

Historical Snapshots of Planning Education in Singapore

Text written by:
Angela Teo
Cristina Nearing

Editing support:
Wang Yi Wen
Felicity Chan

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1. Introduction

Singapore is dubbed as one of the “most meticulously planned cities in the world”, and even hailed as a “planner’s dream”.¹ But what do we actually know about how planning education in modern Singapore has evolved since Singapore attained self-government in 1959 from British colonial rule? What do we know about their experiences of planning education?

2. Early Stages of Town Planning in Singapore, 1959-1969

With a strong imperative to ensure that robust urban foundations were properly laid, Singapore sought the expertise of the United Nations (UN) for technical assistance in urban planning. The UN played a pivotal role by providing comprehensive support in multiple phases. This collaboration aimed to chart out both long-term and short-term urban redevelopment programs and strategies for Singapore. A key component of this assistance included a two-month study to uncover the problems of the city and to propose legislative and executive measures. The study was led by three international urban planning experts from the UN: Otto Koenigsberger, Charles Abrams and Susumu Kobe.²

The first generation of planners in post-colonial Singapore comprised largely of expatriate planners. These expatriates played a foundational role in forming the Singapore branch of the Royal Town Planning Institute (RTPI) United Kingdom. The RTPI set the qualification standards of planners in Singapore. For the first 15 years, membership in RTPI Singapore was limited to twenty planners who were graduates from recognised planning schools in the Commonwealth and the United States, resulting in many pursuing their planning education in the UK, Australia, and the US. The Singapore Institute of Planners (SIP) was only formed in 1971, partly to secure a wider representation of town planners to address the need to adopt a more realistic approach in setting the qualification standards for town planners.

Lim Siah Chuan, an SIP member who attended a graduate planning course at Oxford Polytechnic, shared in an SIP newsletter about the difficulties he faced taking the RTPI examinations in the UK. In the newsletter, Lim shared that there was a lack of resources and guidance for the local students from Singapore. The examination syllabus also was centred on the British socio-economic, political and physical landscape conditions that differed significantly from Singapore’s. This made it difficult for Singaporean students to pass the RTPI exams.³

Consequently during the 1960s, the newly-established Planning Department in Singapore faced a crisis as it was heavily short-handed and had insufficient resources to develop a new planning framework. The situation worsened as many of the expatriate planners in the Singapore Improvement Trust (SIT) left upon Singapore’s self-governance in 1959. This exodus left the Planning Department in Singapore with only three local planners⁴. Throughout the civil service, the departure of expatriate officers created a challenge in finding “suitably qualified” and “experienced local officers” to fill their roles. This situation underscored the need for a manpower planning body responsible for developing tertiary education, both domestically and internationally, with the goal of training a new pool of civil servants.⁵

3. The Inception of an Urban Planning Programme in Singapore, 1970-76

The first urban planning postgraduate program in Singapore, Master of Arts in Urban Planning (MAUP), was established in 1970 at the University of Singapore (now known as National University of Singapore). This two-year postgraduate course was first of its kind in Southeast Asia and designed to support the urban renewal initiatives (see Figure 1). The MAUP also served as “a much-needed bridge between professional urban planners and implementation of the plans”.⁶ At that time, there was no urban planning training available in Southeast Asia, and the program aimed to address urban planning challenges specific to developing countries and their local contexts. British Professor and town planning specialist Jaqueline Tyrwhitt provided guidance for setting up the syllabus. The curriculum has four different specialisations: Urban Policies and Reform, Analytical and Predictive Methods, Urbanisation and Rural Development, and Resettlement Patterns (refer to Figure A.2. in Appendices). Supplementing the MAUP programme at NUS, members at SIP offered an ‘Urban Planning Course’ in the Geography Department of Nanyang University in 1973.⁷

Tan Cheng Siong, who completed the MAUP programme in 1973, shared that he found the then-local urban planning course content too abstract and impractical, and was disappointed by the lack of good instructors⁸. The MAUP programme was terminated in 1976 due to a lack of teaching staff and enrollment (see Figure 2)⁹. Between 1970 and 1976, only 15 graduates completed the programme as some students working full time eventually dropped out of the programme.

For the next 36 years until 2012, Singapore had no university planning programme.



