

REGULATIONS FOR THE DEGREE OF MASTER OF SCIENCE IN URBAN DESIGN AND TRANSPORT (MSc(UDT))

(These Regulations are applicable to candidates admitted to the Master of Science in Urban Design and Transport curriculum in the 2022-2023 academic year and thereafter)

(See also General Regulations and Regulations for Taught Postgraduate Curricula)

Any publication based on work approved for a higher degree should contain a reference to the effect that the work was submitted to the University of Hong Kong for the award of the degree.

MUDT1 Admission Requirements

To be eligible for admission to the courses leading to the degree of Master of Science in Urban Design and Transport, candidates

- (a) shall comply with the General Regulations and the Regulations for Taught Postgraduate Curricula;
- (b) shall hold
 - i. a Bachelor's degree with honours in transport, urban design or related and relevant fields of this University; or
 - ii. a qualification of equivalent standard of this University or another university or comparable institution accepted for this purpose;
- (c) for a candidate who is seeking admission based on a qualification from a university or comparable institution outside Hong Kong of which the language of teaching and/or examination is not English, shall satisfy the University English language requirement applicable to higher degrees as prescribed under General Regulation G2(b); and
- (d) shall satisfy the examiners in a qualifying examination if required.

MUDT2 Qualifying Examination

- (a) A qualifying examination may be set to test the candidates' formal academic ability or their ability to follow the courses of study prescribed. It shall consist of one or more written papers or their equivalent and may include a project report.
- (b) Candidates who are required to satisfy the examiners in a qualifying examination shall not be permitted to register until they have satisfied the examiners in the examination.

MUDT3 Requirements for Graduation

To be eligible for the award of the degree of Master of Science in Urban Design and Transport, candidates

- (a) shall comply with the General Regulations and the Regulations for Taught Postgraduate Curricula; and
- (b) shall complete the curriculum and satisfy the examiners in accordance with the regulations and syllabuses set out below.

MUDT4 Period of Study

The curriculum shall normally require two academic years of full-time study. Candidates shall not be permitted to extend their studies beyond the maximum period of registration of three academic years of

full-time study, unless otherwise permitted or required by the Board of the Faculty.

MUDT5 Completion of Curriculum

To complete the curriculum, candidates

- (a) shall satisfy the requirements prescribed in TPG 6 of the Regulations for Taught Postgraduate Curricula;
 - (b) shall follow courses of instruction and complete satisfactorily all written work and practical work as prescribed in the syllabuses;
 - (c) shall satisfy the examiners in all prescribed courses and studios and in all prescribed form of assessment; and
 - (d) shall complete and present a satisfactory capstone dissertation and urban design thesis as prescribed in the syllabuses.
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MUDT6 Research Dissertation and Urban Design & Transport Thesis Project

- (a) The title of the research dissertation shall be submitted for approval by 15 November in the final year of study and must be presented in the candidates' final year of study on a date to be specified by the Head of the Department of Urban Planning and Design.
 - (b) Candidates shall submit a statement that the dissertation represents their own work undertaken after registration as candidates for the degree. The examiners may also prescribe an oral examination on the subject of the research dissertation.
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MUDT7 Assessment

