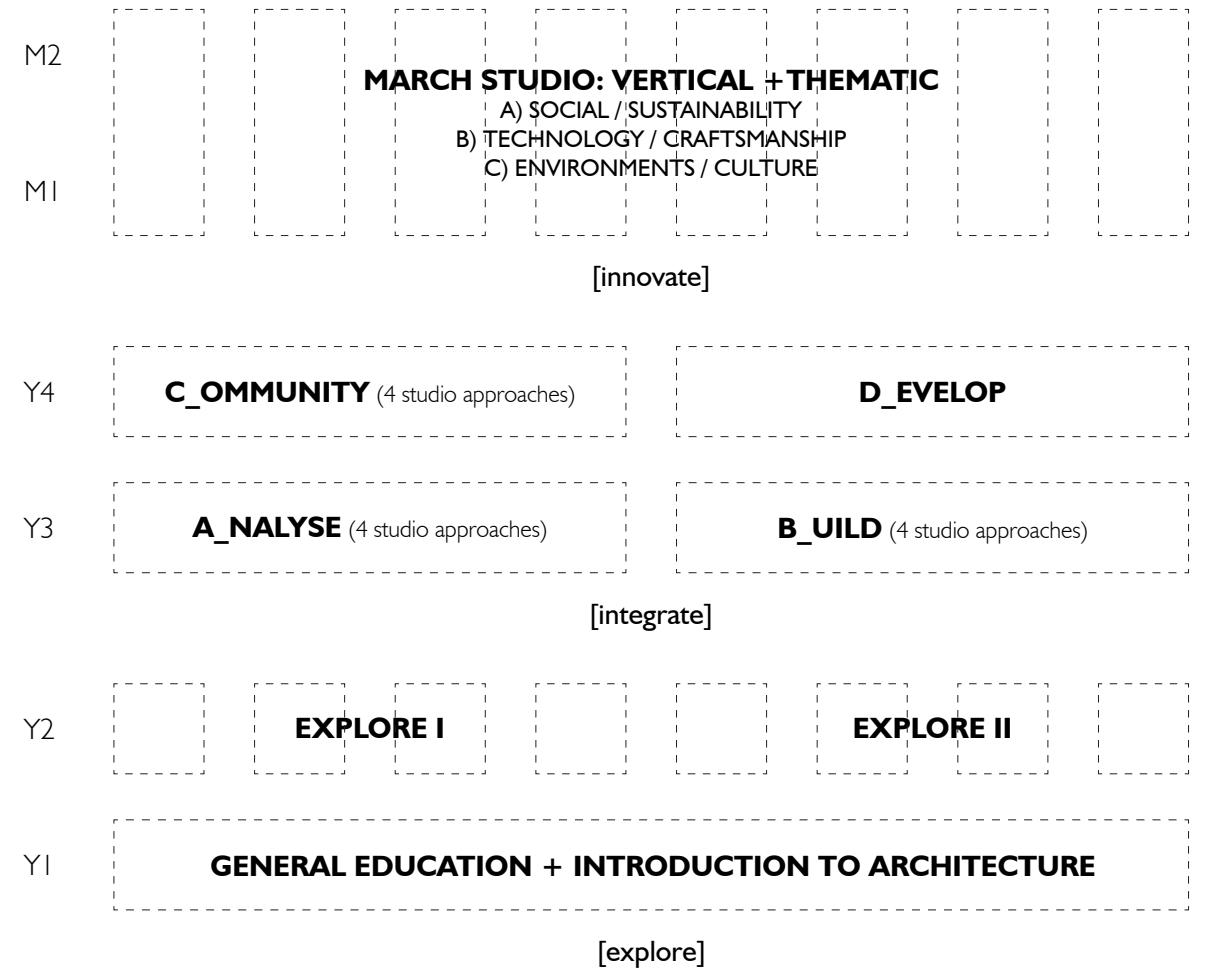| week	event	date
1	First teaching day	11.01 M
2		18.01 M
3		25.01 M
4		01.02 M
5		08.02 M
	Lunar New Year holiday begins	12.02 F
6	Lunar New Year holiday ends	15.02 M
7		22.02 M
8		01.03 M
9		08.03 M
10		15.03 M
11		22.03 M
12	Reading week begins	29.03 M
	Easter holiday begins	02.04 F
13		05.04 M
	Easter holiday ends	06.04 Tu
	Reading week ends	07.04 W
14		12.04 M
15		19.04 M
16		26.04 M
	Examination period begins	28.04 W

BSSc (AS)

Programme Director
Patrick Hwang

The Bachelor of Social Science (Architectural Studies) programme offers education on design thinking in general and preparation for professional practice as an architect in particular. The core of studies consists of design studios in addition to courses and electives offered in humanities, technology, representation and professional practice. The interplay of learning experience is accomplished by exposing the learners to engagement with a wide variety of processes, to work with tools and materials; communicate ideas through drawing, making, writing and speaking; understand the technical challenges of architecture; engage the society in an impactful and ethical manner, and most importantly *to think critically*.

After a rich Year 1, exploring the University's General Education programme, including an *Introduction to Architecture*, Year 2 *Studio Explore I & II* will be offered through a series of intensive skill and knowledge acquisition modules. In years 3 and 4, the sequence of *Studio Analyse*, *Studio Build*, *Studio Community*, and *Studio Develop* will investigate the relationship between analysis and synthesis by studying canonical built works; explore the poetics of material, tectonic, technic, and the craft of detail; address the interdependence between people, architecture, city and the environment; and finally a graduation studio integrating the skills and knowledge obtained in the semesters prior and culminates in a comprehensive architectural design.
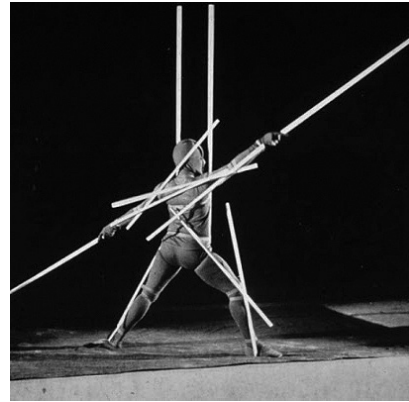
The required courses reflect a changing pedagogic approach and cross-disciplinary practice. The courses are organised through an *analytical case-study method* that bridges across the subject area of humanities, technologies, and communications. This approach seeks to explore the culture and history of architecture through a focused examination of the works of architecture. The programme mirrors professional development in other disciplines by moving from intense skill and knowledge apprehension in the early years to a focus on application and integration by Year 4.

Studio structure

M2	**MARCH STUDIO: VERTICAL + THEMATIC**
M1	A) SOCIAL / SUSTAINABILITY B) TECHNOLOGY / CRAFTSMANSHIP C) ENVIRONMENTS / CULTURE

[innovate]

Y4	**C_OMMUNITY** (4 studio approaches)	**D_EVELOP**
Y3	**A_NALYSE** (4 studio approaches)	**B_UILD** (4 studio approaches)

[integrate]

Y2	**EXPLORE I**	**EXPLORE II**
Y1	**GENERAL EDUCATION + INTRODUCTION TO ARCHITECTURE**	

[explore]

Explore 1

DESIGN STUDIO *arch 2111*

pole dance, 1927, oskar schlemmer

Architecture is by nature a *doing* word: both in its outcome – it is occupied, experienced and materialised; it constructs, organises and extends; and in its creation – we observe, study, imagine; we explore, research, test. Architecture is DESIGNED. Learning to do architecture involves a particular kind of learning. As a mind wishing and willing to take on the challenges and responsibilities of 'architecting' we must become a student of the ways in which the minds of fellow architects think and work.

arch 2111 explores creative process, the realms of imagination, and art and design practices in viewing, experiencing, reading and, ultimately, producing form. Skills of representation and fabrication are introduced in the context of the development of each student's capacity to observe, interpret and translate design concepts into physical form. The studio is organised in modules, each running for several weeks, exploring the articulation of a fundamental architectural / spatial concept with a specific design-related action: seeing + abstraction: modes of drawing; scale + measures: modes of mapping; body + perception: modes of experiencing; mass + light: modes of shaping.

The aim is to expose the students to a precise and rich set of tools and armatures; a spectrum of design skills and transformations to introduce the art of architecture as a design process and language that activates, mediates and politicises the built environment and its subjects. Group projects, individual assignments, critiques, discussions, research and studio sessions will provide students an opportunity to work through issues and ideas within a social, cultural and personal context.

jonathan

REQUIRED COURSES

Visual Studies
arch 2221 Kelly Chow t1

This course introduces visual media, examining how its history and ideas can help develop our critical understanding of spatial design. The course offers an overview of the subject for those with little or no visual art + design background and is intended to provide a sense of visual literacy. The course is designed to develop skills of observation, interpretation and creativity, as well as giving a strong intellectual grounding in visual thinking, and the form, meaning and content of visual media.

Cultural Contexts I:
arch 2322 Stanislaus Fung t1

This course is an introduction to the history and theory of Western architecture from Classical Greece to contemporary times. It is primarily concerned with four themes: (1) concepts of geometry and proportion, (2) concepts of architectural representation, (3) professionalism and the institutionalisation of architecture, and (4) the relationship between architecture and engineering since the 19th century.

Building Technology I: Materials and Construction
arch 2413 Maggie Ma / Xu Liang t1

Establishing on the fundamental principles of statics, the course will investigate primary types of structural system in architecture by focusing on their physical performance characteristics that based on the action of forces as well as the design parameters. Students will learn to use the method of graphic statics to derive the internal forces and reactions for a few types of determinate structures and apply their skills through appraising and investigating in case studies.

SSF PACKAGE

Understanding Cities
arch 1002 Melody Yiu t1

This course will introduce basic ideas about what makes urbanity and how to understand cities with students from diverse background. Initiated from an architecture-urbanism perspective, it would cover cross-disciplinary material in topics on inter-related social, spatial and economic issues. Through medium of text, media and scenarios, it aims to equip students with the knowledge to participate in discourse about cities and urban life.

ACTIVITY

Digital Learning

Modules provided by the Institute of Digital Design (IDDA) are available for self-instruction. This is an online e-learning platform for digital design tools. Modules for term1 include: *Adobe CC (Photoshop + InDesign)*.

Explore II

DESIGN STUDIO

arch 2112

Kelly Chow / Han Man / Xu Liang / Melody Yiu

16

chan chun kwan, kenny

The second core studio builds upon the tools and processes introduced in arch2111 and further explores creative process, the realms of imagination, and art and design practices in viewing, experiencing, reading and, ultimately, producing form. Skills of representation and fabrication are introduced in the context of the development of each student's capacity to observe, interpret and translate design concepts into physical form.

The studio is organised in modules, each running for several weeks, exploring the articulation of a fundamental architectural / spatial concept with a specific design-related action: field + figure: modes of marking; craft + assembly: modes of constructing; environment + interface: modes of balancing; time + rituals: modes of projecting. Group projects, individual assignments, critiques, discussions, research and studio sessions will provide students an opportunity to work through issues and ideas within a social, cultural and personal context. Makers and crafts people will be invited as guest contributors during the yearlong exploration.

The richness of architecture lies in the interplay of spatial and constructive concepts towards specific aesthetic, social, and performative ends; the interplay between abstract orders (form, pattern, organisation), technical systems (structure, envelope), and the contingencies of human conditions (site, politics, environment). The studio seeks to expose the students to a precise and rich set of tools and armatures; a spectrum of design skills and transformations to explore new spatial, social, and material orders that activate, mediate and politicise the built environment and its subjects.

17

fang kuan chung, joe

REQUIRED COURSES

Introduction to Architecture: People and Places
arch 1001 Kelly Chow / Xu Liang t2

This course explores the discipline - its rich relationship with society - and its global impact. The course addresses architecture as a continuous field in flux - presenting case studies that cut across and unfold to show alternate, sometimes contradictory stories about art and design. Through a series of lectures and readings, along with a set of critical terms specific to these times and places, the class aims to foster a rich, complex understanding of the many narratives that the built environment can tell.

Digital Media
arch 2222 Jeroen van Ameijde t2

This course introduces students to the principles of computational design, giving an overview of applications across different scales and stages. Students will develop insights and confidence around the integration of generative procedures within architectural and urban design processes, learning how to control elements within a three dimensional environment. Focusing on the underlying logic rather than specific software, the course helps to build up essential skills needed to participate in current and future practice.

Building Technology II: Materials and Construction
arch 2422 Zhu Jingxiang t2

The course is designed for studies in materials and construction with an approach based on operation and observation exercises. The process of integrating knowledge framework, observation skill and exploration ability related to architectural and construction practice is emphasised. Students will learn to appreciate the essential knowledge of basic building materials, the ethics of using materials and the importance of tectonic and technical issues.