Figure 1. Part-time Master of Arts (Urban Planning) programme at the University of Singapore in the 1970s (Source: NUS Department of Architecture¹⁰)

A Firstly we had the problem of staff shortage, fully qualified staff that is, and secondly the student applications received; we were not too satisfied with the quality of students applying for the course. Their backgrounds were also too diverse.

Initially the intention was only to suspend the course but we find that we are unable to re-introduce it basically because of the uncertainty over the supply of students. In the past there were two main groups of students. Firstly, private students with backgrounds in either architecture, engineering, estate management, building, etc. The number in this group is uncertain and it is often a problem with part-time students that they are not able to pursue the course to its completion because of work commitments. The second group of students are those sponsored by Government or statutory boards. Even with this group, there is no certainty that there would be a constant supply of students into the course. We are therefore unable to re-start the course as there is a fear that although started, we may not be able to continue.



Figure 2. Planews excerpt showing search for staff

4. The 36 Years Absence, 1976-2012

The absence of formal planning education in Singapore presented manpower challenges. Debates about the adequacy of skills, training and credentials of planners were continual as urban renewal in Singapore proceeded apace. Not all planners in the government possessed technical engineering and architectural backgrounds and there was the question of whether this would lead to negative consequences for the urban development of Singapore. With only 50 planners for a population of 2 million in, there was a concern that if Singapore was to have a strong future, there was a need to build up and expand the capabilities of planners.¹¹

During the 36 years, Singapore relied on international planning education to train its urban planners through the provision of scholarships.¹² From 1979 to 1983, 90 percent of scholar recipients went to the UK for higher education to institutions such as Cambridge and Oxford.¹³ As incomes increased, more families could afford to send their children overseas for higher education, further reinforcing this trend.¹⁴

In 2012, the National University of Singapore (NUS) Department of Architecture established the Master of Urban Planning (MUP) programme led by Associate Professor Ng Wai Keen who studied architecture and urban design in the UK and urban planning in the United States. Ng had previously worked as an architect with the Public Works Department in Singapore and as an urban planner for Fundación Metrópoli in Spain. The reestablishment of an urban planning programme in Singapore marked a significant step in the evolution of urban planning education in Singapore.

5. Urban Planning Education in Singapore, 2012-Today

Since 2012, establishment of urban planning-related programs has mushroomed, including urban design, urban studies, and urban science. As shown in Table 1, there are now fourteen urban planning-related programmes. In addition to the 2-year MUP programme at NUS since 2012, SUTD started the 1-year MSc in Urban Science, Policy and Planning (MUSPP) in 2018.

Today, many planners practising in Singapore continue to be educated in the universities of the Global North. Planning education offerings are unevenly distributed – despite only representing 20 percent of the global

population, over half of the planning schools are located in the Global North.¹⁵

In addition to further developing Singapore's planning education, Singapore could consider kickstarting a regional collaboration of planning knowledge exchange among Southeast Asian countries as first mooted by then SIP President A.G.S. Danaraj in 1977 for an ASEAN town planners association.¹⁶ According to Chua Peng Chye, "much of the unique experience and expertise gained, through modifying overseas planning principles, theories and models to local situations, cumulatively represent a special store of knowledge, which no educational institution is known to have stocked and transmitted to planning students".¹⁷

As planning education in Singapore evolves, we look forward to a near future when planners will become ever more robust multi-disciplinary professionals, who are even more equipped with the skills and qualities to work with people and residents from diverse social and cultural groups.