- (a) Candidates shall be assessed for each of the courses for which they have registered, and assessment may be conducted in any combination of continuous assessment of coursework, written examinations and/or any other assessable activities. Only passed courses will earn credits.
- (b) Candidates shall not be permitted to repeat a course for which they have received a passing grade for the purpose of upgrading.
- (c) Candidates who have failed to satisfy the examiners at first attempt in not more than 18 credits of the core and elective courses, excluding Urban Design Studio or Research Dissertation and Urban Design & Transport Thesis Project, may be permitted to present themselves for re-assessment in the failed courses at a specified date. If they again fail, but in not more than 12 credits of the core and elective courses, excluding Urban Design Studio or Research Dissertation and Urban Design & Transport Thesis Project, they may be permitted to repeat the relevant curriculum and to present themselves for re-assessment at a specified date in the failed course(s) at a third and last attempt.
- (d) Subject to the provision of MUDT7(c), candidates who have failed to satisfy the examiners in an elective course in the first attempt may be permitted under special circumstances to register for another elective course as substitution and be assessed at a specified date. If they fail to satisfy the examiners in the substitute elective course, they may be permitted to present themselves for re-assessment only once more at specified date. If any of the failed courses is not being offered in the particular academic year, this may be construed as a special circumstance for the purpose of this article.
- (e) Candidates who have failed to satisfy the examiners in any academic year in work prescribed in the Urban Design Studio or in the Research Dissertation and Urban Design & Transport Thesis Project may be permitted to present themselves for re-assessment at a specified date. If they again fail to satisfy the examiners in any work, they shall be required to repeat all or

- part of the work prescribed during the academic year and to present themselves for re-assessment at a specified date in the work repeated.
- (f) Candidates shall be recommended for discontinuation if they have:
- i. failed to satisfy the examiners at a first attempt in more than 18 credits of core and electives courses excluding Urban Design Studio or Research Dissertation and Urban Design & Transport Thesis Project; or
 - ii. failed to satisfy the examiners in any of the failed courses in their second attempt or in any of the failed substitute elective courses in 12 credits or more of core and electives courses excluding Urban Design Studio or Research Dissertation and Urban Design & Transport Thesis Project; or
 - iii. failed to satisfy the examiners in their second attempt in any of the work prescribed in the Urban Design Studio or Research Dissertation and Urban Design & Transport Thesis Project; or
 - iv. failed to satisfy all requirements for the award of the degree within three academic years from the commencement of studies.
- (g) Candidates who are unable because of their illness to be present at the written examination of any course may apply for permission to present themselves for a supplementary examination of the same course, which shall be held at a time to be determined by the Board of Examiners. Any such application shall be made on the form prescribed within two weeks of the first day of the candidate's absence from any examination. Candidates who fail to satisfy the examiners in the supplementary examination shall be required to repeat the failed course.

MUDT8 Grading System

Individual courses shall be graded according to the following grading system

Grade	Standard	Grade point
A+	Excellent	4.3
A		4.0
A-		3.7
B+	Good	3.3
B		3.0
B-		2.7
C+	Satisfactory	2.3
C		2.0
C		1.7
D+	Pass	1.3
D		1.0
F	Fail	0

MUDT9 Assessment Results

Upon successful completion of the curriculum, candidates who have shown exceptional merit may be awarded a mark of distinction, and this mark shall be recorded in the candidates' degree diploma.

MUDT10 Advanced Standing

- (a) Advanced standing shall be granted to candidates who have successfully completed a cognate

Master's degree of this University or another qualification of equivalent standard accepted for this purpose.

- (b) Candidates may upon application be granted advanced standing from core course except for the studios and capstone experience, on the basis of their previous studies.
- (c) Advanced standing of up to 24 credits may be granted by the Board of the Faculty of Architecture subject to the condition that the application for advanced standing is received within five years of successful completion of the degree accepted for this purpose.
- (d) Applications for advanced standing shall normally be made at the same time of application for admission to the Master of Science in Urban Design and Transport curriculum and should be accompanied by copies of academic transcripts to support the application.

November 2021

SYLLABUSES FOR THE DEGREE OF MASTER OF SCIENCE IN URBAN DESIGN AND TRANSPORT (MSc(UDT))

(These syllabuses are applicable to candidates admitted to the Master of Science in Urban Design and Transport curriculum in the 2023-2024 academic year and thereafter)

(See also General Regulations and Regulations for Taught Postgraduate curricula)

The Department of Urban Planning and Design offers a postgraduate course leading to the degree of Master of Science in Urban Design and Transport.