GENERAL EDUCATION

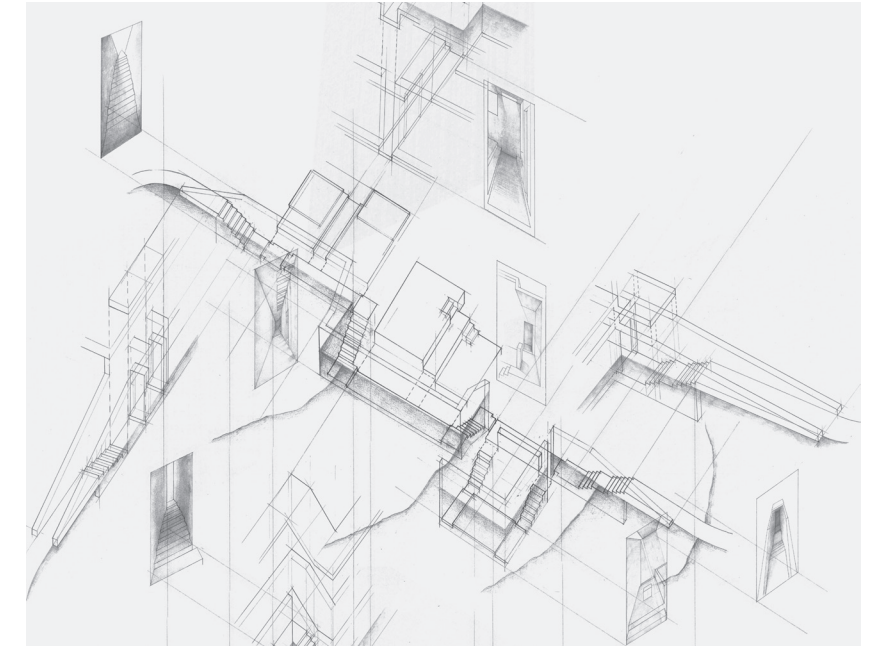### Experiencing Architecture
arch 1320 Han Man t2

The term 'architecture' in this course specifically refers to the built environment. This course teaches a method of experiencing architecture, with the aim to increase students' awareness of the living environment and equip them with the ability to understand and appreciate architecture as it exists locally and in the global context. Apart from a theoretical framework, basic skills of sketching, photographing and writing will be taught as tools to facilitate the act of experiencing architecture.

ACTIVITY

Digital Learning

Modules provided by the Institute of Digital Design (IDDA) are available for self-instruction. This is an online e-learning platform for digital design tools. Modules for term2 include: *Auto CAD, Adobe CC (Illustrator)*.
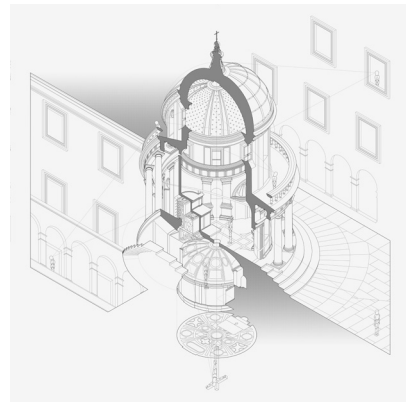
Studio A

DESIGN STUDIO

analyse

arch 3113

Patrick Hwang / Simon Hsu / Hiroyuki Shinohara / Elva Tang

*tempietto by branato bramante,
drawn by office nadaaa*

To design is to see. To see is to not only look but to analyse what one sees. To analyse is to discover and understand the essence of the problem (conditions) being probed. Understanding the essence of the problem (conditions) allows for more focused design synthesis.

Studio A stands for 'Analyse'. It is the first studio option for Year-three students. This studio focuses on analytical observation of architecture, followed by a series of design inquiries. The studio studies canonical buildings of architecture through analysis and dissection, emphasising the connection between form, structure and tectonics. The latent knowledge created by the inquisitive process will inform the design project in the second stage.

In Studio A, you will learn to analyse through the act of drawing and modeling. The activity will encompass the examination, interrogation, observation, operation, deconstruction, dissection and de-composition of an utilitarian object, a fragment of a building and a canonical building. Through the discriminatory actions of drawing and model making you will identify critical findings of the 'thing' being examined to identify its key essence. To understand the selective nature of drawing and modelling, what one leaves out is as important as what one draws and makes.

REQUIRED COURSES

Land and City

*arch 3721 Francesco Rossini t1*

This course introduces fundamental concepts and ideas of urban design and planning starting from a historical perspective, introducing important theories to analyse and understand the dynamics and complexities that characterise the urban environment. This course aims to develop the essential knowledge in the field of Urban planning and Design by investigating the critical role that the architecture, combined with the interdisciplinary approach of urban design, can play in creating a better and more livable and sustainable city.

ACTIVITY

Digital Learning

Modules provided by the Institute of Digital Design (IDDA) are available for self-instruction. This is an online e-learning platform for digital design tools. Modules for term1 include: *Rhino + Grasshopper, Revit.*
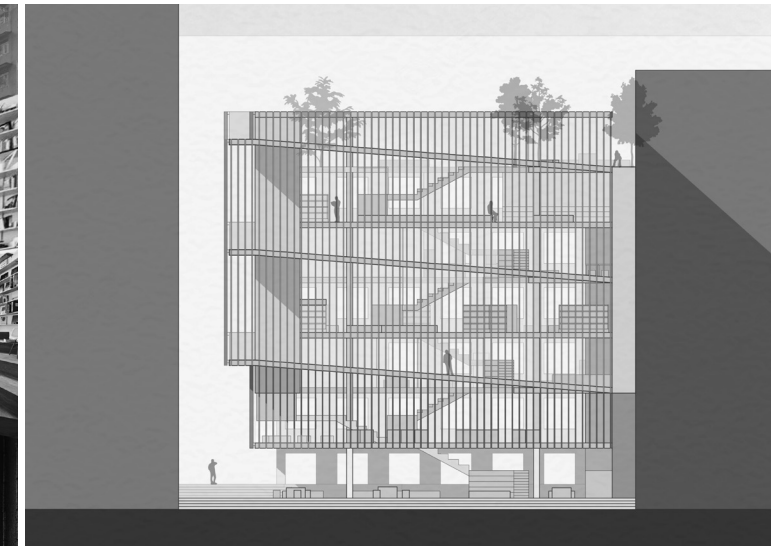
tong yan tung

Studio B

DESIGN STUDIO

build

arch 3114

Hiroyuki Shinohara / Maggie Ma / Francesco Rossini / Yutaka Yano

Studio B is the second part of the studio option for Year-three students and aims to learn to build. It approaches architectural issues through the role of building technology in architectural design. The studio focuses on materials, techniques and tectonics studies that expose and inform design opportunities and solutions. The central question to ask is what relationships can be established between space, structure, and technology and how they can be intertwined and synthesised. The studio's emphasis is placed on experimentation through act of making as a way of discovering. Moreover, the studio projects involve design in broader body of contexts of what it is made such as related architectural theories, design technologies, pragmatic issues and innovation with the intention to learn to think critically through making.

The studio encourages the notion that build-ing is an act of making for design inquiries. Students will learn to build by working with real materials and different tools for specific tasks of design and making. The studio activities will engage students in observing, questioning, experimenting, composing, constructing and synthesising multi-scale parts to whole of a building. The observation and experimentation with materials and tools will allow students to reveal inner workings of material characteristics, ways of composing and joining, assembling building, and connecting it to the contexts that produce it.

Studio B will revolve around three projects that form a common framework of four different approaches taught by four instructors.

REQUIRED COURSES

Cultural Contexts II
arch 2323 Tatjana Crossley t2

This course will cover 20th century architectural movements across the globe that grew out of, ran parallel to and broke away from modernism. We will discuss the objectives of Team 10 and CIAM, branch off into the Metabolists and Situationationists and move into the social and philosophical influences on architectural discourse in the 20th century. This will be done through specific domestic case studies that reveal and open up a broader conversation around architecture, urban design and their social implications.

#### Building Technology III: Environmental Technology
arch 3424 Edward Ng t2

This course introduces the fundamental concepts of passive environmental design, and examines the effect on buildings and their occupants of environmental conditions of light, temperature, air movement, and sound. Case studies are used to review both traditional and current approaches of representative building types in depth.

ACTIVITY

Digital Learning

Modules provided by the Institute of Digital Design (IDDA) are available for self-instruction. This is an online e-learning platform for digital design tools. Modules for term2 include: *Revit (plug-ins for lighting and wind simulation).*
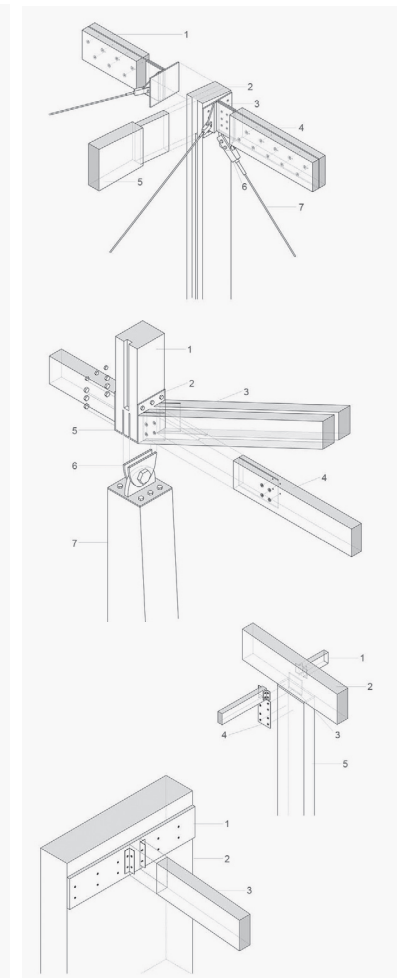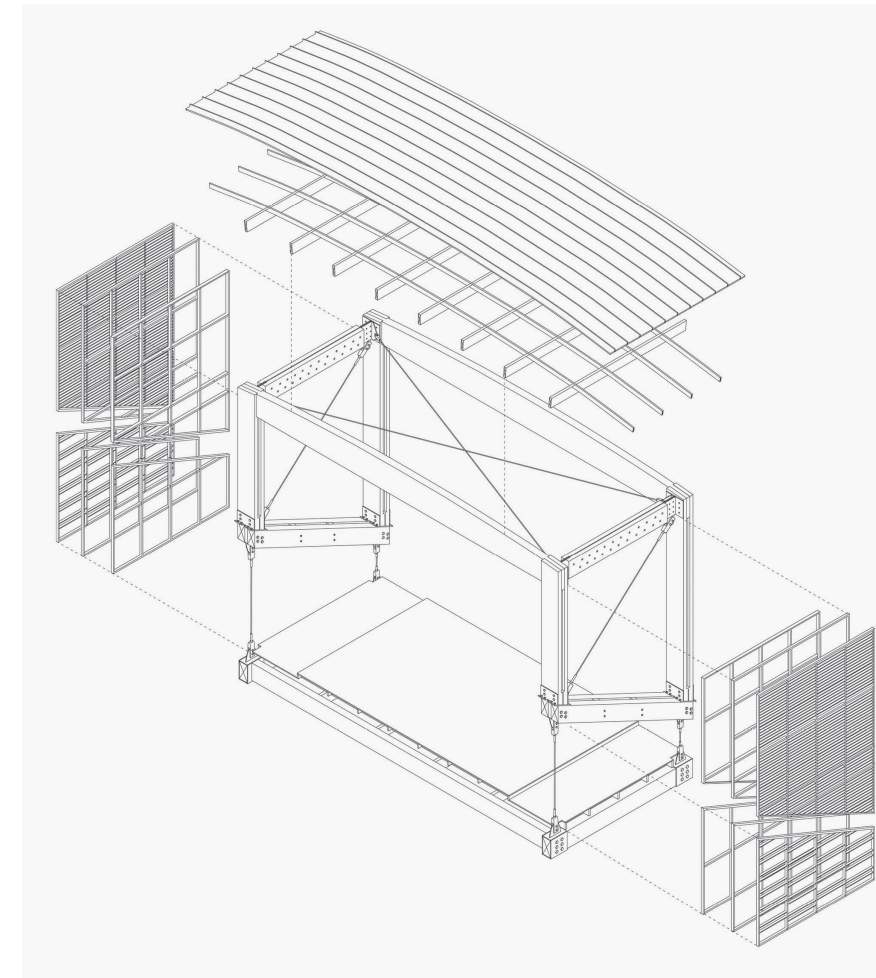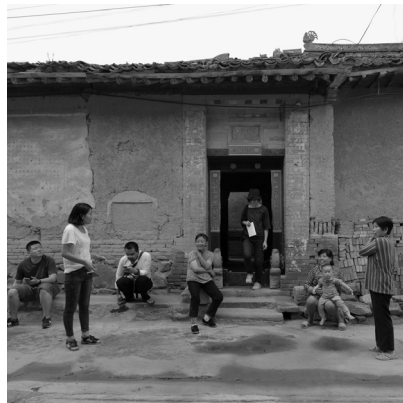

tsang siu kiu

Studio C

DESIGN STUDIO

community

arch 4115

Francesco Rossini / Jeroen van Ameijde / Maggie Ma / Mo Kar Him

Making cities and human settlements safer and more inclusive, resilient and sustainable is at the core of Goal 11 of the UN-Habitat. Nowadays the residential market is dominated by economic interest, and most cities in different areas of the globe face the problem of the lack of affordable rental apartments for low-income households. The French architect Christelle Gautreau argues that new form of housing emerge to answer to new needs of the population and that 'coliving has begun to transform our notions of ownership and habitat'.