Table 1. Urban- and Planning-related programs in Singapore

Source: Curated by Cristina Nearing and Wang Yi Wen

Year Established (Approx.)	Program Level	University	Program	Details	Modules
1970-1976	Graduate	National University of Singapore (NUS)	Master of Arts in Urban Planning (part time)	The M.A. in Urban Planning was established under the School of Architecture at the National University of Singapore (NUS). It was terminated in 1976 due to a lack of enrollment.	N/A
1998	Graduate	National University of Singapore (NUS)	Master of Arts in Urban Design	The program uses Singapore and other Asian cities as design innovation labs to equip graduates with advanced knowledge, social responsibility, and entrepreneurial skills. The MAUD curriculum covers high-density urban environments, technological advancements in design, social engagement, community development, and systems thinking.	The modules include Urban Design Studio, Theory and Discourse, Methods and Tools, Urban Economics, Critiques of Contemporary Urban Design, and a Dissertation. These courses cover practical design, theoretical frameworks, analytical tools, economic considerations, contemporary critiques, and research projects in urban design.
2011	Undergraduate	Yale-NUS	Major in Urban Studies	Students learn about many different urban contexts, processes and topics, and are taught a range of explanatory frameworks (economic, political, social, cultural and spatial). After completing the program, students go on to Master's degrees in fields of urban planning and policy.	The courses explore comparative urban development, urban theory, spatial representation, geospatial and demographic methods, social science research methods, urbanization's environmental impact, urban planning debates, challenges in Global South cities, and various specialized urban topics.
2012	Graduate	National University of Singapore (NUS)	Master of Urban Planning	A two-year post-graduate programme offered by the Department of Architecture. MUP is open to students with various backgrounds. The Master of Urban Planning (MUP) programme was inaugurated with Associate Professor Ng Wai Keen as programme director.	The modules cover comprehensive aspects of urban planning and design, including practical studios in Urban Analysis and Urban Design and Planning, qualitative and quantitative methods, Urban and Regional Economics, Planning Policy and Process, and Planning Technologies. Additionally, they delve into the History and Theory of Urban Planning, providing a well-rounded education in both theoretical and applied aspects of the field.

Year Established (Approx.)	Program Level	University	Program	Details	Modules
2017	Undergraduate	National University of Singapore (NUS)	Minor in Urban Studies	A minor programme jointly Offered By Department of Geography (FASS) and NUS Business School.	The modules encompass the economic, social, environmental, and political aspects of urban development, including urban and transport economics, socio-ecological impacts, spatial dynamics, urban planning, infrastructure finance, and urban sociology.
2018	Graduate	Singapore University of Technology and Design (SUTD)	Master of Science in Urban Science, Policy and Planning (MUSPP)	A 12-month, full-time programme aimed at training the next generation of urban researchers, analysts and practitioners to be well-grounded in theory, skilled in data and analytics and adept at policy and planning. The program is jointly organised by the Humanities, Arts and Social Sciences (HASS) cluster and the Lee Kuan Yew Centre for Innovative Cities (LKYCIC) research institute.	There are three core focuses of this program including urban theory, data science, and urban policy. With urban theory, students are provided with a theoretical foundation that incorporates critical thinking about cities, social theory and urban planning paradigms. Students are trained in social science, Geographic Information Science (GIS) and relevant data science techniques such as machine learning, network analysis and interactive data visualisation. Lastly, students are prepared to critically assess, understand and craft evidence-based policies and programmes positioned within the institutional context of urban economics, politics and governance.
2018	Undergraduate	Nanyang Technological University (NTU)	Minor in Geography and Urban Planning	Offered by the School of Social Sciences and the College of Humanities, Arts, and Social Sciences, this minor programme introduces students to spatial thinking about contemporary societies, urban development, and the physical environment. Based in the School of Social Sciences, it cross-lists electives from various schools, offering a comprehensive curriculum. The program equips students with a theoretical understanding of space and practical skills in urban planning, preparing them to address contemporary societal issues and envision alternative urban futures.	Core courses include an introduction to geography or urban planning. Students choose four unrestricted electives from various departments, covering topics in urban life, development, environment, GIS, remote sensing, contemporary art in Singapore, and the politics and history of Southeast Asia. The electives allow for a broad interdisciplinary approach, integrating insights from geography, urban planning, environment, history, politics, and sociology. Only one course may be taken from the History, PPGA, and Sociology lists.