CURRICULUM STRUCTURE

The curriculum shall include assessment of the prescribed and elective courses subject to the approval of the Head of the Department of Urban Planning and Design, the Urban Design Studios and the Research Dissertation and Urban Design & Transport Thesis Project. Candidates studying the full-time curriculum are required to complete a total of 120 credits of courses.

Candidates are required to follow courses of instruction and satisfy the examiners in each of the following:

Core courses (Compulsory)

MUDP1030 Morphologies and Urban Design Theories	6 credits
URBA6011. Programming and Foundations in Urban Data Analysis	6 credits
URBP7005 Planning Future Cities and Regions	6 credits
URBA6004 Spatial Mobilities Analytics	6 credits
URBA6008 Spatial Planning Analytics	6 credits
MUDP2010 Research Methods and Techniques	6 credits
GEOG7001 Survey and Data Analysis in Transport Studies	6 credits
MUDT5010 Transport Network Analysis and Modelling	6 credits

Studio Courses (Compulsory)

Candidates shall complete the following studios courses:

MUDT7001 Strategic Urban Design and Transport, New Town Studio	12 credits
MUDT1002 Public Transport Interchange Urban Design Studio	12 credits

Capstone Experience (Compulsory)

Candidates shall complete the following capstone experience course:

MUDT1003 Research Dissertation and Urban Design & Transport Thesis Project	30 credits
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And a total of 18 credits of Elective Courses as specialization selected from a list approved from time to time. Candidates' selection of courses shall be approved by the Head of the Department.

Elective Courses

CIVL7006 Optimization Techniques for Transportation Applications	18 credits
CIVL6007 Behavioral Travel Demand Modelling	
URBP6157 Transport Economics	
URBP6131 Transport Policy and Planning	
URBP6123 Public Transport Systems	
URBP6006 Planning, Managing and Financing the Development Process	
URBP6003 Planning Practice, Law and Ethics in Hong Kong	
URBP8003 Land and Real Estate Markets: Smart Governance, Finance and Business Models	
URBP7006 GIS and Smart Technology in Spatial Planning	

MHCD7001 Design, Survey and Modelling for Urban Health	
MHCD7002 Principles of Healthy Cities	
MHCD7003 Health Impact Assessment of Urban Development Projects	
MHMP6858 Housing Economics	
MHMP7007 International Housing Policies and Practices	
MHMP8008 Transitional Cities: Urban and Housing Development	
MHMP8013 Smart and Sustainable Cities	
URBP6904 Housing Planning, and Sustainability	

CORE COURSES (Compulsory)

MUDP1030 Morphologies and Urban Design Theories

| 6 credits

This course introduces the three natures of urban morphology: natural, built environment, institutional configurations and urban design theories. Introduction to urban morphologies will examine key concepts, the study of the formation of urban fabric, the relationship of these components through time and at different spatial scales in local and international contexts. Urban design theories describe the state of the art of research about the relationship between urban morphology and human effects and other impacts referenced to the key historical urban design thinkers.

Assessment: 100% continuous coursework assessment

URBA6011. Programming and Foundations in Urban Data Analysis

| 6 credits

Spatial data has become indispensable for building a smart city, particularly in city planning, design and management. This involves new means of capturing spatial data by different types of sensors, advanced application of Artificial Intelligence (AI) and rapid development of spatial analytics in the area of Geographic Information System (GIS) and Building Information Modelling (BIM). The main objective of this course is to equip students from relevant disciplines (e.g., land use planning, surveying, architecture, landscape architecture, engineering, environmental science, and social sciences) with foundational knowledge and techniques on spatial data analysis.

Assessment: 100% continuous coursework assessment

URBP7005 Planning Future Cities and Regions

| 6 credits

In this course, class participants explore prevalent and emerging challenges cities and regions confront in pursuing sustainable development and discuss potential planning and policy solutions to such challenges. In detail, the course covers three main topics: key concepts/theories of sustainable development and global megatrends, such as slow growth, ageing, inequality, and climate change; available planning and policy tools for sustainable development—and in response to the megatrends—and related performance/impact assessment systems; and contemporary practice in both local and international contexts.