Responding to the need to address joint issues of sustainable housing and urban development, the Community Studio aims to speculate about architecture's role in shaping the urban environment by conceptualising alternative typologies of collective living. The four sections of the studio will explore how collective living concepts could be adapted to different social context and urban conditions.

Informal villages, high density social housing, transitional homes and housing for the elderly are the specific topics to be explored in the four studio sections. The students will focus especially on the relationship between collective spaces and living units as well as to explore how to generate meaningful interactions between the residents and the rest of the city. Combining hybrid programs with shared and collective facilities, students have to accommodate the diverse needs of the community. The opportunity of sharing, the mixing of household types and uses, and the blurring of physical boundaries between private and public realm are the objectives to re-define different approaches that co-living spaces present to architects and designers.

REQUIRED COURSE

### Building Systems Integration
arch 4425 Hiroyuki Shinohara t1

This course builds upon fundamental topics covered in the building technology sequence- materials and construction, building structures and environmental technology- with the objective to introduce an overarching perspective of the design and integration of the building systems in making of a building. Through case studies of modern and contemporary buildings, it investigates that the technical aspects of a building are to be an integral part to achieve an architect's vision and design intent and serve to make critical design decisions.

ACTIVITY

Digital Learning

Modules provided by the Institute of Digital Design (IDDA) are available for self-instruction. This is an online e-learning platform for digital design tools. Modules for term1 include: *Rhino + Grasshopper.*
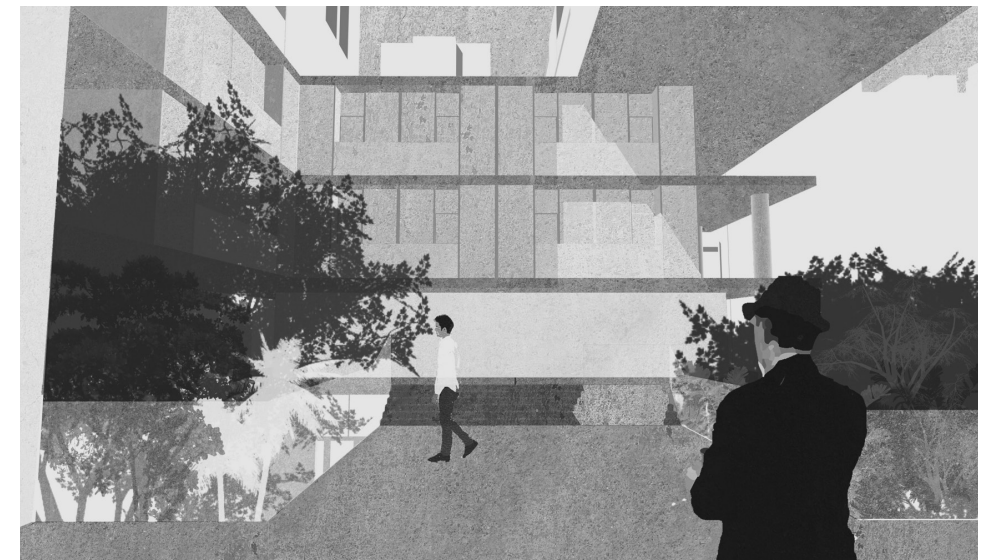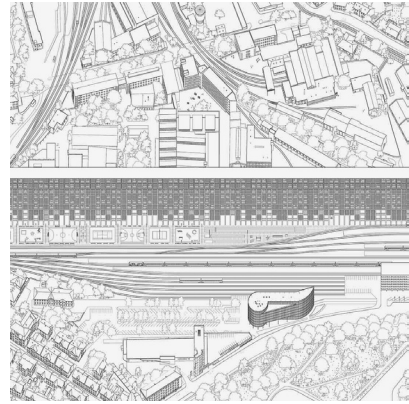
chan chun yu, eric

Studio D
DESIGN STUDIO

develop

arch 4116

Patrick Hwang / Chi-yan Chan / Yuet Tsang Chi / Sebastian Law

proposal for a living/working unité d'habitation, by dogma

Studio Develop integrates the skills and knowledge obtained in the prior five semesters and culminates in a comprehensive architectural design. Infusing program, site, material and tectonic which are central to the development of architectural form and the means by which they structure human environments and relationships. Program is both the reality of functional use, and the scenarios of imagined narratives. An architectural Site consists of an urban context or a condition of landscape, and the cultural understandings that influence the reception of a built intervention. Material, which may seem straightforward, real and direct, contains questions regarding the status of nature, artifice, and craft. The Tectonic idea and the articulation of a building's assembly is never as simple as revealing the construction and is often as much about what is concealed as it is about what is revealed.

The studio asks students to examine and engage these terms as dynamic, shifting and historically contingent. The studio tackles the comprehensive project by focusing on the *general* and the *particulars* of the building's organisation, structure, systems, skin and its integration. The design challenges will be tackled through a matrix of architectural ideas derived from the discourse of architecture and operative keywords such as poche, veil, promenade, hierarchy, parti etc.

REQUIRED COURSES

Cultural Contexts II
arch 2323 Thomas Chung t2

This course stresses the importance of understanding architectural history and theory with respect to culture and context. There is a specific focus on 20th century architects and buildings, a range of key architects' philosophies and approaches and the relationship between architecture and the arts. Students will study architectural works with respect to historical continuities and ruptures, as well as explore the unity of forms and diversity of solutions.

### Future Practice and Sustainable Response (start from 2022-23)
arch 4426 Maggie Ma t2

This course prepares students to practice, through the understanding of fundamental roles and values of an architect, with discussions on professional conduct and procedures that are related to practising as an architect. It is designed to inspire students to look beyond the customary, and consider the ever-changing environment of the future, through the study of alternative possibilities in architectural and spatial practices.

ACTIVITY

Digital Learning

Modules provided by the Institute of Digital Design (IDDA) are available for self-instruction. This is an online e-learning platform for digital design tools. Modules for term2 include: *Rhino + Grasshopper.*

kary chan

MArch
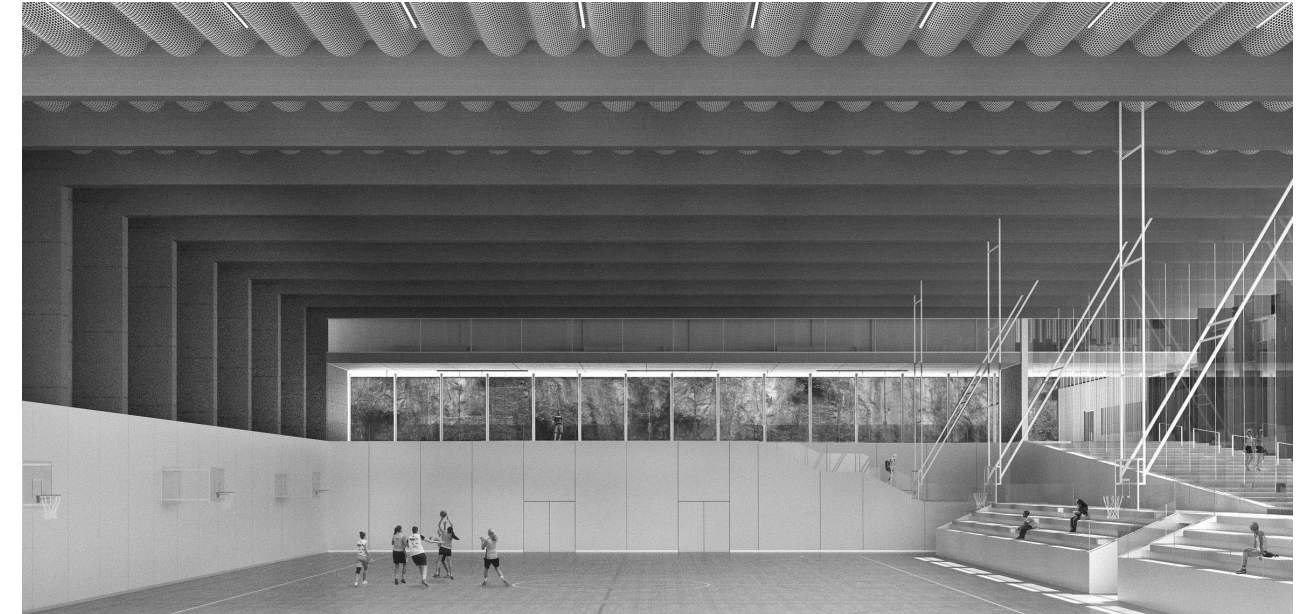
Programme Director
Peter Ferretto

The Master of Architecture at the School of Architecture is a two-year programme designed to provide students with an advanced educational experience focused on design innovation, specialised research and critical thinking. The programme stresses the importance of architecture as a humanistic discipline concerned with the design of habitats in diverse social and ecological conditions. The programme's aim is to engage with a wide range of critical issues, teaching methodologies and design agendas that reflect the changing conditions of contemporary practice and emphasise the profound relationship of architecture to the broader problems of the environment and ecological sustainability. The position of the School, situated within the Faculty of Social Science, offers a unique opportunity for interaction and interdisciplinary research.

Advanced Architectural Design Studio
The design studio is the lens through which students develop their architectural identity, fostering a speculative thinking environment that encourages innovation and experimentation. Through the studio, students are able to hone their research skills, develop high-level design proposals and learn to articulate a refined project. Studios are structured around two yearlong projects, a pre and a final thesis, organised into vertical studios where students learn from their peers and work collaboratively. M-Arch students are encouraged to pursue their own individual paths within a design agenda established by the studio tutor, who forms the objectives of each studio.

This Year's Theme
HONG KONG IDEAS: Designing and Thinking Architecture
The first of a three-year plan focusing on interrogating three International territories, Hong Kong, Tokyo and Hanoi.

Research Categories
Each year the programme offers nine design studios that question a variety of agendas connected with a commonplace. The nine studios are organised into three categories committed to applied architectural research:

A_social / sustainability
Tatjana Crossley | Peter Ferretto | Lam Tat

B_technology / craftsmanship
Adam Fingrut | Zhu Jingxiang

C_environments / culture
Thomas Chung | David Dernie | Inge Goudsmit | Wataru Shinji & Lily Zhang

Structure
All Design Studios are subdivided into 4 parts, approximately 6/7 weeks long, leading to a final project developed over 26 study weeks.

Part 1 – QUESTION
Students start their design journey by establishing a research process, understanding and challenging the brief, contextualising the topic and articulating a position. They are introduced to multiple Design Research Methods: Understanding Context, Architectural Surveying, How to Assemble Material, Systematic Observations, Human Behaviour.

Part 2 – CHALLENGE
During this design experimentation phase, students formulate ideas by testing propositions. Emphasis is placed on the synthesis of research within a design framework. A broad range of teaching methods are adopted to reflect the agenda and context of the studio. At the end of this phase, all studios have an integrated trip.

Part 3 – PROTOTYPE
The phase where an idea is translated into a design proposal. Through a process of trial and error students demonstrate that their creative decisions are based on research, analysis and precedent studies. This phase concludes in the development of a 'Technical Report' setting out in detail the technical implications of the design strategy.

Part 4 – PROJECT
The final phase focuses on the development of a complex architectural project that addresses the ambition of the brief and ambition of the initial hypothesis. Students must articulate, via an architectural lexicon, a high-level design project that offers innovation, provokes experimentation and articulates a clear architectural discourse.

MArch
DESIGN STUDIO

Tatjana Crossley
Body Architecture:
Implications of the Sensorial

I understand architecture because I have a body from which to understand it.

Sensorial stimuli is crucial for our ability to perceive space. The signals received from the eyes, nose, and skin allow for the brain to create a mental image of our environment. Without them we would not be able to understand our relationship to space in the same way. Historically, humans have produced devices through architecture and art that have allowed them to manipulate their perceptions, many of which come out of an urge to question the status quo.

This studio seeks to challenge current modes of perceiving. We will be designing architecture for the body. Through the development of these provocations we will dissect the value of designing a particular experience for the body and what the implications of this are for subjectivity, the built environment and for the architectural profession in general.

