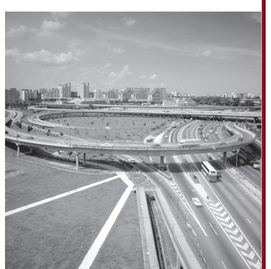
NOW I CAN

Making Cities Liveable and Sustainable



MASTER
OF SCIENCE IN URBAN
TRANSPORT
MANAGEMENT

SIM UNIVERSITY

Life-long learning
that works for me

SIM UNIVERSITY

Contact us at:
SIM University
461 Clementi Road
Singapore 599491
Tel: 6248 5783 / 5787
graddip&master@unisim.edu.sg
www.unisim.edu.sg

Graduate Studies at SIM University

Graduate education that's flexible, accessible and attainable.

SIM University offers graduate studies in a diverse range of disciplines that cater to the demands of professionals on the fast track to greater career mobility.

If you are looking for a career change or simply to enhance your current professional standing, you couldn't do better than enrol in one of our innovative and cutting edge Graduate Diploma and Master Programmes.

Our programmes bring students and faculty members together in an open learning and collaborative environment to create knowledge, innovation and best practices to meet the challenges of the new economy. Each programme is developed through partnership and affiliation with a private organisation or public sector institution.

To accommodate the hectic lifestyles of the working professional, classes are mostly conducted on weekends. Depending on the programme chosen, you can successfully complete a Graduate Diploma in 9 months and a Master Degree in 18 months.

Come have a chat with us to find out more about how we can help you advance your career potential, develop new knowledge, expertise and professional competencies.

Transforming Urban Transport

Overview

To meet the challenges and demands of an increasingly complex land transport system in today's urban environment, UniSIM in collaboration with the LTA Academy has developed a unique post-graduate programme of study to equip aspiring professionals with specialized skills and knowledge to enable them to play a lead role in the management and development of land transport systems in cities around the world.

The Master of Science in Urban Transport Management (MSUTM) Programme leverages on the global experience and expertise of senior professionals, scholars and researchers in the transport and related fields:

> To provide practising professionals and government officials involved in transport in Singapore and from overseas, with a holistic and rigorous grounding in the concepts, principles, techniques, issues and practices in urban transport; so that they are well-equipped to play a pivotal role in policy formulation as well as the planning, implementation, regulation, management and operations of the urban transport system.
>
> To provide graduates from diverse backgrounds with an avenue for acquiring specialized knowledge and skills that will enable them to embark on and/or advance their professional career in the transport and related areas.

This Graduate Programme is the first of its kind in this region.

Unique features of the Programme:

- A practice-oriented, academically rigorous and practically relevant programme that is suitable for both technical and non-technical graduates
- Focus on the policy and management aspects of urban transport that include a strong emphasis on sustainable development and a choice of specialised areas
- Leverages on the strength of the Land Transport Authority (LTA), LTA Academy, UniSIM and Singapore's expertise and experience in land transport development and management as well as global best practices
- Practical attachment at LTA or at an approved transport-related organisations leading to a practical Urban Transport Project
- Conducted over five 2-week blocks (full-time) of 3 months apart, making it conducive for working professionals and overseas students
- Depending on the level of aspiration and time availability, a student may opt to do the Graduate Diploma or enrol in an individual course and be awarded a Professional Certificate.

The LTA Academy - The Knowledge Hub of the Singapore Land Transport Experience

The LTA Academy, set up by the Land Transport Authority (LTA) and supported the Ministry of Transport, is the knowledge hub of the Singapore land transport experience. It is the focal point for governments, organisations and professionals around the world interested in tapping Singapore's vast know-how in land transport management and serves as a platform for the exchange of global best practices.

The Academy has successfully leveraged on the vast domain expertise and wealth of experience that the Land Transport Authority and its predecessor agencies have accumulated over years of developing, managing and transforming the land transport system in Singapore - building a system that is globally regarded as among the most successful in the world.

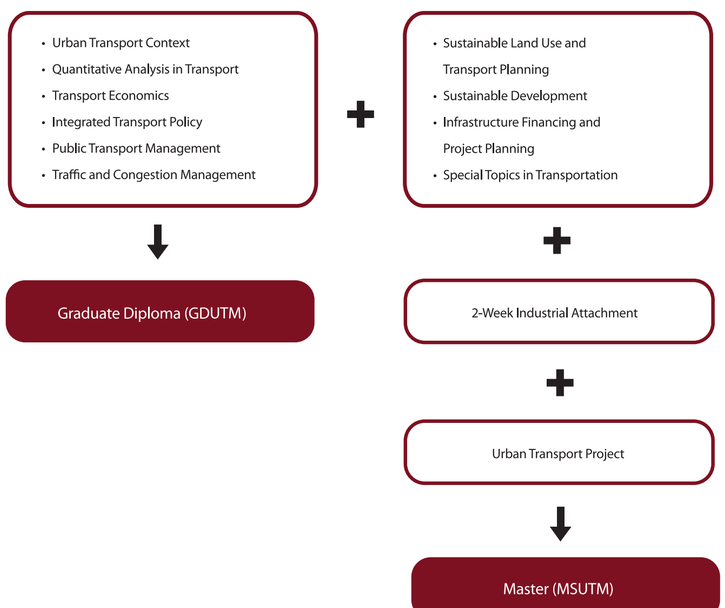
To-date, the Academy has designed, conducted and hosted more than **250** professional programmes and international conferences for over **6000** senior officials and professionals, mainly overseas delegates from as many as 80 countries. It has also forged important strategic partnerships, through a series of Memorandums of Cooperation, with several established overseas institutions in US, UK, Germany China, India and Korea. The Academy also carries out policy research and publishes a biannual professional journal on land transport.