Assessment: 100% continuous coursework assessment

URBA6004 Spatial Mobilities Analytics

| 6 credits

This course discusses how space, society (institutions) and accessibility are related and how accessibility should be defined, analysed, and designed/improved in light of the existing, possible or proposed spatial arrangements of socially valued goods, services, and opportunities, which are embedded in, and shaped by social norms, values, and institutions. It argues that complex relationships exist between space, society, and accessibility, which should be accounted for in related policy/planning interventions. Students will learn to understand, analyse, manage, and harmonise such relationships to deliver desirable outcomes such as efficiency, equity, quality of life and sustainability.

Assessment: 100% continuous coursework assessment

Prerequisite: URBA6011. Programming and Foundations in Urban Data Analysis

URBA6008 Spatial Planning Analytics

| 6 credits

Spatial planning shapes the built environment and human activities across sites, neighbourhoods, cities and regions. This course introduces the basic concepts and methods in the use of spatial analytics and modelling to support sustainable urban development across different spatial scales. It is applied oriented and designed to equip students with analytical and modelling techniques for measuring, modelling and predicting urban spatial changes. It covers a wide range of topics, including urban form metrics, geodesign, location choice models, frameworks for land use and transport interaction, and scenario planning. Students will be required to reflect on and design context-specific strategies for a sustainable urban future, based on spatial planning analytics and modelling.

Assessment: 100% continuous coursework assessment

MUDP2010 Research Methods and Techniques

| 6 credits

The course introduces research design and research methodology and their limitations appropriate for urban design. Topics include: research paradigms, the emergence of design research, formulation of research questions; range of research methods and resources needs; choices of research methods and limitations; formulation of research proposals; use of digital techniques in urban design research.

Assessment: 100% continuous coursework assessment

GEOG7001 Survey and Data Analysis in Transport Studies

| 6 credits

Surveys are commonly used to collect useful data in transport studies. A myriad of survey methods and instruments are available. This course covers the major aspects including survey design, sampling, hypothesis testing, interview and questionnaire design, survey implementation and administration, computer-based data processing, analysis and retrieval and report writing. Different aspects of surveys are discussed with reference to the transport-related professions and disciplines in different political and socio-economic contexts. Examples include travel characteristics, origin-destination, freight and public transport surveys conducted in Hong Kong and the other parts of the world. The fundamentals of spatial and non-spatial data analysis are covered using selected software. Moreover, some key opportunities and challenges of big data are discussed.

Assessment: 100% continuous coursework assessment

MUDT5010 Transport Network Analysis and Modelling

| 6 credits

This course introduces a variety of advanced analytical methods for analyzing and modelling urban transportation systems, stressing a qualitative understanding and the applications of these methods in urban transport design. The primary methods introduced will include complex networks, machine learning, and simulation-based methods. Throughout the course, we will focus on the applications of these methods to the design of transport systems, with an eye towards how these designs can facilitate urban vitality, sustainability, accessibility, and various factors of well-being (for example resilience, disease spread, social integration, and equity).

Assessment: 100% continuous coursework assessment

Studio Courses (Compulsory)

The Studios are the critical component of the MSc programme. The design studios link the theories and issues raised in the core and elective courses with the practical analysis of urban design, transport and accessibility issues and the formulation of proposals for soft and hard interventions. The courses lead students through the process of experiential and problem-based learning in urban design, transport and accessibility and engaging with the different ways urban design, transport and accessibility relates to policy development, planning processes, legal contexts, financing Instruments, multi-scale configuration and organisation and the existing and emerging values of complex urban societies. Each studio focuses on important aspects of urban design, transport, mobility and accessibility fields both informed by research about design and creative modes of research for design and by/through design.