Biography

Tatjana Crossley is co-founder of architectural and research practice ArchiTAG. Her research focuses on the sensorial and psychology of immersive environments and virtual realities. She has been examining the development of the body image in relation to how the subject perceives space, themselves within it, and the 'other', using theories from psychology, philosophy, biology, technological sciences, art and architectural history.
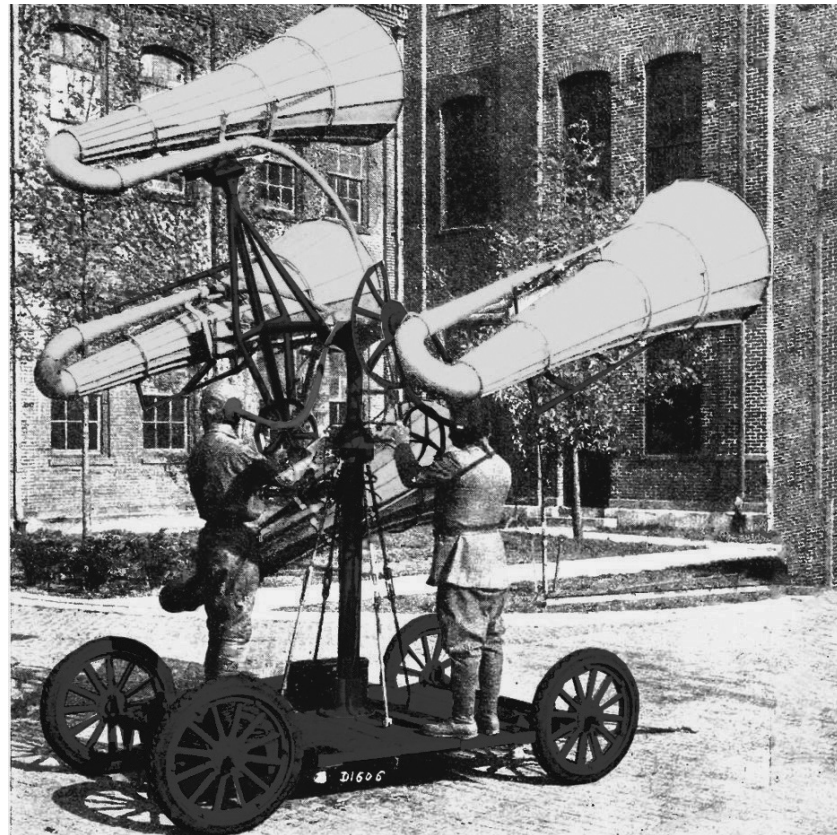
Peter Ferretto
Condition / HK Villages

For most outsiders the idea of Hong Kong has a rich heritage of villages appears absurd, where could villages possibly fit within this vertical Brave New World? The studio wishes to challenge these assumptions and explore the deep connection between Hong Kong villages and its 'territory'. Starting from the first-hand reading of five village conditions, our research seeks to re-establish a new rural identity in coexistence with the urban surroundings.

The studio's goal is to develop a 'Poetic Purpose' of architecture through beauty. Purpose relates to values and agency; it is different from the generic word 'programme' so commonly associated with architectural briefs. Purpose avoids a passive stance towards design, reinjecting responsibility into architecture. By focusing on the social role of design, design understood as the act of modifying human environments, our purpose is to reactivate abandoned, vacant and disconnected villages through architecture.

Biography

Peter's research focuses on understanding urban/rural territories through design prototypes. His research subjects include Architectural Urban Typologies of Seoul, Residual Urban Spaces of Hong Kong, Everyday Urban Conditions, Contemporary Background City, Reactivating the Social Spaces of Chinese Ethnic Minority Villages and Prototype Solutions for a Self-build Timber House in Rural China.

MArch

DESIGN STUDIO

Lam Tat
Social Housing in Hong Kong

Among the 7.6 millions of Hong Kong citizens, 1.3 millions are living below the poverty line set by the United Nations. This number is surprisingly high for a highly developed city such as Hong Kong. In this studio, we would like to explore all urban design and architectural design possibilities to tackle on the problems of urban poverty. The studio will focus on the area of Sham Shui Poo, at where 15,400 households live in subdivided units, while mainstream solutions tend to argue for an increase in supply of public housing. How can we create alternative housing development model, design strategy and even innovative financial vehicles as ways to expedite such changes of our society? Students will develop their own set of methodologies to understand urban development, and propose practically, economically, and culturally sensitive solutions to the selected site and the local community. The work will also critically analyse the impact of urban renewal (both potentially negative and positive ones) to assess the feasibility of the proposal.

Biography

Tat Lam was trained as an urban designer and architectural researcher, and has practiced in urban design and regional development consultancy in the last 10 years. He is currently the director of Studio X Beijing of Columbia University. He is particularly interested in studying and providing holistic social development solutions to governments and institutions.
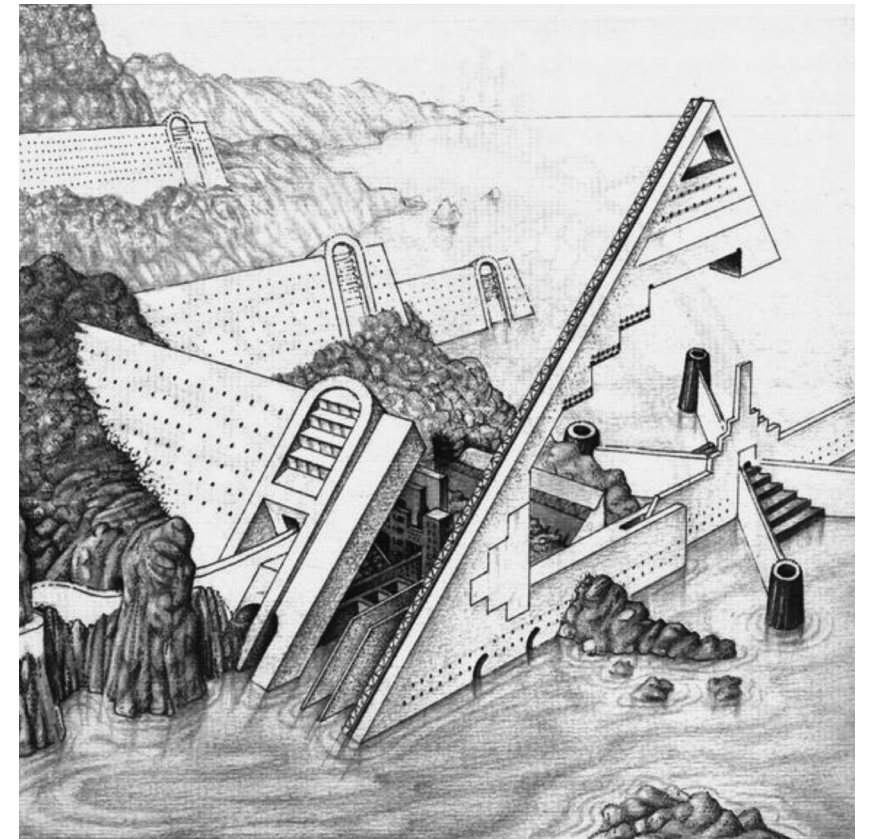

subdivided flats © benny lam

Adam Fingrut
Peripheral Visions: Architecture on the Edge

This studio explores the impact of technology as a conduit for architectural exploration, design, and inhabitation. A rigorous series of exercises along with exposure to digital and analog craftsmanship will guide students toward developing their own architectural vocabulary for deployment at different scales and resolutions. At the heart of this studio is an interest in the crafting of beautiful drawings, objects, and buildings – each with their own unique story nested inside a broader design narrative. Knowledge and experience gained throughout all exercises will culminate in a group based final project. The project will focus on design possibilities for civic architecture along landfill sites, where edge conditions along the waterfront can activate a sense of place, life, and identity. Students will consider how waterfront infrastructure can invite the community to walk, exercise, sit and watch by incorporating new architecture to stop, see, snack, play, buy, listen, and learn. They will develop a position that negotiates the waterfront edge that can provide respite from typical Hong Kong commercial and residential centers.

Biography

Adam's research focuses on understanding how new technology can innovate design, fabrication, and construction methods in architecture. He is also the Co-Director of the Centre of Robotic Construction and Architecture at CUHK, which explores the use of advanced design and robotics for innovative architecture. His teaching demonstrates how emerging technology is integral to design thinking by exposing students to a process of discovery learning.

Serafini, Luigi. Codex Seraphinianus. Milan: Franco Maria Ricci, 1993.

MArch
DESIGN STUDIO

technology / craftsmanship

environments / culture

MArch
DESIGN STUDIO

technology / craftsmanship

environments / culture

Zhu Jingxiang
Tectonic of Spatial Panels

Panel Construction developed rapidly in last two decades and reshaped building market in European countries. It mainly uses various components with flat panel form due to the ease of processing and transportation. Through early building experiments, the research team in CUHK discovered that customised spatial panels not only gain impressive forms and spaces, but also avoid the extremely weak structural orientation of the flat panels, without a loss on packing and transportation convenience. Along this potential direction, students will examine the generation, performance and application of customised panels with supportive knowledge from geometry, structure, material and construction. Students have the opportunity to explore building systems based on novel features of new component and to design highly integrated building products for specific place and program. Research, learning and design with a natural articulation and transformation will be supported by doctoral researchers, professionals and real builders.

Biography

Zhu's research focuses on new spatial structures, lightweight building systems and sustainable building technologies. He has completed dozens of built projects in Mainland China and Kenya, and has won the China Innovator of the Year Award in Architecture from The Wall Street Journal in 2012, First Prize of Local Academia in the Hong Kong Construction Industry Council Innovation Award 2015, etc. He also designed Dou Pavilion for China's national pavilion at the 15th Venice Architecture Biennale 2016.

Thomas Chung
Regenerative Design Radical Conservation in Lantau

Regenerative Design goes beyond sustainability's 'do less harm' imperative to aspire towards a more radical 'do more good' design paradigm. It calls for a proactive development process to replace 'the present linear system with cyclical flows at sources' that not only restore but positively regenerates the ecosystem. This studio explores how regenerative design understands the systems of life in place, co-opting human, natural and architectural systems into mutually beneficial relationships, to enable environment-behavioural change.

Using the Lantau Island as site this year, we will map its multiple heritages, topographies and ecologies to better empathise with its eco-system: urban and rural, economic and cultural, human and natural. Engaging residents and stakeholders and through interdisciplinary collaboration, we will co-create innovative scenarios that employ architecture as an 'ecology of tectonics', as the primary catalyst to enact regenerative conservation in place.

Biography

Thomas's research interest involves understanding how architecture contributes to the urban order and culture of the modern city. His research focused on the interplay of architecture with urban representation and cultural imagination, and the metabolisms of urban vernacular in Hong Kong. Besides research, Thomas is active in steering, curating and exhibiting at the Hong Kong & Shenzhen Bi-City Biennale of Urbanism/Architecture since 2008, as well as at the Venice Biennale in 2010 and 2014.

lantau south © kelvin yuen

MArch

DESIGN STUDIO

David Dernie
The Mind's Eye: Disappearance

The Mind's Eye studio looks at relationships between art and architecture and the spatiality of disappearances – later in 2021 the shops will be demolished. You will explore memory, time, do wonderful drawings and make finely crafted artifacts.

We will explore architectural design in relation to the humanities, mostly the visual arts, but also philosophies and histories in relation to design and representation. We will explore the boundaries of architectural design with fine art, installation and spatial practices. In the history of the discipline, at least in the West, the loss of meaning in architecture is relatively recent and largely on account of the challenge of the new sciences that emerged in the early modern period (16th century). As a consequence of developed scientific thinking, architectural design is now allied with the design sciences, environmental science, digital design, engineering or any one of the other fragments of knowledge that are otherwise synthesised in architectural design.