Year Established (Approx.)	Program Level	University	Program	Details	Modules
2021	Undergraduate	National University of Singapore (NUS)	Second Major in Sustainable Urban Development (SUD)	The Second Major in Sustainable Urban Development is open to all students with strong interests in urban sustainability. The objectives of the Second Major are to provide students with broad exposure to the field of urban sustainability and to equip them with interdisciplinary knowledge and skills to be able to address the most pressing issues of urban development and its human impacts in cities in the context of changing climate from the sustainability viewpoint.	The Foundation Course offers an introduction to sustainability, environmental studies, or urban livability. Core Courses cover managing the built environment, energy, and resources, while Elective Courses and Cross-Disciplinary Projects focus on building performance, energy management, climate change, and green development.
2022	Undergraduate	National University of Singapore (NUS)	Minor in Cities	Offered by College of Design and Engineering (CDE), NUS Cities offers an interdisciplinary curriculum underpinned by the Liveability Framework (LF) developed by the Centre of Liveable Cities (CLC) to explain how Cities are governed, planned, and managed. Programmes are jointly taught by seasoned practitioners, interdisciplinary faculty from departments within and beyond the College of Design and Engineering (CDE), and visiting professors.	The modules focus on creating liveable, inclusive, sustainable, smart, and effectively planned cities. They also address various urban challenges.
2022	Graduate	Singapore Management University (SMU)	Master of Philosophy in Asian Urbanisms	Offered by the College of Integrative Studies, the Asian Urbanisms is an interdisciplinary programme that blends urban studies with insights from the humanities, economics, public policy, business, climate science, and information systems. It combines taught and research components, equipping students with the knowledge and skills to address complex urban problems.	In Year 1, students complete core courses in urban studies, planning, sustainability, and research methods, alongside elective courses in comparative urbanisms, urban sustainability, technologies, and economics. Throughout the first year, students also develop their thesis proposal. In Year 2, they prepare and defend their thesis proposal, conduct research, and ultimately submit and defend their thesis.

Year Established (Approx.)	Program Level	University	Program	Details	Modules
2023	Undergraduate	University of the Arts Singapore	Bachelor of Arts (Honours) Biophilic Design	Offered by University of the Arts Singapore, an alliance between LASALLE College of the Arts and Nanyang Academy of Fine Arts, the undergraduate biophilic design programme integrates urban living with the natural world, addressing climate change and health concerns by reducing carbon emissions, regulating temperatures, and improving air quality. The three-year Bachelor of Arts (Honours) Biophilic Design programme focuses on organic and nature-inspired design for human well-being. Partnering with CPG Corporation, the interdisciplinary curriculum combines theory and practice to nurture skills in spatial design.	The program includes courses in spatial design, urban ecosystems, and biophilic design, emphasizing health, wellness, and green building strategies. It covers urban ecology, design tools, spatial representation, regenerative urban systems, and experiential design. The curriculum culminates in a capstone project, integrating co-creation and advanced urban design concepts.
2023	Undergraduate	University of the Arts Singapore	Diploma in Design (Landscape & Architecture)	This programme focuses on the understanding of relationships between people, space and environmental forces and how these impact the landscapes and built environment you design and create. The programme emphasises a strong foundation of design skills, architecture theory, with an emphasis on studio work, industry attachments, and project work, the program is focused on landscapes and built environment.	The modules cover fundamental skills in drawing, 2D and 3D design, creative thinking, and visual arts history, with general studies on life skills and professional preparation. Practical experiences include overseas immersion, internships, and community projects, alongside specialized courses in design theory, communication, studio work, and contextual studies.
2023	Continuing education	National University of Singapore (NUS)	Professional Development in Placemaking	In collaboration with the Urban Redevelopment Authority and Ministry of Culture, Community & Youth, NUS launched two Professional Certificates in Placemaking including Professional Certificate in Placemaking for Vibrant Places and a Placemaking for Community Management). They also launched the Advanced Profession Course in Placemaking.	The modules cover topics related to placemaking, such as vital placemaking, contract management, project management, stakeholder engagement, building and sustaining communities, place economics, placemaking design thinking, event management and marketing, and placemaking for city spaces. Courses are taught by experts from across the faculty from the College of Design and Engineering, College of Humanities and Sciences, and the Lee Kuan Yew School of Public Policy.