MUDT7001 Strategic Urban Design and Transport, New Town Studio

| 12 credits

This is the first urban design and transport studio in the Programme. The course introduces key concepts and principles of strategic urban design, transport, and accessibility at a range of spatial scales (both process and content) with a focus on spatial intervention scale such as New Town, New Area, New District, urban extension and their contemporary equivalent (e.g., eco-city). A deep experiential format includes recent past spatial studies of HK, Shenzhen, and Singapore New Towns (NT), NT visits, NT projects reviews, studio-based tutorials, and engagement with Hong Kong generation of NT. Students acquire strategic urban design and transport-mobility-accessibility analytical and design skills through a series of project-based stages. Students are also introduced to and develop a proficiency in graphic (computer 2D/3D visualizations) and 2D and 3D urban design analytics visualisation, written and oral communication skills associated with urban design reviews attended by external professionals. Students get experience of working in teams of four or five preparing and making presentations of preliminary strategic urban design options while further developing individual urban design capacity, learning critically the importance of spatial configuration and their resulting impacts.

Assessment: 100% continuous coursework assessment

MUDT1002 Public Transport Interchange Urban Design Studio

| 12 credits

In large metropolis, Public Transport Interchange (PTI) and its service area is an everyday experience. PTI are associated with Transit Oriented Development as one of the most successful attempts made worldwide to achieve sustainable urban development through promotion of high-density public transport nodes. Increasingly interchange service area and TOD have become multi-levels, mixed uses, integrating community amenities and public spaces to become proliferating mega-structure. PTI and TOD design investments are variable with mixed results. This studio is designed to engage student's understanding and designing of the complex multi-faceted transport, mobility-accessibility and urban design nature of contemporary interchange and its service area. Hong Kong has a wide range of PTI-TOD configurations. An international field study visit expands the understanding of emerging issues and design. Students will have opportunities to practise and refine questionnaire design, survey, and data analysis. Students get experience of working in teams preparing and making presentations of preliminary strategic urban design options while further developing individual urban design capacity, learning critically the importance of spatial configuration and their resulting impacts.

Assessment: 100% continuous coursework assessment

Capstone Experience (Compulsory)

MUDT1003 Research Dissertation and Urban Design & Transport Thesis Project

| 30 credits

The research dissertation in urban design and transport and the urban design thesis project are the culmination of the MSc Programme. The course is independently led by the student with supervision.

The course has three components: a research dissertation about urban design and transport in the manner of academic research paper, an urban design & transport thesis project proposal and an urban design & transport thesis project report in the manner of a design report. The urban design project should be informed by the research component and should demonstrate knowledge, use and limitations of research about design, research for design and research by design.

The research dissertation and the design report are respectively 6,000 words $\pm 10\%$ and 3,000 words $\pm 10\%$ long excluding bibliography, abstracts, contents, list of illustration etc. Supplementary materials are allowed as appendix.

The urban design & transport thesis project includes mandatory design review of options and preferred option.

The candidate shall present the research dissertation no later than 30 May or on a date approved by the Head of Department in the final year of study. The dissertation must be related to the candidate's area of optional specializations selected. The examiners may prescribe an oral examination about the dissertation.

Assessment: 100% continuous coursework assessment

ELECTIVE COURSES¹

URBP6131 Transport Policy and Planning

| 6 credits

This course focuses on key issues in transport policy and the implementation of transport plans and programmes. It examines the role of private and public modes within the overall urban transport system as well as pedestrian movement planning, airport development and seaport development. The course uses examples drawn from various countries to evaluate the appropriateness and effectiveness of alternative policies and implementation mechanisms.

Assessment: 100% continuous coursework assessment

URBP6003 Planning Practice, Law and Ethics in Hong Kong

| 6 credits

This course provides a detailed understanding of professional planning practice in Hong Kong. It deals with the practical dimensions of planning in both the public and private sectors. The course reviews the history, policies, strategies, administrative and legal procedures of planning. It also examines issues surrounding the ethical basis of professional planning activity.

Assessment: 60%-70% continuous coursework assessment; 30%-40% examination

CIVL7006 Optimization Techniques for Transportation Applications

| 6 credits

Linear programming, non-linear programming, network optimization, and integer optimization methods for solving transportation problems.