Biography

David Dernie is an architect and academic whose work focuses on the practice of drawing and the questions of materials, colour and representation in architecture. He has a deep interest in the natural environment and founded international network 'Latitudes' in 2014, engaging future generations with the challenges of designing for climate change.
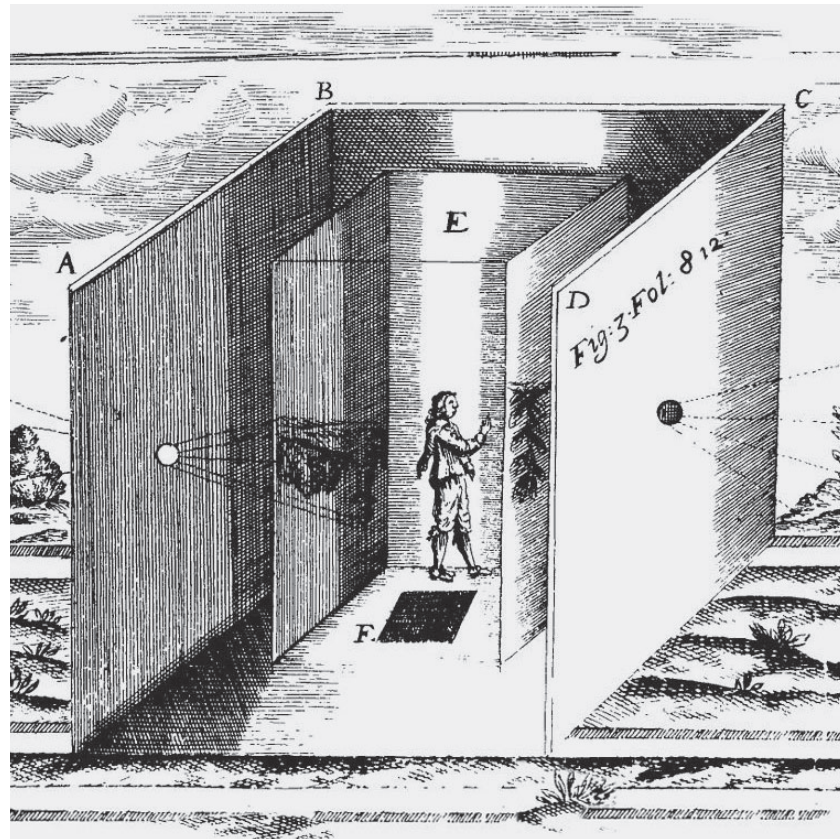
athanasius kircher, camera obscura, 1646

Inge Goudsmit
Urban Politics Studio:
Cultural Policies in Hong Kong

In a pursuit to reclaim a critical approach that is more conscious of the needs of society, the Urban Politics Studio aims to map the complexity of urban power relations, and review the city through many lenses: that of a politician, economist, humanitarian, strategist, resident, activist or visitor. We will consider these different contexts as a series of design parameters. Through carefully unpacking the different desires and constraints, we will develop a critical and analytical approach to the design process. Using an ethnographic research methodology, we aim to gain understanding, discover new insights and (re)frame design opportunities. Within this framework we will focus on cultural facilities in Hong Kong and their function within a community. Following a research-by-design process, we will look in detail at the status of cultural facilities in Tung Chung and find opportunities to reformulate their meaning.

Biography

Inge is teaching and conducting research in architecture and urban design with a focus on urban politics. Her research interests are situated at the boundary between Architecture and Social Sciences, and focus on the influence of transnational and local forces on the production of iconic architecture. She concentrates her research on cultural flagship developments in Hong Kong and analyses their socio-spatial impact before, during and after the construction.

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MArch

environments / culture

DESIGN STUDIO

**Wataru Shinji / Lily Zhang**
Designing Environment

The environment is very large and vague as an image. If we attempt to create it artificially, it may be difficult to imagine the way to begin designing. We would like to conceptualise this novel idea and think of architectural space in a completely different aspect and scale.

Architecture originated as shelter for humankind as protection against the elements. Previously, nature reigned over the Earth, while the human domain was a seemingly demarcated space. Now the balance between human living and nature has changed drastically. We may question whether architecture remains solely as a shelter, or if the boundary between humankind and nature has been distorted.

This studio explores what the concept of living space, to expand the possibilities of architecture by designing an environment itself, to discover a new idea of comfort for not only humans but also a multitude of other living beings in the world.

Biography

Wataru Shinji is a designer whose interests lie not only in architecture but also on exploring space for other living beings on the planet. Lily Zhang is a designer whose work and research focus on designing environment through the interaction of the natural and the artificial. Their research interests include design environment, human and non-human living space, natural and artificial interaction, new possibilities in architecture and global material systems.
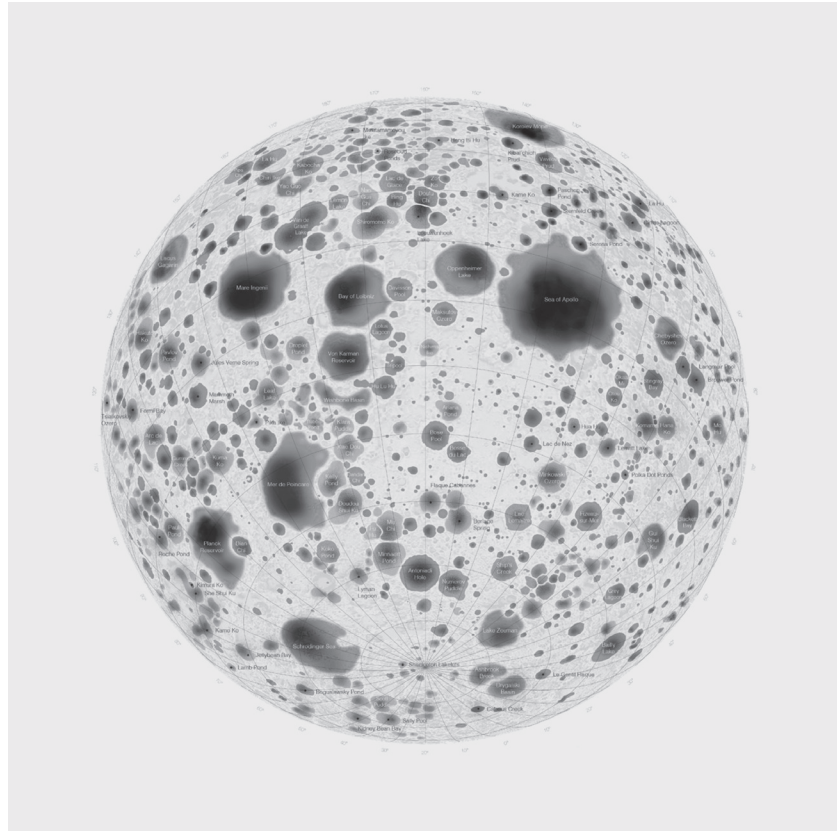
REQUIRED COURSES

Architectural Theory and Criticism
arch 5321 David Dernie / Patrick Hwang t2

The course unfolds ideas that lie behind the appearance of buildings from surveying key theoretical concepts emerged from the mid-twentieth century. Through examples of theoretical positions, buildings and texts, the instructors deliver ten thematic lectures, each addressing a specific thematic topic. The architectural subject in discussion is juxtaposed with art, culture and politics of its time to sketch an illuminating and reciprocating contextual relationship. The students learn how to analyse buildings, and how to relate architecture to the broader cultural and social practices.

Advanced Building Systems I
arch 5421 Adam Fingrut t1

This course presents contemporary and innovative strategies for the integration of building systems into architectural design and construction. Conducted through the study of technology, the course examines problems, possibilities, co-ordination, and dependencies of practical building assembly. The course equips students with a working basis and literacy of building systems and an understanding of the role architect coordinating with a team of consultants and specialists.

Advanced Building Systems II
arch 5422 Inge Goudsmit / Han Man / Brian Anderson t2

To realise architectural designs, it is crucial to communicate them clearly: to contractors, engineers, clients, building departments, quantity surveyors and other collaborators in the design process. A good documentation enables a smooth(er) design process, and if all parties follow the same standards, communication is more simple and straightforward. In this course, we will unravel the complexities of design documentation.

Professional Practice and Management
arch 6521 Mona Yeung t1

This course introduces the general structure of the building industry, the professionals and trades associated with the building process. It will give insights into the statutory and non-statutory control mechanism in Hong Kong on the design and construction of buildings, such as the Town Planning Ordinance, Land Lease, Buildings Ordinance and its regulations, Code of Practices, Design Manuals and Practice Noted for Authorized Persons. The role of Registered Architect and Authorized Person under the legislation will be examined. The Standard Form of Building Contract, duties, liabilities and relationships between the parties, and different types of Contracts will also be introduced. Various resolutions of contractual disputes including arbitration, mediation and litigation will also be explored.

Urban History & Theory
urbd 5703 Hendrik Tieben / Melody Yiu t1

This course examines the main ideas, histories and theories of the city. Important themes and debates in the history of urban design will be critically explored. In particular, the course investigates how urban forms have emerged and later reinterpreted, adapted and challenged by different social, economic and political contexts.

ACTIVITY

Digital Learning

Modules provided by the Institute of Digital Design (IDDA) are available for self-instruction. This is an online e-learning platform for digital design tools. Modules for both terms include: *Revit, Rhino + Grasshopper, Python and Maya.*

MArch

ELECTIVE COURSES

**Material Imagination:
Spatiality of Colour**
arch 5131a David Dernie t1

This course explores ideas about architecture, perception and architectural representation, particularly related to the history and practice of materials and colour in architecture. A deeper understanding of materials is born out of relational values, a tensional set of conditions that qualify material by virtue of light, orientation, scale, place and time: the material imagination starts from the qualities of the room, of light and dark, orientation and 'concrete life' of the place. The course discusses relationships to the visual arts and asks how and why materials have been used historically – what are the possibilities of expression through colour, light and materials in contemporary architecture?

**Architectural Photography and
Design: Materialisation of Light**
arch 5131b Xu Liang t1

The course aims to examine how we consider architectural photography and explore its potential as a medium of conceiving of and constructing space/place. This time, we take the 'Materialisation of Light' as the theme of our laboratory. The introduction of photography techniques and the experiment of light, form and spatial ambience are associated through the practice of image-making and the design of spatial prototypes.

Out of the Ordinary
arch 5131c Wataru Shinji / Lily Zhang t1

Why is typical ceiling height set to be 2.5 meters? Most rooms we inhabit are all the same height, like living space, kitchen, and office. How about

corridor width, or chair and desk height? As designers, we believe our built surroundings cast holistic influence over people's behavior, yet what if we envision out-of-the-ordinary conditions to achieve novel kinds of spaces and activities? In this course, we will reflect ideas of comfort beyond building standards to define new ways of making and inhabiting architecture.

**Mapping, Drawing, Thinking:
From Cartography to Data
Visualisation**
arch 5131d Melody Yiu t2

This course explores key ideas about cartography as a medium in architecture and urbanism. From conceptual mind-map to technologies in urban data, different ways of documentation and representation are used to record our built environment. Framed within larger social context, this course would be a discourse on urbanism through the narrative of drawing/mapping as a way of thinking.

**What is a Roof?
Designing with the Site**
arch 5131e Wataru Shinji / Lily Zhang t2

Empty space does not exist. Any site has its own specific conditions, surroundings, and histories constituting the basis of design. In particular, roof can be found in every building, yet most are unused spaces. What potential can we uncover in this element common to all architecture? We will explore the possibilities of what a rooftop space can be, from individual homes to city scale, by studying its design opportunities and constructing a small project made for a rooftop site.

Digital Design Problem Solving
arch 5231 Adam Fingrut t2

The course exposes students to an iterative approach to design problem solving. It is independent in nature and asks students to investigate, document and develop digital design workflows and tools development. Students will select new and innovative digital design tools based on interest and curiosity. Students will report on their explorations, declare the limits and opportunities of their tools-based research. After gaining confidence and a level of virtuosity, students will be provided with a design provocation for which they develop a response featuring their documented workflows.

Dissecting the Virtual
arch 5331a Tatjana Crossley t1

There is a long lineage of virtual reality spaces throughout history that have utilised different mediums, modes of representation and framing which propose different sensory engagement. Devices of immersion re-present a perceived reality, itself a form of representation as it is determined on a subjective basis through sensorial perception of space. As designers working with mediums and materials we inherently engage with this virtuality of experience. So then, what do our virtual realities expose about our society's deepest inclinations?

**Hong Kong Modern Architecture
through Case Studies**
arch 5331b Han Man t1

The course first looks into the history of Hong Kong modern architecture from three perspectives. Then the instructor will guide the students to conduct comparative analyses on

historical cases and contemporary cases in a pair so as to explore the new development of Hong Kong architecture as well as to further understand the taught history. The case studies also serve as a device to cultivate a method of studying architectural history.

**Extra-ordinary Arrangement of
Loadbearing Components**
arch 5431a Zhu Jingxiang t1

This course will unveil the enormously multilayered issues of wall and beam design through in-depth study on selected cases from international architects and local scenario. The complexity of a case will be clarified through a modeling process, followed by analyses on structure, geometry, and organisation logic. Design exercises on wall and beam will prepare students for an application of know-how in their studio work.

The Building Envelope: Wall of Light
arch 5431b Kelly Chow t2

There is an increasing focus on façades due to the growing importance taken on by exterior walls in the context of energy consumption issues and options for making use of environmental energy. In addition to this focus, and usually contrasting with it, are the centuries of efforts by architects concentrated on developing the façade as the expression of the building. This dialogue has resulted in the façade – or now, more contemporarily, the building envelope – to become a metonym for architecture as a whole; the element most invested with architectural, cultural and political meaning; the boundary that protects, the edge that mediates, the face that expresses. And yet, with this latent complexity, the design of the building envelope

is increasingly being relinquished by the architect to specialised consultants…

**Skin or Structure:
Transfer of Traditional Knowledge**
arch 5431c Hiroyuki Shinohara t2

This course explores the notion of tectonic and atectonic in transferring knowledge of traditional crafts to contemporary architectural production. The principles of Kagome weaves, a tri-axial material interlacing system, of the basket making are attempted to apply in architectural scale. It investigates the relationship between pattern, material and fabrication system established on the scale, and considers tools and fabrication methods for the purpose.