Figure A.1 Timeline of the Evolution of Singapore's Planning Education (Below)
(Source: Compiled and designed by Cristina Nearing)

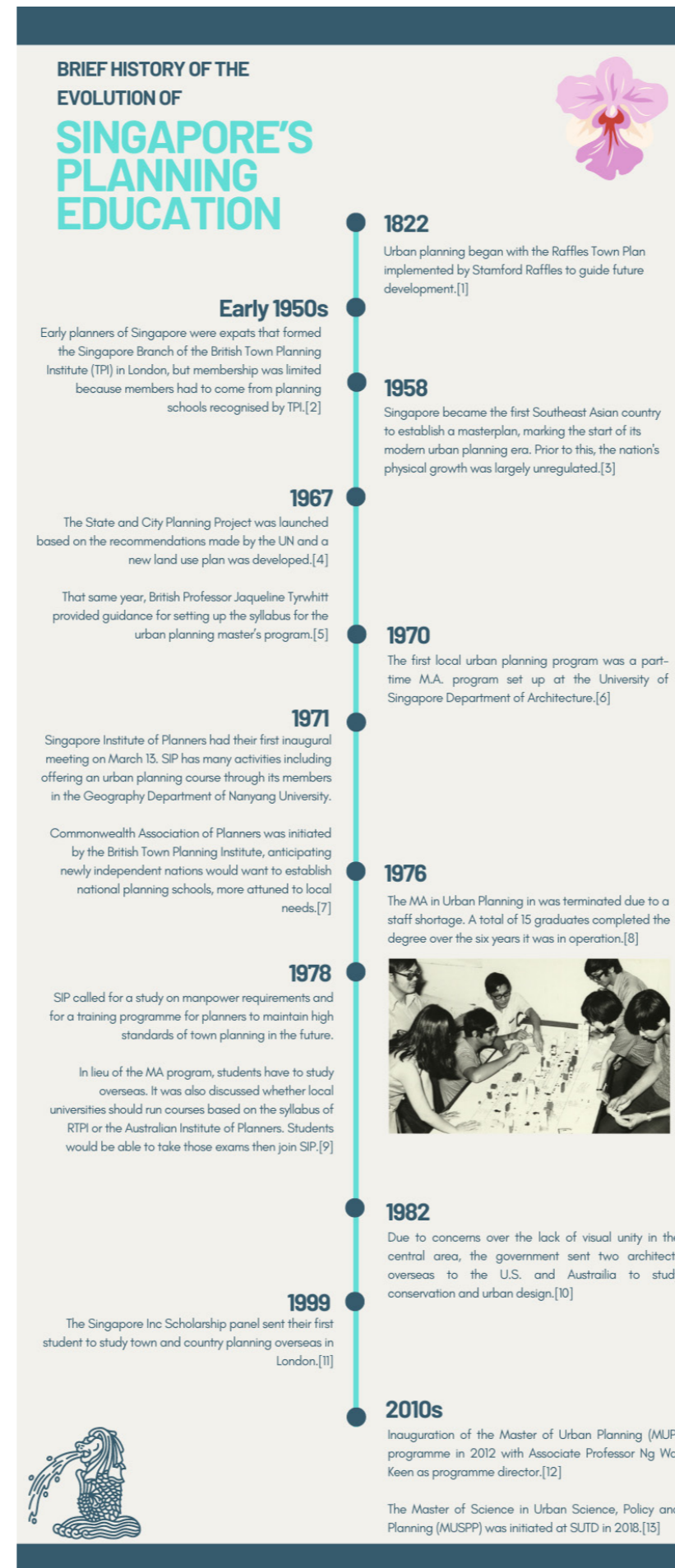
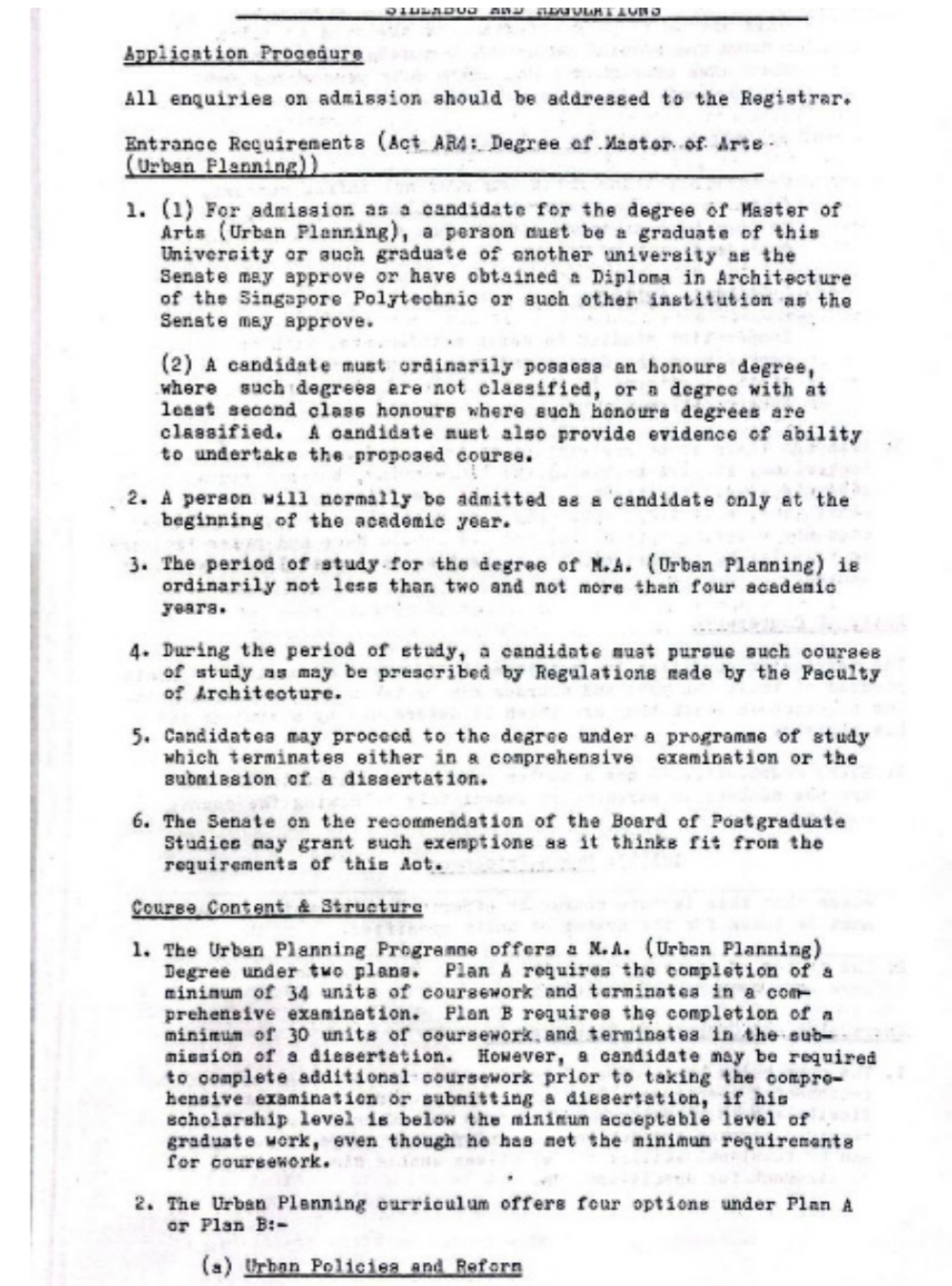