Assessment: All courses offered by the Department of Civil Engineering are assessed through examination (70%) and coursework continuous assessment (30%), the weightings of which are subject to approval by the Board of Examiners.

MHMP6858 Housing Economics

| 6 credits

¹ Choice of the courses is subject to prior approval by the Head of Department/Programme Director concerned. Not all courses are available each year. Priority will be given to students of the relevant curricula. Please refer to the respective curriculum syllabuses for the course descriptions.

This course provides a basic introduction to economics and the application of economic concepts in the analysis of housing issues. The course also deals with the principles of cost-benefit analysis and economic evaluation in general in the housing context. Other topics covered include land policy and economics, cycles in housing activity, the financing of housing development and privatization. The course also introduces the functions, principles and methods of valuation.

Assessment: 100% continuous coursework assessment

URBP6904 Housing, Planning and Sustainability

| 6 credits

This course aims to provide an integrative and in-depth understanding of Hong Kong's housing system and its relationships with urban planning and the concepts of sustainable development. It discusses the theoretical and practical aspects of housing, making special reference to their relationships with urban planning and sustainable development. Major topics include the housing system concepts, the political economy of housing policies, land use planning and housing affordability, principals of residential planning, housing policy analyses, housing market analyses, and the application of the sustainable development perspective to housing analyses.

Assessment: 100% continuous coursework assessment

MHCD7001 Design, Survey and Modelling for Urban Health

| 6 credits

This is a methodology course aimed at assessing key attributes of urban environments for population health improvement. The course will introduce concepts of: 1) study design (descriptive and analytical [observational study and experimental study]); 2) study populations (sample size calculation, data collection/sampling approaches); 3) exposure assessment (survey and management of urban environments: air pollution, water, wastes etc.); 4) outcome assessment (physical and mental health, economics, policy etc.); 5) describe and analyse evidence (disease mapping, spatial analysis models, and health effects assessment of environmental exposures). Students will be also encouraged to form groups to appraise and interpret existing evidence of the links between urban exposures, behaviour and health outcomes.

Assessment: 0%-70% examination and/or 30%-100% continuous coursework assessment

MHCD7002 Principles of Healthy Cities

| 6 credits

This is a theoretical course focusing on fundamental concepts, theories and models on a wide range of emerging urban health issues at local, regional and global scales. The aim is to employ systems thinking to elucidate the intrinsic multifactorial interactions between urban space and human behaviour and lifestyle resulting in the socio-spatial production of health. Urban planning, design and policy aspects at building-, neighbourhood- and city-levels promoting active-living, salutogenicity, social cohesion and racial inclusivity, age-friendliness, climate change-resilience, pandemic-resilience and longevity-readiness, and their role in population health and wellbeing will be discussed.

Assessment: 0%-70% examination and/or 30%-100% continuous coursework assessment

MHCD7003. Health Impact Assessment of Urban Development Projects

| 6 credits

Urbanisation is one of the leading global trends of the 21st century. It has been found that urban development is closely associated with significant human health in both direct and indirect way. This course will introduce Health Impact Assessment as a tool to internalize evidence in our decision-making process with focus on health externalities. The process of full-chain health impact assessment including exposure assessment, health risk assessment and economic evaluation of various aspects of urban design and urban and transport development projects will be elucidated.

Assessment: 0%-70% examination and/or 30%-100% continuous coursework assessment

MHMP7007 International Housing Policies and Practices

| 6 credits

This course aims to compare housing policies and practices at an international scale and to explore global housing issues. It examines and compares the evolution of housing policies in different housing systems, the modes of intervention in the housing markets, the roles of the public and private sectors in housing provision, housing finance systems, and the relationships between housing standards and societal conditions. Prevailing global trends and issues in housing are also examined.