The Making of Details
arch 5431d Xu Liang t2

This course considers the subject of detailing as not just a matter of technical exercise, but an inseparable correlation among design idea, its material embodiment and spatial experience. Through furniture design and case study, we will investigate the making of details by enquiring its material performance and tectonic expression independent of scales. Through literature study, a frame of historical reference will be established for understanding the evolution and continuity of architectural detailing.

**Topical Studies in Professional Practice
Management: Future Practice and
Sustainable Response**
arch 5531 Maggie Ma t2

Architectural education provides the ability to design, to critically question, and tackle design

challenges, as a prelude to practice and an integration into the full complexity of daily life. The course prepares students to practice, through the understanding of fundamental roles and values of an architect, with discussions on professional conduct and procedures that are related to practising as an architect. It is designed to inspire students to look beyond the customary, and consider the ever-changing environment of the future, through the study of alternative possibilities in architectural and spatial practices.

Co-creating architectural landscapes
arch 5731 Thomas Chung t1

This elective explores ideas of co-creation and their significance for architectural design, especially in view of increasing environmental challenges, social dissonance and political polarisation in our cities. We will learn from case studies of design thinking and co-design as interactive collaborations of socially inclusive innovations that unlock collective creativity through constant dialogue. Using local projects of schools, villages and public landscapes, we will test the architect's role as facilitator, curator or empathic form-giver that designs for place-making, community engagement and well-being.

MSc

Urban Design

Programme Director
Hendrik Tieben

The COVID19 pandemic underlined the central role of public space for our health and well-being. It also highlighted existing social and health disparities as they were further exacerbated by the health crisis. Urban design can play an essential role to better prepare cities and communities for the 'new normal' by helping us reconsider the way public spaces can be used, where and how we will live, work and socialise, and how we will move between different places and activities. Following these considerations, we will focus in the first studio on the urban conditions and public spaces along the MTR Central-Tsuen Wan Line ('red line'), which connects the affluent finance and tourism center on Hong Kong Island with the low-income neighborhoods of Kowloon. The second studio will continue our design research but engage with the larger scale and different urban conditions of Hong Kong's New Territories and Shenzhen.

The learning activities in the MSUD programme are co-organised with our international partners facillitating online connections with students and teachers from diverse backgrounds. Our studio research on 'Urban Design for Healthy Cities in the Age of Pandemics' is also co-developed with our professional partner ARUP Hong Kong. For the summer, we plan an international urban design workshop, conducted online or if conditions allow, abroad at one of our partner schools in Europe or the USA. With our studio work, we aim to contribute to the implementation of the United Nations Sustainable Development Goals: 3 (Good Health and Well-being), 10 (Reduced Inequalities) and 11 (Sustainable Cities and Communities).

Study Scheme

Students are required to complete a minimum of 30 units of courses for graduation.

(i) Required courses: 24 units

First Term:
- URBD 5710 Urban Design Studio I - 6 units
- URBD 5703 Urban History & Theory - 3 units
- URBD 5731 Urban Processes - 3 units
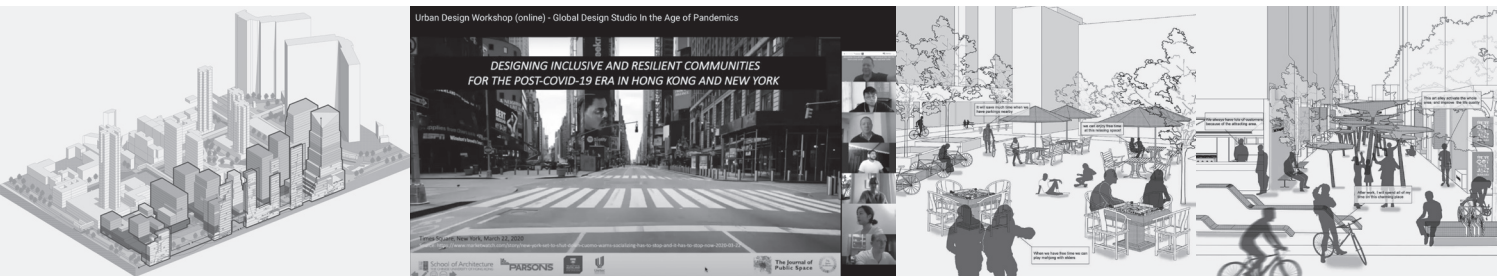- URBD 5732 Urban Transport Networks - 3 units

Second Term:
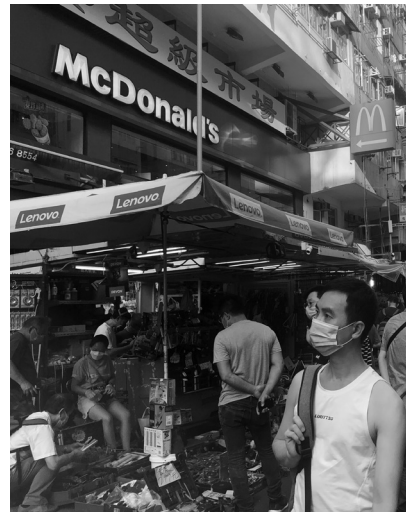- URBD 5720 Urban Design Studio II - 6 units

Summer Term:
- URBD 5734 International Workshop - 3 units
- URBD 6701 Urban Design Thesis - 6 units

For more information and updates, visit the programme website:
http://web5.arch.cuhk.edu.hk/urbandesign/

MSc

Urban Design

DESIGN STUDIO

Urban Design Studio I a & b
urbd 5710
Hendrik Tieben
Darren Snow

Urban Design for Healthy Communities in the Age of Pandemics

The Urban Design Studio in Term I focuses on communities and public spaces along the MTR Central-Tsuen Wan Line (red line), which connects the financial centre on Hong Kong Island, with the diverse neighbourhoods of Kowloon. Reflecting on the complex interface of urban design and public health students will be challenged to develop innovative responses in line with the UN Sustainable Development Goals (SDGs). In a time of social distancing and remote working the role of public spaces and transport has changed, perhaps for the long term. Such crises highlight the need for multiple bottom lines and resilience at local and global levels. Responding to these challenges students will reconsider the potential for sustainable urban change examining the relationship between regional infrastructure and local placemaking initiatives.

The case study sites at Sham Shui Po and Jordan provide a rich cross-section of morphologies, from the dense gridded blocks, through new reclamations and large scale infrastructure. Opportunities for more inclusive and sustainable visions of the city have been enabled as a substantive rethinking of the city becomes not only possible but essential. As places for living and working on Hong Kong Island and Kowloon have become unaffordable, more and more of these functions are relocated along the MTR line towards the north and transforming old grass-roots and industrial areas. During the semester, students will work with different community organisations and engage with local stakeholders and residents. Working with local community partners the studio will culminate in a strategic intervention in Sham Shui Po, creating a space for community engagement and local resilience.

REQUIRED COURSES

Urban History & Theory
urbd 5703 Hendrik Tieben & Melody Yiu

This course examines the main ideas, histories and theories of the city. Important themes and debates in the history of urban design will be critically explored. In particular, the course investigates how urban forms have emerged and later reinterpreted, adapted and challenged by different social, economic and political contexts.

Environmental & Urban Economics
urbd 5702 Sylvia He

The course prepares students to develop criteria for value judgments about the complex social, economic and environmental impact of urban design and planning. A range of topics will be discussed including planning policies, migration, and transportation, zoning and livability issues, and potentials for more sustainable, just and livable cities. Students will learn about contemporary urban economic research and online sources of economic data.

ACTIVITY

International Urban Design Workshop
urbd 5734 Hendrik Tieben

As in every year, the programme plans an international urban design workshop. If the health situation allows, the workshop will be organised in an overseas location (e.g. New York or Venice) in collaboration with one of our international partner programmes. If the current health crisis would continue, an international online workshop with our international partners will be arranged.

DESIGN STUDIO

Urban Design Studios II a & b
urbd 5720
Jeroen van Ameijde
Casey Wang

Infrastructures of Inclusion for Local Communities and Networked Cities

Until recently, the guiding narrative about the planning of cities focused on the continuous expansion and increasing integration of city regions, forming new networks of mobility and exchange at multiple scales. The Greater Bay Area initiative falls within this philosophy, promoting what Manuel DeLanda has termed as 'meshwork cities', which stimulate economic development through internal and external competition, innovation, and the strengthening of regional collaboration. Yet the pandemic has imposed new boundaries to protect populations, highlighting the precarious dependencies of cities on supply lines and hinterlands. Limited travel and requirements of social distancing are reframing forms of communication at the micro and macro scale, across urban communities and the networked city in the region. While sudden improvements in air quality and other natural systems provide a positive note in a time of crisis, these also indicate the urgent need for a debate about balanced future urban growth in relation to the environment.

With the theme of 'infrastructures of inclusion', this studio will address the need for support networks at the neighbourhood, city and regional scales during 'the new normal', exploring solutions that balance interconnectivity with local self-sufficiency. At the neighbourhood scale, we will explore how the (re) design of new or existing urban areas in Hong Kong and Shenzhen can improve their capacity to support diverse communities, promote health and well-being, and economic mobility. At the regional scale, we will explore the future relationships between the different areas of the Greater Bay Area, understanding how integrated flows of resources, information and people are vital for its future development while also offering opportunities to strengthen unique local characteristics and specialisations.

ELECTIVE COURSES

Urban Processes
urbd 5731 Sujata Govada

This course is organised in close relationship to the Urban Design Studio I and gives students the opportunity to learn about urban processes in Hong Kong and beyond. The course uses a combination of lectures and workshops in which students directly engage with different stakeholders and community members.

Urban Transport Networks
urbd 5732 Daniel Pätzold

The course provides an introduction into history and application of urban transportation systems. Urban integration, policy, transport concepts, planning aspects, technical requirements and ways of implementation are presented. During the course visiting lectures convey professional knowledge whilst its adaption to student design projects will be encouraged.

THESIS

Urban Design Thesis
urbd 6701 Jeroen van Ameijde & Darren Snow

The course covers the general procedures of theoretical inquiry as it relates to urban design. For the dissertation, students will develop a proposal and produce an intellectually rigorous piece in design and writing. The topics will be self-defined but should relate to the overall studio theme.

MPhil-PhD

name	research title	supervisor(s)
Cai Meng / PhD	Developing a High-resolution Urban Carbon Emission Inventory for the Greater Bay Area: An Open Data Approach	Edward Ng
Chan Ching Kan / PhD (Part-time)	Architect as the Agency in the Making of Public Realm: Cultivating Diversity through Commercial Architecture	Stanislaus Fung Ho Puay Peng
Chan Chun Hong, Felix / PhD (Part-time)	Applying Semantic Web on BIM-Based Urban Water Supply Network	Hendrik Tieben Tsou Jin-yeu
Chen Fei / PhD	Transformation of Public Participation in Urban Renewal, HKSAR (2001-)	Hendrik Tieben
Chen Feihao / PhD	Detecting and Simulating Future Land Use/Cover Change with Deep Learning Techniques	Zhu Jingxiang Tsou Jin-yeu
Chen Jun / PhD	Dialogue: A Case Study of The Collaborations Between Structural Engineer Zhang Zhun and Several Chinese Architects	Stanislaus Fung
Cheung Ka Ming / PhD	Development of Healthy City Assessment Tool for Active Lifestyle	Edward Ng
Choi Sze Ho, Jack / PhD	Hong Kong Vernacular Urbanism in the Collective Realm: A Sense of Place and Identity to the People and the Community through Everyday Events of Architecture	Peter Ferretto
Rico Samuel Diedering / PhD	Building Systems Adaptive to Radical Changes	Zhu Jingxiang
Fung Sze Wai, Veera / PhD	Architectural Design and its Economic Implications in Low-Cost Housing Projects	Peter Ferretto
Geng Yan / PhD	From Rural Settlement to Urban Form: A Comparative Study of Village Transformations in Shenzhen and Hong Kong	Hendrik Tieben
Pedram Ghelichi / PhD	Becoming Constructed: From Structural Versatility to Local Adaptivity in the Works of Sverre Fehn, Miralles-Pinos and Unitinno Studio	Zhu Jingxiang
Ho Tsz Wai / PhD	Co-designing for Positive Education in Hong Kong: Architectural Redesign Framework of Physical Environment for Teaching, Learning and Wellbeing	Thomas Chung
Kwok Yu Ting / PhD	Mesoscale Urban Climate Modelling for High-rise, High-density Cities: Implications on the Urban Planning of Hong Kong	Edward Ng
Li Kehan / PhD	Meanings of the Built Environment and Power Behind Changes of Rural Spaces in China's Nu River Valley	Edward Ng Peter Ferretto
Li Xiang / PhD	Evaluating the Accessibility of Public Open Space under Demographic Ageing with Geographical Information System: A Case Study of Wong Tai Sin District, Hong Kong	Hendrik Tieben Tsou Jin-yeu
Li Yuke / PhD	Soundscape in Chinese Literati Gardens of the Ming Dynasty	Stanislaus Fung
Liu Chang / PhD	Rocks and Rockeries in Song Dynasty China	Stanislaus Fung
Liu Sheng / PhD	Building Performance and Passive Adaptation Strategies in the Context of Future Climate Change: A Case Study of Residential Buildings in Subtropical Hong Kong	Edward Ng
Liu Yan / PhD	History and Memory: Research of the Gardens on Paper in the Late Ming Dynasty	Stanislaus Fung
Luo Jing / PhD	Form Follows Body: The Dong Carpenter's Knowledge and the Application of Carpenter's Rules, Rituals and Tools for Constructing the Dong Minority Houses in Rural Southern China	Peter Ferretto
Ouyang Wanlu / PhD	Improve Microclimate and Pedestrian Thermal Comfort by Optimising Urban Greenery Combinations on Ground Level, Vertical Wall, and Rooftop Locations	Edward Ng
Shao Changzhuan / PhD	Research and Application of Bamboo Bridge in China	Edward Ng Peter Ferretto
Shen Qi / PhD	A Case Study of Contemporary Chinese Architect	Stanislaus Fung
Sun Xiong / PhD	A Preliminary Study on Architect's Discourse and Works in Contemporary China: 3 Cases by Atelier Deshaus	Stanislaus Fung
Sun Yuxuan / PhD	Vertical Efficiency Benchmarking: Tall Building Evaluation and Design Improvement in High Density Cities	Zhu Jingxiang
Wajiha Tariq / PhD	Data Driven Public Housing: Enhancing Quality of Life in Urban Clusters of Hong Kong	Hendrik Tieben Jeroen van Ameijde