Figure A.2 Extract of Syllabus for University of Singapore's MA (Urban Planning)
(Source: National Library Archives)



(b) Analytical and Predictive Methods

This option focuses attention on theories of urban growth and spatial interaction models. A rigorous knowledge of regional and urban data processing and statistical methods is essential.

(c) Urbanization and Rural Development

Factors affecting urban and regional infrastructure, population movements, resource allocation, etc., are matched with strategies for urban & regional development in the third option.

(d) Settlement Patterns

Comparative studies on Asian settlements, with an emphasis on the design and maintenance of best-fit spatial patterns is the main area of study in the fourth option.

3. Although there is no restriction as to a student's undergraduate background, it will be useful and time-saving, but not required, if students electing options (a) and (b) had prior work in mathematics, statistics, sociology, geography, and economics or law. Similarly students electing options (c) and (d) should have had prior training in visualizing and graphically presenting the spatial parameters of design.

Units of Coursework

The curriculum specifies its requirements in terms of units. Students proceed at their own pace and courses may be taken in any combination. The sequence in which they are taken is determined by a student and his adviser.

1. Every course offered has a number of units credited to it. These are the numbers in parenthesis immediately following the course number, e.g.:

101(2): Urban Processes

means that this lecture course is offered for two units. Courses must be taken for the number of units specified.