Assessment: 100% continuous coursework assessment

MHMP8008 Transitional Cities: Urban and Housing Development

| 6 credits

Building upon comparative concepts and introductory materials of local knowledge, this course aims to provide students with the opportunity to explore contemporary urban changes both in the countries that are undergoing the transition from the planned to a market-oriented economy and in newly industrialised economies. The course has a regional focus on cities in Pacific Asia, in particular Chinese cities, and cities in Central and Eastern Europe. By the end of the course, students should be able to gain an empirical understanding of diverse local contexts and to broaden the concepts discussed in urban and housing studies.

Assessment: 100% continuous coursework assessment

MHMP8013 Smart and Sustainable Cities

| 6 credits

This course examines the rise of smart and sustainable cities, as mobilized by a range of governance actors from the urban to global scale, including their origins, construction and management. It explores the underlying motivation for these specific urban models - often grounded in the UN Sustainable Development Goals (SDGs) - their potential, but also their more problematic aspects. The course will introduce key theories that have been used to understand smart and sustainable cities, and relevant planning and governance issues. Learning activities will involve case studies, debates, and field research intended to enhance student engagement.

Assessment: 0%-70% examination and/or 30%-100% continuous coursework assessment

URBP7006 GIS and Smart Technology in Spatial Planning

| 6 credits

This course introduces the basic concepts, methods and techniques in the use of geographic information system (GIS) and smart technologies as a spatial planning support system in urban planning and smart cities development. It examines the challenges and opportunities of using emerging urban data for the development of smart cities and regions through urban analytical methods such as GIS, remote sensing, big data, and open data.

Assessment: 100% continuous coursework assessment

URBP6006 Planning, Managing and Financing the Development Process

| 6 credits

Planning in a development process needs to take into account a variety of spatial, sectoral, resources management and financial factors. This course examines the interactions of these factors in development processes initiated by the public sector, the private developers or through various modes of public-private partnership. The intersectoral and spatial implications of the development processes will be explored through case studies of planning at different geographical scales in the context of Hong Kong.

Assessment: 100% continuous coursework assessment

URBP8003 Land and Real Estate Markets: Smart Governance, Finance and Business Models | 6 credits

This course provides a land and real estate development perspective on urban development. Cities face continuous processes of both expansion and transformation. Population growth and economic growth lead to expansion, while processes of obsolescence and decline lead to a demand for urban transformation projects. These processes usually require investments in land and property (re)development, while planning interventions provide guidelines to investors, sometimes as opportunities, but also as barriers to what an investor might see as a profitable investment. The interaction between planning interventions on the one hand and land and real estate investments on the other hand is the central theme of this course. Starting from that interaction the course pays attention to different planning approaches and their impact on land and real estate markets, the dynamics of land and real estate markets, investment behaviour by private and public developers, public private partnerships, land management strategies and value capturing mechanisms and smart land and real estate investment strategies.

Assessment: 100% continuous coursework assessment

URBP6157 Transport Economics | 6 credits

This course helps to develop a specialist appreciation of the economics of urban transport provision. It highlights the economic principles and techniques employed in planning, operating and managing our city transport systems and concentrates on topics such as: travel time valuation, road congestion costing and pricing, public transport finance and cost-recovery, and economic appraisal techniques employed therein.

Assessment: 40%-60% continuous coursework assessment; 40%-60% examination

CIVL6007 Behavioral Travel Demand Modelling | 6 credits

Demand theory; statistical models; survey methods in transport; land use transportation models; disaggregate choice models; behavioural concepts in choice modelling.

Assessment: All courses offered by the Department of Civil Engineering are assessed through examination (70%) and coursework continuous assessment (30%).

URBP6123: Public Transport Systems | 6 credits

This course is designed to examine the nature and the role of public transport systems mainly in the urban context with special reference to high-density development. Topics include the nature and the characteristics of passenger transport, the operation and management of public transit systems, deregulation and privatisation, the role of para-transit, and multi-modal cooperation and competition.

Assessment: 100% continuous coursework assessment.

January 2024