name	research title	supervisor(s)
Wang Ran / PhD	Urban Expansion Patterns and Surface Urban Heat Island Effect of Selected Chinese Cities from 2000 to 2005 Based on the Local Climate Zone Scheme	*Edward Ng*
Wu Fangning / PhD	A Study on Pedestrian-scale Neighborhoods in Central Urba**n** Area According to the Supply of Public Product	*Hendrik Tieben Thomas Chung*
Xiang Luyao / PhD	Outdoor Environment as a Means to Relieve Human Psychological Stress in High Density City at Pedestrian Level	*Edward Ng*
Yiu Hoi Lam, Melody / PhD (Part-time)	Institutional Public Space: Cultural Architecture, Institution and its Public Space	*Hendrik Tieben Francesco Rossini*
Zhai Yukun / PhD	Spatial Panel Construction: Case Studies on Industrialized Modular Buildings	*Zhu Jingxiang*
Zhao Yan / PhD	Modernising Log Construction System: A Study on Technology Advancement and Design Strategy	*Zhu Jingxiang*
Zhang Xiaojun / PhD	Resilient Village as the Rural Response to the megacity of the Greater Bay area in China	*Peter Ferretto*

Incoming PhD Students 2020-21

Gao Shichao	*Supervisor:*	*Liang Erchun*	*Supervisor:*
MSc PolyU. Milan,	*Zhu Jingxiang*	*MSc CUHK*	*Hendrik Tieben*
BA Guangxi U. Nationalities		*BArch Huazhong UST*	

Tian Fang — *Supervisor: Edward Ng* — *MArch, BArch Kunming UST*

Garvin Niklas Karsten Goepel	*Supervisor:*	*Liu Xinyu*	*Supervisors:*
MArch Applied Arts Vienna,	*Zhu Jingxiang*	*MPhil Dalian U. Tech,*	*Hendrik Tieben*
BSc U. Liechtenstein	*Kristof Crolla (TBC)*	*BEng IMUT*	*Jeroewn Van Ameijde*

Wen Rui — *Supervisor: Thomas Chung* — *MArch UCL, BArch Fujian U. Tech*

Ju Liqin	*Supervisor:*	*Nan Tian*	*Supervisor:*
MPhil SZU,	*Hendrik Tieben*	*MArch CUHK, BArch CAFA*	*Zhu Jingxiang*
BArch Zhengzhou U.			

Wong Yuk Tsin, Beryl — *Supervisor: Peter Ferretto* — *MArch CUHK, BArch NQU*
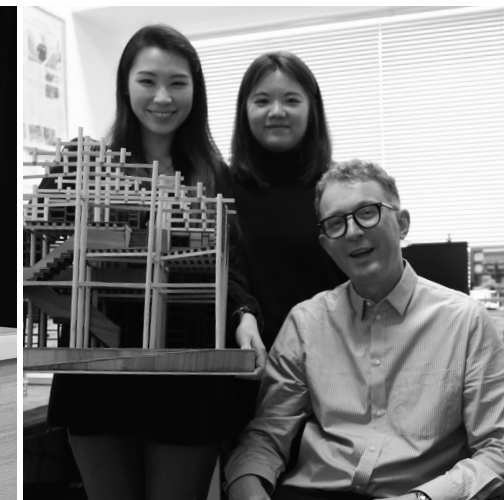
Faculty

Full-time Faculty

Kelly Chow	*Professional Consultant*
Thomas Chung	*Associate Professor*
Tatjana Crossley	*Assistant Professor*
David Dernie	*Director and Professor*
Peter Ferretto	*Associate Director and Associate Professor*
Adam Fingrut	*Assistant Professor*
Stanislaus Fung	*Associate Professor*
Inge Goudsmit	*Assistant Professor*
Han Man	*Lecturer*
Patrick Hwang	*Assistant Professor*
Maggie Ma Kingsley	*Assistant Professor*
Mo Kar Him	*Assistant Professor*
Edward Ng	*Yao Ling Sun Professor of Architecture*
Francesco Rossini	*Assistant Professor*
Hiroyuki Shinohara	*Assistant Professor*
Hendrik Tieben	*Associate Director and Associate Professor*
Jeroen van Ameijde	*Assistant Professor*
Xu Liang	*Lecturer*
Melody Yiu	*Lecturer*
Zhu Jingxiang	*Associate Professor*

Part-time Faculty

Brian Anderson	*Adjunct Associate Professor*
Nobuo Aoki	*Adjunct Professor*
Essy Baniassad	*Adjunct Professor*
Chan Chi Yan	*Adjunct Assistant Professor*
Sujata Govada	*Adjunct Associate Professor*
Simon Hsu	*Adjunct Associate Professor*
Lam Tat	*Adjunct Assistant Professor*
Sebastian Law	*Adjunct Professor*
Daniel Pätzold	*Adjunct Associate Professor*
Wataru Shinji	*Professional Consultant (PT)*
Darren Snow	*Adjunct Assistant Professor*
Elva Tang	*Adjunct Assistant Professor*
Casey Wang	*Adjunct Associate Professor*
Xu Subin	*Adjunct Professor*
Yutaka Yano	*Adjunct Assistant Professor*
Alfred Yeung	*Adjunct Associate Prorfessor*
Mona Yeung	*Adjunct Associate Prorfessor*
Yuet Tsang Chi	*Adjunct Associate Professor*
Lily Zhang	*Adjunct Assistant Professor*

Emeritus and Honorary Professors

Nelson Chen	*Honorary Professor*
Gu Daqing	*Emeritus Professor*
Heng Chye Kiang	*Honorary Professor*
Ho Puay Peng	*Emeritus Professor*
Tunney Lee	*Emeritus Professor*
Ronald Lu	*Honorary Professor*
Peter Rowe	*Honorary Professor*
Tsou Jin Yeu	*Emeritus Professor*
Rocco Yim	*Honorary Professor*

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sebastian law

adam fingrut

patrick hwang

kelly chow

chan chi yan

hendrik tieben

stanislaus fung

elva tang

simon hsu

lam tat

hiroyuki shinohara

thomas chung

han man

maggie ma

jeroen van ameijde

tatjana crossley

david dernie

zhu jingxiang

mo kar him

xu liang

peter ferretto

edward ng

inge goudsmit

francesco rossini

melody yiu

Events 2019-20

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Summary Activities 2020

Future Craft
Kristof Crolla   *25 May - 12 June*

As recent technological evolutions are radically reshaping all aspects of the architecture profession, it is essential for future generations to not only explore the potential of latest advancements, but also gain a critical understanding of novel modes of production based on traditional forms of craftsmanship.

This research seminar investigates how latest technology is creating a paradigm shift in the conceptual stages of architectural design through innovations in modes of design implementation and material production. It entails the exploration of architectural production techniques and how contemporary technologies can impact on century-old craftsmanship and construction technology. The question at hand is how a computational design and project delivery approach can allow for a paradigm shift in the architectural design solution spaces accessible to entrepreneurial design-builders. We no longer perceive architectural production as sequential to or segregated from the design process now that technology facilitates instant communication and synchronisation across the entire architectural design and implementation spectrum.

Radical Villages: Socially Aware Community Based Architecture for Hong Kong
Peter Ferretto   *25 May - 19 June*

The idea of 'Local' has taken on a new meaning in the last three months. Post March 2020 the world has become, all of a sudden, a lot smaller. In the words of the Indian author Arundhati Roy 'this pandemic is a portal. We can walk through it with our dead ideas. Or

we can walk lightly, ready to imagine another world' (Roy, 2020).

This elective wishes to reimagine another world, where Hong Kong's abandoned, desolate and forgotten rural villages can be reintegrated into society via a socially aware, community-based architecture. Students will be asked to design a 'Hybrid Architectural prototype' rooted in local knowledge, whose role will be to enable life to return to the villages via learning, economic reawakening, cultural activities, as well as directly engaging with the local environment. The aim of the course is to shift the notion of architecture away from being a container of social programmes and project it towards becoming a social agent of change.

Digital Design Problem Solving
Adam Fingrut   *26 May - 23 June*

The course exposes students to an iterative approach to design problem solving. It is independent in nature and asks students to investigate, document and develop digital design workflows and tools development. Students will select new and innovative digital design tools based on interest and curiosity. Students will report on their explorations, declare the limits and opportunities of their tools-based research. After gaining confidence and a level of virtuosity, students will be provided with a design provocation for which they develop a response featuring their documented workflows. Group work is not a requirement but highly encouraged. This is an opportunity for students to: 'tool up' over the summertime, gain confidence with digital technology, develop an aptitude for independent problem solving and gain a unique portfolio contribution.

Topical Studies in History, Theory and Criticism: Contemporary Chinese Architecture
Stanislaus Fung   *12 June - 29 June*

This course focuses on the study of contemporary architecture and draws on resources and perspectives derived from architectural history and theory, landscape theory, Chinese studies, and comparative philosophy. The main focus of this course is a series of recent projects by young Chinese architects and in Shanghai, Shenzhen and Dali. We shall study these project designs and construction drawings in conversation with local architects in a series of 'virtual visits', and how the construction of the image of professional architects might be adjusted to communicate the innovative aspects of the projects under study.

Live, Work, Play: Inclusive and Democratic In-between Spaces in Public Housing
Jeroen van Ameijde   *15 June - 19 June*

This course focuses on the mapping analysis, theoretical interpretation and creative redesign of an existing public space in Hong Kong, to achieve an inclusive and socially engaging common area. Following a competition brief from the Jockey Club Design Institute for Social Innovation and the Hong Kong Housing Society (HKHS), we analyse the public spaces of an existing public housing estate in Yau Ma Tei. The work developed in this elective will be submitted to the Hong Kong Housing Society, who may select some of the ideas for implementation in the estate. Students work together in small groups in collaboration with students and staff from the Faculty of Social Science and the Gerontology programme in CUHK, to

develop knowledge about the physical and mental health needs of people from all ages and generate creative ideas regarding the social dynamics of public space.

We start with a research phase conducted as one large group, to develop a highly detailed and data-driven site analysis. Based on this methodology, students will then develop design proposals in small multi-disciplinary teams. The specific focus of the design proposals will be 'intergenerational play' – creating an open-ended urban landscape that promotes social interaction between local residents of all ages. The outcomes of the course include high quality analysis and design drawings that explore complex and human-centric designed spaces that integrate movement and activities.

Mapping the Informality:
New Housing Typologies for the
Community
Francesco Rossini *22 June - 9 July*

This course offers the opportunity to explore the area of the Baseco Compound, one of the densest informal settlements in Manila. In the last ten years, the district has suffered from natural disasters and high levels of crime and poverty. Due to its proximity to Manila Bay, it is particularly vulnerable to river flooding and storm surges (Perez et al., 2015). The need for housing and the extremely high population density have put incredible pressure on the basic infrastructure and community services, leading to overcrowded and environmentally unsustainable urban areas. The spontaneous growth that characterises the development of informal settlements must be systematised with innovative methodologies to establish a long-term planning strategy.

