

4.2.2.10 Master of Science in Integrated Sustainable Design

This programme is offered by the NUS School of Design and Environment, jointly managed by the Departments of Architecture and Building.

Programme Objectives

The MSc ISD is a unique one-year post-professional degree programme for individuals with an interest in the sustainable development of the built environment. The programme's past and current students include architects, engineers, landscape architects, urban planners, project managers and educators.

The programme offers insights, knowledge and skill-sets for a holistic approach to sustainability. The programme curriculum has four areas of emphases:

- **The Asian Context** | The programme asks what it means to design and build for Asia. It inculcates a sensitivity to climate, socio-economic factors and environmental vulnerabilities that are particular to the region.
- **Buildings & Cities** | The programme's modules examine different scales at which the built environment is designed and operated. The first semester is devoted to the building scale; the second semester probes the urban scale. In both cases, candidates are taught to understand the interdependency of buildings and urban networks.
- **Strategic Thinking** | Modules emphasise strategic and critical thinking over text-book learning. This is about asking the right questions at the start of the design-construction process.
- **Interactive, Integrative, Multidisciplinary** | Learning focuses on process: the how and why of decision making. It advocates synergy between disciplines and stakeholders, bridging knowledge and viewpoints.

Entry Requirements

Candidates are selected on the basis of their academic qualifications and industry experience. An applicant must assemble the following:

1. Evidence of a bachelor's degree with honours in Architecture, Engineering, Landscape Architecture, Planning/Urban Design, Project and Facility Management or other building-related degree programmes, or qualifications as may be approved by National University of Singapore's Senate.
2. A detailed CV *and* project portfolio, the former describing at least two years of relevant practical experience and the latter illustrating this with projects in which the applicant has had an active role. The portfolio should be no larger than A4 format and it should highlight, in particular, the candidate's role in each project.
It is important that the CV and portfolio are used to illustrate the candidate's interest and experience in the subject of sustainability. This may include non-professional activities, where possible, for instance community and/or environmental activism, contributions to print or online publications, etc.
3. Letters of reference from at least two persons who know the applicant well in an academic or professional capacity.
4. An essay explaining in what way the question of sustainability is important to the candidate's home country/city/region, what s/he plans to do after graduation, and why, specifically, s/he has chosen MSc ISD. The essay should not exceed 2000 words.

5. TOEFL score of 580 or equivalent for applicants whose first degree is not taught in English.

Shortlisted candidates may be asked to appear for an interview. Where an applicant is not based in Singapore, the interview will take place via the internet.

Graduation requirements

The graduation requirement is 40 modular credits (MCs) and with a Cumulative Average Point (CAP) of at least 3.0. The 40 MCs can be attained by taking essential modules and two elective modules from existing master coursework programmes.

The programme is taught via six lecture modules and two studio projects.

Period of Candidature

The programme can be completed in one year (Students may join in Semester 1 or Semester 2), full time, or two years, part-time.

Syllabus

ESSENTIAL MODULES		MCS
Semester 1		20
ISD5101	Integrated Project Studio 1	8
ISD5103	Green Buildings in the Tropics	4
ISD5104	Energy and Ecology	4
	Programme Elective 1	4
Semester 2		20
ISD5102	Integrated Project Studio 2	8
ISD5105	Principles of Sustainable Urbanism	4
ISD5106	Sustainability Models and Blueprints	4
	Programme Elective 2	4
Total		40