2. The number of units assigned to a course is a reflection of the work load required of a student.

Curriculum and Coursework Requirements

1. The curriculum has a core of required courses and a group of recommended electives. This structure provides a student with flexibility in planning his programme for advance study. The required courses are designed to enlarge his range of perceptual and professional skills; the electives enable him to fulfill the requirement for specialization.

category	number	value	descriptive title
100 series (lectures)	101	(2)	Urban Processes
	102	(2)	Urban Society
	103	(2)	Urban Analytical Methods
	104	(2)	Transportation Systems
	105	(2)	Urban Geography
	106	(2)	Urban Economics
	107	(2)	Planning Law & Administration
	108	(2)	Resource Conservation
	109	(2)	Planning Theory
	110	(2)	Planning Practice
200 series (studios)	201	(4)	Urban Area Problems
	202	(4)	Comprehensive Planning
300 series	300	(1-4)	Electives
400 series	400	(2)	Research Seminars

Note: Courses in the 100 and 200 series are core courses and are common to all options. 300 and 400 series courses are courses leading to specialization.

2. The minimum unit requirements are as follows:

	Plan A	Plan B
100 series (lectures)	14 units in not less than 7 courses	12 units in not less than 6 courses
200 series (studios)	8 units	8 units
300 series (electives)	10 units in not less than 3 courses	8 units in not less than 2 courses
400 series (research)	2 units	2 units
Total	34 units	30 units

It is anticipated that most students can complete the programme under Plan A in two years; those electing Plan B can expect to be enrolled for a minimum of two and one half years.

Regulations

1. The course leading to the degree of Master of Arts (Urban Planning) consists of either -

(a) thirty-four units of course work and a comprehensive examination;

or (b) thirty units of course work and the submission of a dissertation.

In either case, the candidate must follow to the satisfaction of the Head of the Urban Planning Programme, the course of study leading

Endnotes

- 1 Marshall, C. (2016, April 21). Story of cities #27: Singapore – the most meticulously planned city in the world. *The Guardian*. <https://www.theguardian.com/cities/2016/apr/21/story-cities-singapore-carefully-planned-lee-kuan-yew>
- 2 Guo, Remy. Urban Systems Studies: *Urban redevelopment: From urban squalor to global city*. Edited by Alvin Pang. Singapore: Centre for Liveable Cities, 2016.
- 3 Singapore Institute of Planners. (1978, November). Planners and Planning Education in Singapore. *Planews*, 6(1).
- 4 Guo, Remy. Urban Systems Studies: *Urban redevelopment: From urban squalor to global city*. Edited by Alvin Pang. Singapore: Centre for Liveable Cities, 2016.
- 5 Fernandez, W. 2001. *Without Fear or Favour: 50 Years of the Public Service Commission*. Singapore: Times Media for the Public Service Commission.
- 6 "Two-Year Urban Planning." *The Straits Times*. March 6, 1970.
- 7 Chua, Peng Chye. (1973, November). "The Development of National Planning Institutes in the Commonwealth and Their Regional Collaboration." *SIP Journal* 3, no. 1: 2–6.
- 8 NUS Department of Architecture. (n.d.). *History*. <https://cde.nus.edu.sg/arch/about/history/>
- 9 Ibid.
- 10 Ibid.
- 11 Ibid.
- 12 Lee Kuan Yew emphasised the necessity of overseas education, stating in 1966 that "it is cheaper really, to do it that way: to send them abroad, the bright ones, pay their passages, their fees. And then, they come back". In the late 1970s, the Singapore government sent prospective policymakers to be educated in the United Kingdom and the United States. This approach was influenced by the history of prestigious scholarships awarded during the colonial period, such as the Queen's Scholarship, which funded students to study at British universities.
- 13 Ye, R. (2021). Schooling for government: Institutionalised sponsored mobility and trajectories of public service scholarship recipients in Singapore (1979–2018). *Journal of Education and Work*, 34(4), 518–532. <https://doi.org/10.1080/13639080.2021.1943335>
- 14 Sanderson, G. (2002). *International education developments in Singapore*. <http://hdl.handle.net/2328/3142>
- 15 Ibid.
- 16 Singapore Institute of Planners. (1977, October). Message from the President. *Planews*, 5(1).
- 17 Chua, Peng Chye. (1973, November). Op. cit.