Putting Graduate education within the reach of working professionals.

Structure

The Programme comprises two qualifications: the Graduate Diploma Programme and the Master of Science Programme. The Graduate Diploma Programme consists of 6 courses designed to provide the student with the contextual framework and a set of analytical and quantitative skills essential to the successful management of complex land transport systems in cities around the world.

The Master Programme provides the student with advanced training in transport management, planning, system implementation and other specialized areas, emphasizing a sustainable approach to the development of liveable cities. The Industrial Attachment requirement provides the student with an opportunity to be immersed in a land transport or related organisation and allows the student to experience first-hand how some of the concepts learnt from the different courses are manifested in the day-to-day operation and management of land transport systems. An essential component of the Master Programme is the project requirement . It provides the student with an opportunity to tackle real-world problems and to gain additional insights and competencies through independent work. Students are required to identify land transport issues that are of direct interest to them, and to analyse and formulate effective solutions to address these issues.



Administrative Details of UTM Programme

Course Schedule and Assessment

Each cohort progresses in a structured manner and the courses are taken according to a prescribed schedule. The total contact time for each taught course is 32 hours and instruction takes place over four consecutive days.

Courses are delivered in a seminar style workshop with a mix of lectures, case studies, and individual and group projects. All courses will be conducted by established local and foreign academics/practitioners. Occasionally, specialized seminars will be organised.

To graduate, a participant must attain a minimum cumulative grade point average (CGPA) of 2.5 (out of 5) for the Graduate Diploma Programme. A minimum CGPA of 3.0 is required for progression to the Master Programme, and a minimum CGPA of 3.0 to graduate for the Master Programme.

For students who opt to study a single course, they will be awarded a Professional Certificate upon successful completion of the course.

Programme Duration

The Graduate Programme will typically require a period of 9 months to complete. For the Master Programme, a minimum of 18 months is required.

Admissions

Prospective participants must complete and submit an online admission application form to UniSIM by the specified deadline.

- An undergraduate degree, or an equivalent qualification from a recognized institution
- At least two years of work experience
- An interest in transport or a related area
- A high level of motivation
- Good communication skills in both written and spoken English

All applications are considered individually on merit. The Admissions Committee reserves the right to accept or reject an applicant. Applicant may be asked to attend an interview.

Fees

Application Fee:

Applicants are to submit an online application form which can be accessed from the University's website. Each application must be accompanied by an administration fee of S$32.10 (inclusive of 7% GST). Cheques or bank drafts must be crossed and made payable to "SIM University".

Applications with incomplete information and those not accompanied by copies of supporting documents, photographs and the application fee will not be considered. All fees and documents submitted with the application form will not be returned to unsuccessful applicants.

Course Fee:

Programme	Singapore Citizen / Permanent Residents	Other Residents
Professional Certificate (Per Course)	$2,500	$3,000
Graduate Diploma	$12,000	$14,400
Master of Science	$24,000	$28,800

All fees are paid quarterly and are subject to prevailing GST charges.

Course fees cover all study materials, classes, supervision, assignments and examinations. They do not include fees for optional textbooks, seminars and other additional items specified by UniSIM from time to time

Please visit www.unisim.edu.sg for current course fees and other administrative information.

Courses for the UTM Programme

(First 6 courses are for the Graduate Diploma Programme.
All 12 courses are for the Master Programme)

Transport Core

- **UTM501 Urban Transport Context**
  This course provides a comprehensive overview of transport as a key driver in the movement of people and goods in urban areas while emphasizing the complexity and diversity of relationships between transport and society. It traces transport development from a social, historical and institutional perspective, and explores the transport modes and their infrastructure.

  The characteristics of both passenger and freight transport and ways of measuring system performance will also be examined and students will be provided with an understanding of the potential for the application of advanced technologies to manage transport flows. Major transport issues and their implications on the planning and management of urban transport systems will also be covered.

- **UTM503 Quantitative Analysis in Transport**
  This course provides the student with an exposition on the basic methods pertaining to a statistical survey, from the problem formulation stage through to the questionnaire design stage, selection of survey methodology, data collection and analysis, and finally to the presentation of data and report writing. The student will also be introduced to the basics of qualitative data analysis. Supplementing the exposition will be a variety of examples drawn from the urban transport arena.