The course offers a learning experience by using the informal city as a living laboratory for trying new ideas of upgrading and design solutions for low-income districts. Students will design housing prototypes for the community of BaSECo by using a limited budget and local materials.

Architecture Explorer Programme
Patrick Hwang *27 - 31 July*

2020 has been a trying year. Five months in, what started out as a temporary physical-distancing measure have turned out to be, seemingly, an eternity. So much has changed in so little time with the way we live, work, travel, and learn. Despite this great challenge and in structuring some semblance of normality, professors at the Architecture Explorer Programme intend to honour its commitment to offering high-quality design education this summer virtually. In doing so, AEP 2020 FREE ONLINE re-tuned its progamme, calendar, activities, and overall pedagogic approach by calibrating it to take advantage of the online opportunity and resources. The combination of cognitive and physical activities are redesigned to expose inquisitive students to the world of visual, spatial, and architectural design. Best of all, the programme offered a full tuition-waiver this year to help the youngster of our community through this unprecedented and arduous period.
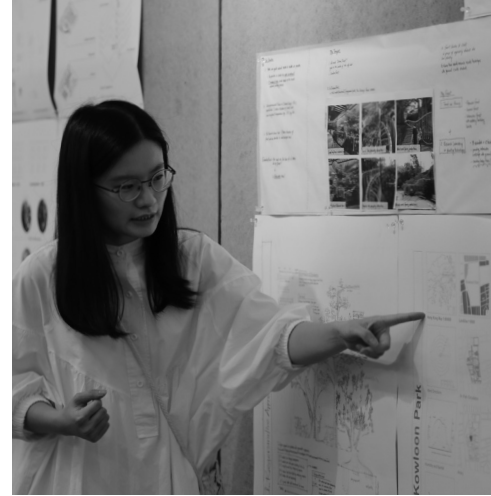
Student Exchange 2020-21

Exchange Programme	Outgoing	Incoming
Partner University		
Delft University of Technology	So Wing Yi	TBC
Graz University of Technology	Chan Ho Kiu, Angel Fung Hiu Tung, Martin Kwok Man Suet, Irene Lam Chak Yan, Melody So Ka Man, Kammy	TBC
National University of Singapore	Ma Po Lun, Charis Ng Ying Tung, Ruby	TBC
Polytechnic University of Milan	Cheung Hiu Yan, Christine Chow Tik Hei ,Dacy Li Wanrong, Vero Tsui Hin Ming	TBC
Polytechnic University of Turin	Lai Ting Yan, Nicole Chan Pui Kwan, Carolyne	TBC
University of Applied Sciences, Stuttgart	Cheung Yi, Yvonne Tse Yuen Wing, Phoebe	TBC
University of Westminster	Li Cheuk Wah, Anson Xu Hanming	TBC

Incoming and outgoing students to be confirmed in Term 1.

Awards and Scholarships 2019-20

Awards	Recipients	Year
6th Hong Kong University Student Innovation and Entrepreneurship Competition – Third Prize	Meng Cai Ran Wang	RPg RPg
A&D Trophy Awards – Excellence in the Student Category	Wong Lok Hei, Jessie	MArch 2
Clifford Wong Prize in Housing Design	Ma Chun Yu, Kelvin	MArch 2
CUHK CAADRIA Student Award	Ma Chun Yu, Kelvin	MArch 2
CUHK CAADRIA Student Award – Commendation	Ho Chung Hei, Alvin Poon Long Wun, Adabelle Fong Chun Hin, Jacky Ngan Wing Sze, Gillian	BSSc Y4 MArch 1 MArch 2 MArch 2
CUHK Outstanding Students Award 2019	Robin Albrecht	BSSc Y4
HKIA Student Medal	Wong Lok Hei, Jessie	MArch 2
International Architecture Student Design Competition 2019 – Teamzero Award	Zhang Fengji, Freddie Wong Yuk Tsin, Beryl	MArch 2 MArch (2019)
RIBA President's Medal Award Nominees Silver Medal Bronze Medal	 Wong Lok Hei, Jessie Ha Po Yi, Bowie Tang Robert Alfred Chan Hiu Wai, Kary	 MArch 2 MArch 2 BSSc Y4 BSSc Y4
Society of Construction Law HK Prize	Tam Dik Yeung, Derek Wong Kwan Ki, Calvin	MArch 2 MArch 2
School of Architecture Best Design Studio Awards: Year 2 Best Project: Winner Commendation Year 3 Best Project: Winner Commendation Year 4 Best Project: Winner Commendation	 Cheung Yi, Yvonne Chan Tung Hoi, Peter Jonathan Chan Tsz Kwan, Kelvin Hung Kwong Lau, Gordon MAN Yan Lok, Thomas Tsang Siu Kiu, Charlotte Tang Robert Alfred Chan Hiu Wai, Kary Yu Man Hon, David	 BSSc Y2 BSSc Y2 BSSc Y2 BSSc Y3 BSSc Y3 BSSc Y3 BSSc Y3 BSSc Y4 BSSc Y4 BSSc Y4

Awards	Recipients	Year
MArch 1 Best Project: Winner Commendation	 Guo Mengdi Chan Claudia Kai Ying Chung Ho Yin	 MArch 1 MArch 1 MArch 1
MArch 2 Best Project: Winner Commendation	 Zhang Fengji, Freddie Wong Lok Hei, Jessie Zhang Pengju, Peter	 MArch 2 MArch 2 MArch 2

Scholarships	Recipients	Year
Formica Scholarship	Robin Albrecht	BSSc Y4
Prof Eric Lye Memorial Scholarship	Cheung Hoi Lan, Sandy Wong Lok Yin, Dannia	MArch 1 MArch 1
Professor Raymond Fung Scholarship	Yang Hang	MArch 1
School Leadership and Service Award	Fong Chun Hin, Jacky Hui Tung Ching, Jennifer	MArch 2 MArch 2
Wong Tung & Partners Scholarship	Choi Lai Fei, Faye Tsang Siu Fung, Simon	MArch 2 MArch 2

| Awards (Alumni)	Recipients	Year
A&D Trophy Awards – Excellence in the Student Category Anthony Sutcliffe Dissertation Award	Tang Wan Ting, Wendy Chen Yongming	MArch (2019) RPg (2019)
DFA Hong Kong Young Design Talent Award – Environmental Design	Gary Ng	MArch (2009)
Green Building Awards 2019	Chi Xinan	RPg (2019)
HKIA Young Architect Award 2018	Kung Yick Ho, Alvin	MArch (2010)
Inspireli Awards 2019 – Finalist	Wong Long Hin, Nichol	MArch (2019)
Smart City Series Design Competition – Merit Recognition	Lau Sze Ngai, Sianne	BSSc (2019)

Location

Elisabeth Luce Moore Library
(1991-1994)

Wong Foo Yuan Building
(1994-2012)
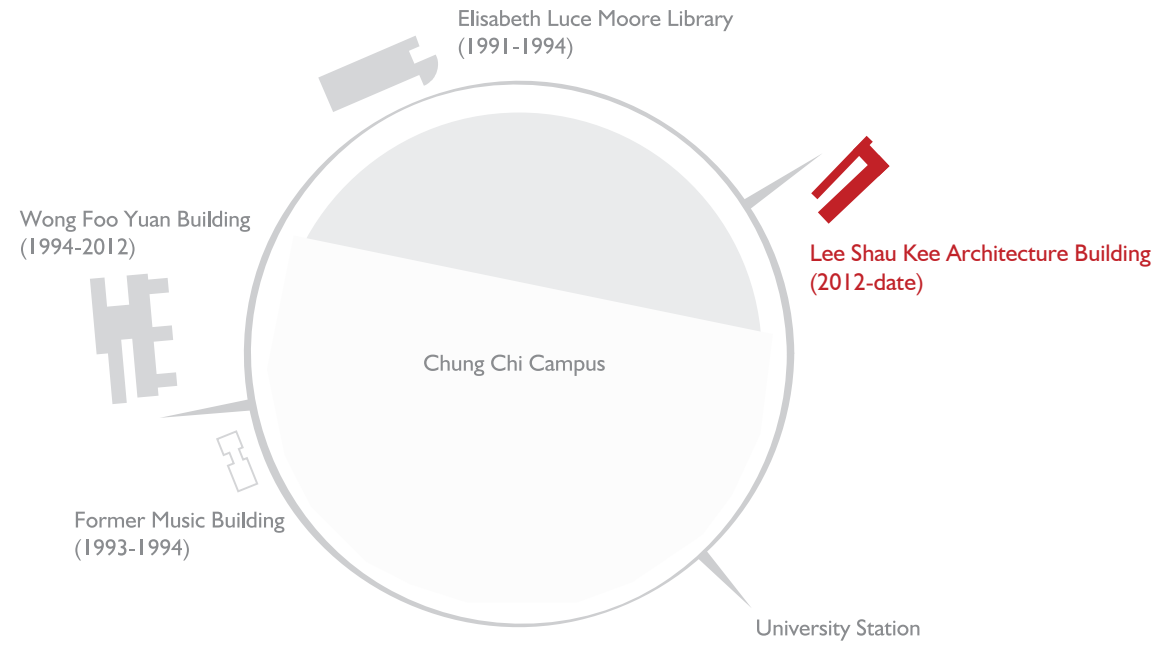
Lee Shau Kee Architecture Building
(2012-date)

Chung Chi Campus

Former Music Building
(1993-1994)

University Station

notebook i 2001-02   210 x 210mm   36 pages
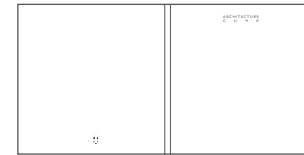vito bertin | essy baniassad
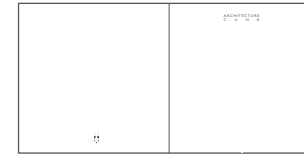
notebook ii 2002-03   198 x 198mm   52 pages
vito bertin | essy baniassad
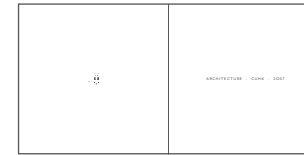
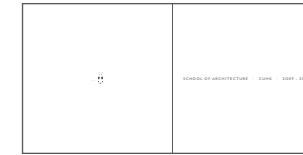*notebook iii* 2003-04   198 x 198mm   64 pages
vito bertin | essy baniassad

notebook iv 2004-05   198 x 198mm   68 pages
vito bertin | essy baniassad

notebook v 2005-06   198 x 198mm   96 pages
liu yuyang | alvin kung

studio booklet 2007-08   198 x 198mm   42 pages
kelly chow

blackbook 2009-10   198 x 198mm   44 pages
thomas chung | andrew yu

blackbook 2010-11   198 x 198mm   48 pages
thomas chung | zachary wong
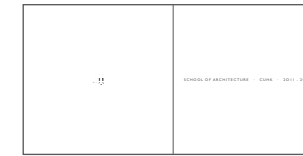
blackbook 2011-12   198 x 198mm   52 pages
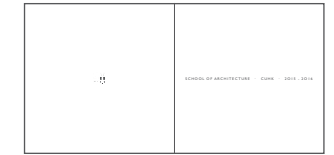thomas chung | andrew yu

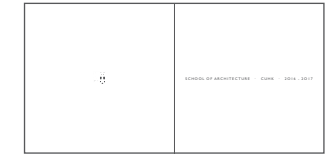*blackbook* 2012-13   198 x 198mm   64 pages
thomas chung | andrew yu

blackbook 2013-14   198 x 198mm   64 pages
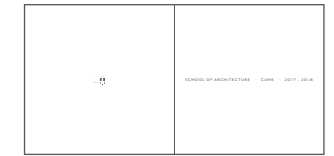bruce lonnman | andrew yu

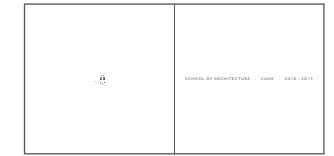*blackbook* 2014-15   198 x 198mm   64 pages
bruce lonnman | andrew yu

blackbook 2015-16   198 x 198mm   68 pages
bruce lonnman | andrew yu & xu liang

blackbook 2016-17   198 x 198mm   68 pages
bruce lonnman | xu liang

blackbook 2017-18   198 x 198mm   72 pages
bruce lonnman | xu liang

blackbook 2018-19   198 x 198mm   68 pages
bruce lonnman | xu liang, janice leung

2019-20   198 x 198mm   68 pages
bruce lonnman | xu liang, janice leung

2020-21   198 x 198mm   60 pages
xu liang | tammy kong