

Master of Architecture (Specialization in Urban Design)

Programme Objectives and Entry Requirements

The rapid urbanization of the Asian landscape and the equally swift transformation of its cities create an urgent need in the region for design professionals, especially practicing architects and planners, to deal with problems of designing within existing urban fabrics and in the periphery of rapidly growing cities. Exposure to a wide scale of design issues ranges from the layout of towns and the restructuring of inner cities to the shaping of streets as settings for public life. The provision of open spaces that nurture civic consciousness also require indepth consideration.

The M.Arch programme with specialization in Urban Design aims to offer a broad-based education in the theory and practice of urban design to enhance the knowledge and abilities of professional architects involved in the design, creation, and evaluation of urban spaces. More specifically, the course hopes to achieve the following objectives:

1. Produce environmentally and socially responsible professionals who are committed to the provision of good urban public areas;
2. Develop analytical and methodological skills that are critical foundations to urban design processes.
3. Provide exposure, at an advanced level, to the full range of issues that bear upon the design and realization of large scale urban space;
4. Prepare students for advanced careers in urban design, consulting, research or public service, or in preparation for further academic training.

Entry requirements include completion of the Architectural Design track of the 4- year BA (Arch) programme with minimum B+ average for Year 4 Design or its equivalence with portfolio review.

Graduation Requirements

Successful completion of the M.Arch with specialization in Urban Design requires a candidate to complete 44 MCs of a Dissertation and seven essential modules. To graduate students have to fulfill the degree requirement of:

- Minimum CAP of 3.0 &
- Minimum C in UD5601 and UD5602 with at least B- in either UD5601 or UD5602

Students would be conferred the Master of Architecture degree upon completion of the programme, with the specialization reflected accordingly in the transcript.

Period of Candidature

The course shall be conducted on a full-time basis lasting 1 year consisting of 2 semesters. The maximum period of candidature is limited to four semesters.

Examination

All courses are graded. Assessment and examinations are as follows:

UD5601 Urban Design Studio 1 UD5602 Urban Design Studio 2	} 100% studio projects and continuous assessment (CA)
AR5141 Dissertation AR5421 Architectural Practice 1 AR5422 Architectural Practice 2 UD5521 Planning Process: Quantitative and Policy Dimensions UD5622 Methods of Urban Design and Urban Analysis UD5624 Special Topics in Urban Design	} 100% Assignment

Syllabus

The following Essential modules are compulsory:

	Module Code	Module Title	Modular Credits
Core Courses	AR5141	Dissertation	8
	AR5421	Architectural Practice 1	4
	AR5422	Architectural Practice 2	4
	UD5601	Urban Design Studio 1	8
	UD5602	Urban Design Studio 2	8
	UD5521	Planning Process: Quantitative and Policy Dimensions	4
	UD5622	Methods of Urban Design and Urban Analysis	4
	UD5624	Special Topics in Urban Design	4
Total Modular Credits			44

Modules Information

Workload: A-B-C-D-E (A=No. of lecture hours/wk, B=No. of tutorial hours/wk, C=No. of lab hours/wk, D=No. of hours for projects, assignments, fieldwork etc/wk, E=No. of hours for preparatory work by a student/week)

AR5141 Dissertation

Modular Credits: 8

Workload: 0-4-0-4-12

The dissertation offers the opportunity to conduct independent research and to demonstrate analytical and communication skills by investigating a topic of interest and of relevance to the discipline of architecture. A topic may be chosen from one of the following subject areas: Design Technologies; History Theory & Criticism; Urban Studies. The length of the dissertation shall be no more than 10,000 words.

AR5421 Architectural Practice 1

Modular Credits: 4

Workload: 2-2-0-3-3

This module will provide students with the knowledge and understanding to enter into architectural practice. It will enable students to understand the roles and responsibilities of the architect in professional practice. Major topics covered are the organization of the construction industry, office and project management, statutory requirements, cost control and contract administration.

AR5422 Architectural Practice 2

Modular Credits: 4

Workload: 2-2-0-3-3

This module will provide students with the knowledge and understanding to enter into architectural practice. It will enable students to understand the legal roles and responsibilities of the architect, the branches of laws applicable to the construction industry, the Singapore Institute of Architects and Public Sector contracts. Major topics covered are the law of contracts, tort, property land law and copyright, duties of architects, the Singapore Institute of Architects and Public Sector form of contracts

UD5521 Planning Process: Quantitative and Policy Dimensions

Modular Credits: 4

Workload: 2-2-0-2-4

This course aims to equip participants with a good knowledge of the urban planning process, particularly the quantitative, research, and policy considerations. It examines the relationship between urban planning and urban design from the practitioner's perspective. Extensive reference with case studies will be made to the Singapore planning process at the various levels. It also helps participants to develop a sound understanding of the integrated nature of urban planning and the urban design processes and how this can be reinforced to achieve a more efficient and attractive urban environment.

UD5601 & UD5602 Urban Design Studio 1 & 2

Modular Credits: 8

Workload: 4-4-0-4-8

The urban design studio is where the synthesis of theoretical and practical aspects of urban analysis and design takes place. Using urban design projects of different scales that deal with programming, planning and design, the studio encourages the integration of political, social, economic, environmental, and physical concerns in the design of urban spaces. The studio will also analyse successful urban design projects in the form of case studies. Urban Design Studio 2 will include a compulsory international workshop in the form of a field trip to a regional city to work with the relevant local planning/design authority and academic institution (cost of fieldtrip borne by student).

UD5622 Methods of Urban Design and Urban Analysis

Modular Credits: 4

Workload: 2-2-0-2-4

This course is taken in conjunction with urban design studios. Methods of urban analysis and urban design will be taught to enable the students to tackle urban design projects of varying scales introduced in UD5601 and UD5602. The various aspects of urban growth, city limits/boundaries, urban structure, urban architecture, typologies as well as infrastructural planning, parcellation, public space and design guidelines will be introduced. The critical role that transportation plays in structuring the city will also be examined. This course will be conducted intensively on a daily basis over a period of three weeks (usually beginning on the third week of Semester 1).

UD5624 Special Topics in Urban Design

Modular Credits: 4

Workload: 2-2-0-2-4

The module is to provide students the in-depth understanding of urban form analysis, urban form making and development processes over extended spatial and temporal environment through various urban design cases and theories. As one of the essential courses of urban design, the lecture/seminar is going to introduce not only the historical legacy but also those cutting-edge thinking for the future. The discussion will cover many discourses related to how cities and urban spaces could be analyzed, designed, managed, evaluated, represented and changed. The original thought of city form and design from Kevin Lynch is regarded as the starting point for the whole module. The following sessions will cover those new trends and issues in different specific urban design topics, such as downtown urban design, urban regeneration, Asian urbanism and large-scale project development, waterfront redevelopment, transit village, sustainable city, landscape ecological design, information city, the emerging technologies for urban simulation and finally the making of urban design plan.