- **UTM505 Transport Economics**
  This course provides the student with the basic economic tools and concepts that are directly useful to the analysis of a variety of urban land transport problems. Ideas that will be covered include the demand for transport, the value of time, the costs of transport, the elasticity of transport demand and supply, the pricing of transport, congestion externality and economic approaches to the management of the congestion problem. The basic analytics of social cost-benefit analysis and the economic appraisal of infrastructure projects will also be covered as will the government regulation of various aspects of urban transport.

Management, Policy and Planning Core

- **UTM507 Integrated Transport Policy**
  This course considers the process of formulating transport policy, and its implications. Issues that are addressed include the interaction between transport policy and other areas, and the policy implications caused by the unique characteristics of transport. The principles of different forms of control - private, public, regulated, deregulated - as well as key transport policy aspects of environment, safety, health and social inclusion are considered.

- **UTM509 Public Transport Management**
  Public transport is an essential public service and is necessary for cities to function. It is an operational and institutional concept related to the movement of large numbers of people between relatively fixed locations. This course provides an understanding of the strategic role and importance of public transport management in the modern city and focuses attention on methodologies for vehicle and personnel scheduling, methods of evaluating public transport lines and networks, system management and regulation, and the entire planning process, including travel demand forecasting as well as comparison and selection of transport modes.

- **UTM511 Traffic and Congestion Management**
  Traffic congestion occurs when demand exceeds the capacity of the transport system. It is a major concern in many cities of the world as it undermines the effectiveness and efficiency of the entire economic system as well as the quality of the urban environment. This course provides students with an understanding of the theoretical concepts of the traffic system including techniques of traffic flow and capacity analysis. It will also explore various traffic management measures to improve capacity or manage demand and equip students with the skills so that they can select and design appropriate measures for a range of situations in urban areas.

Specialized Courses

- **UTM513 Sustainable Land Use and Transport Planning**
  A city is a complex system comprising the physical arrangement of housing, industry, commerce and public institutions linked by transport facilities as well as people and the economic system to which they belong. It is the planner's function to comprehend this intricate web of relationships and to guide their sustainable development. This course provides students with an understanding of the principles of urban and transport planning. It examines the theories underlying urban development and its relationship with transport. The course discusses the approaches to travel demand analysis with an emphasis on the classic 4-step demand forecasting process. Students will be equipped with the skills to develop urban and transport plans, and to critically assess proposals for new developments in the light of key planning objectives.

- **UTM515 Sustainable Development**
  This course is designed to develop in the student a sound understanding of the concepts and issues relating to sustainable development in an urban context. The student will be exposed to impact evaluation tools and techniques as well as alternative modes of governance to achieve a desired sustainable outcome. Among others, more detailed discussions on sustainable development that relates to energy efficiency, green transport, air quality, the 3 Rs approach to managing the environment and issues relating to urban/economic development and the quality of life are also covered.

- **UTM517 Infrastructure Financing and Project Planning**
  The first part of this course is designed to raise the awareness of the student to the various aspects of infrastructure financing that relate to major transport infrastructure projects. Topics that will be covered include the role of public and private sector funding mechanisms including the role of PPP (public-private partnership) in infrastructure development. The identification and management of the different types of risk associated with infrastructure project financing are integral aspects of the delivery.

  The second part of this course focuses on project planning and management; describing the role of management within the context of civil and transport engineering projects. It covers basic management techniques and strategies and illustrates how these can be applied in the urban transport setting.

- **UTM519 Special Topics in Transportation**
  This is an independent learning course whereby students are to attend transport related programmes organized by LTA Academy or any other approved institutions. These could be conferences (such as the World Roads Conference and the Urban Transport Leaders Summit), seminars and workshops (organized by LTA Academy for foreign transport officials) or programmes specially arranged for the students when international experts visit Singapore. Students can also satisfy the requirements of this module by attending conferences, seminars, workshops or courses done overseas too. Students must accumulate 32 hours of attendance in conferences, seminars, workshops or courses. The costs and expenses of attending these activities are to be borne by students.

- **UTM697 Industrial Attachment**

  This is a 2-week (or equivalent) attachment at LTA or other approved transport-related organizations. Each student will be assigned to a senior staff member of the host institution. The senior staff member and the Head of Programme will work with the student to identify a topic that is of interest to the host institution and to the student. The senior staff member will also act as mentor/supervisor to the student and will supervise the writing of a case study. The case study as well as a reflection journal documenting the learning experience during the attachment must be submitted to UniSIM.

- **UTM699 Urban Transport Project**
  It is essential for graduates of the Programme to acquire a set of research and/or design skills and to be able to apply these skills in the urban transport setting. These skills include problem identification, review of relevant literature, experimental design, collection and analysis of relevant data, and making logical inferences. Development of candidate solutions and their evaluation also constitute part of this skill set. Emphasis will also be placed on effective communication and report writing skills. The main requirement of the Project is a formal report or a dissertation not exceeding 8,000 words.