SYLLABUSES FOR THE DEGREE OF
MASTER OF SCIENCE IN URBAN PLANNING

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

A. CURRICULUM STRUCTURE

The curriculum shall include assessments of the prescribed and elective courses subject to the approval of the Head of the Department of Urban Planning and Design, the Urban Planning Studios and a Dissertation. Candidates studying both the full-time and part-time curricula are required to complete a total of 126 credits of courses.

The curriculum shall normally require two academic years of full-time study, or three academic years of part-time study. Candidates shall not be permitted to extend their studies beyond the maximum period of registration of four academic years of full-time study, or five academic years of part-time study, unless otherwise permitted or required by the Board of the Faculty.

Candidates are required to follow courses of instruction and satisfy the examiners in the “Foundation Course on Statistics and Quantitative Methods” and in each of the following seven Core Courses:

- Values in Planning;
- Urban Development Theories;
- Research Methods in Spatial Planning;
- Urban Design and Place Making;
- Planning Practice, Law and Ethics in Hong Kong;
- Planning, Managing and Financing the Development Process;
- Planning Sustainable Cities and Regions.

and a total of 18 credits of Elective Courses as specialisation selected from a list approved from time to time. Candidates’ selection of courses shall be approved by the Head of the Department. In addition, candidates are required to complete satisfactorily the urban planning studios and submit in the final year of study a dissertation of not more than 15,000 words on a date to be specified by the Head of the Department.

B. ASSESSMENT

Each of the courses followed by candidates is examined either by an assessment of coursework, or by a combination of coursework assessment and a written examination. To complete the curriculum, candidates shall satisfy all the assessments and the relevant requirements prescribed in the Regulations for the Degree of Master of Science in Urban Planning.
C. COURSE LIST

Foundation Course

URBP6911. Foundation Course on Statistics and Quantitative Methods (6 credits)

This is a general foundation course on statistics, quantitative methods and computer techniques that are commonly used in urban analysis and planning. It introduces students to the fundamentals of descriptive, inferential and multivariate statistical techniques and quantitative methods. The aim is to develop students a basic level of competence and ability in using them in urban analysis and planning.

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

Urban Planning Core Courses

Students are required to take all Core Courses:

URBP6002. Urban Development Theories (6 credits)

This course reviews the theoretical frameworks for the understanding of urban development processes. It analyses the economic, spatial and socio-political dimensions of urban activities. The dynamics of urbanisation in the global production system, the relations between capital accumulation and urban development, place marketing and the rise of the creative cities will be discussed.

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 and 30%-40% examination

URBP7003. Research Methods in Spatial Planning (6 credits)

This course introduces basic research methods and techniques in urban and regional spatial planning. It will examine research design methods, data collection, and the use of statistical as well as qualitative techniques in data analysis. It will also examine analytical models and evaluation and management methods that are commonly used in spatial planning and research.

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

URBP6901. Values in Planning (6 credits)

This course provides a comprehensive overview of the theoretical basis of urban and regional planning. It examines the nature and value of the planning process through different theoretical paradigms.
Through active class deliberations on issues surrounding the roles and definitions of knowledge, the public interest, equal opportunities and ethics in the planning process, students will develop their own value system in planning.

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

**URBP6007. Planning Sustainable Cities and Regions (6 credits)**

This course focuses on the linkages between sustainable development and the planning of cities and regions. It comprises three main elements: firstly, a review and discussion of the principles of sustainable development, the concept of sustainability and related theories and discourses such as ecological modernisation, secondly, the design of policies to promote sustainable urban and regional development and related sustainability assessment systems, and, thirdly, contemporary practice in sustainability planning as reflected in emerging international experience in the field.

Assessment: 100% continuous coursework assessment

**URBP6902. Urban Design and Place Making (6 credits)**

This course introduces students to the theories, principles, processes, methods and practice of urban design and place making. Through literature reviews and case studies students begin to clearly understand the importance of policy, planning, design, and management in place making. Students comprehend the value of common visions, cultural diversity and community aspirations in the process of design in the creation of high quality places to live, work and play. Students undertake site specific place making design projects at the development and public realm context. Students are challenged to generate visionary, imaginative and realistic responses through investigation, analysis to make informed design decisions and creative recommendations.

Assessment: 100% continuous coursework assessment

**Elective Courses**

(Students shall take a total of 18 credits of elective courses as specialisation to be approved by the Head of the Department. Not all courses are available each year. Applicants should consult the Department for further information.)
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

URBP6903. Quantitative Methods for Transport Planning (6 credits)

This course focuses on the transport planning process and examines the following: traffic generation forecasts; spatial patterns of traffic; modal split models; traffic assignment methods; transport evaluation; network and local planning; traffic engineering considerations and basic transport economics.

Assessment: 100% continuous coursework assessment

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

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 and 40%-60% examination

MHMP6858. Housing Economics (6 credits)

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 privatisation. The course also introduces the functions, principles and methods of valuation.

Assessment: 100% 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% 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% 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

ENVM7012. Environmental Economics and Analysis (3 credits)

The aim of this course is to equip students with the ability to undertake economic analyses of the environment. The course provides an introduction to economic concepts and principles and applies them to the analysis and management of environmental problems. The course covers the economic understanding of environmental problems (e.g. external costs and benefits, public goods, resource scarcity), economic instruments for environmental management (e.g. taxes, subsidies, tradable permits), methods for valuing environmental goods and services (market and non-market approaches), and economic tools for supporting decision-making (e.g. cost-benefit analysis and multi-criteria analysis). All topics will be illustrated with current environmental and policy issues to emphasise their relevance and applicability.

Assessment: 100% coursework assessment
ENVM8011. Environmental Auditing and Reporting (3 credits)

This course provides an introduction on the concepts of environmental management, auditing and reporting. Detailed explanation of the development, implementation and continuous improvement of an environmental management system (EMS) based on ISO 14001:2015 standards will be covered. With the understanding on the key elements of an EMS, audit methodology and skills based on ISO 19001:2011 will be introduced with focus on environmental auditing.

In the light of the significant impacts of climate change globally, carbon audit which is a tool to measure greenhouse gases is considered valuable to be shared with students. The mechanism of carbon audit will therefore be taught and illustrated by real life examples. The functions and importance of environmental reporting will be demonstrated by using examples from large corporations in Hong Kong. Key elements of Global Reporting Initiative (GRI) Standards which is a guide for sustainability reporting will also be covered. In closing, the advantages, disadvantages and next step forward for environmental auditing and reporting will be explained and discussed.

Assessment: 100% coursework assessment

ENVM7016. Environmental Policy (3 credits)

This course focuses on key aspects of environmental policy-making and policy-implementation processes, such as how policy agendas emerge and evolve, how environmental discourse shapes policy outputs; and how institutions affect the trajectories and outcomes of environmental policy measures. Making references to local, national and international cases of successful and not-so-successful policies that pertain to the sustainable development agenda, the course also examines the theories and praxis of policy integration and policy convergence, as well as the perennial problematics of policy failure and policy learning.

The lectures are organised into three inter-related parts. In Part One, the basic principles and key concepts pertaining to environmental policy-making and policy-implementation will be examined. They include agenda setting; environmental institutions and the policy process; policy networks and advocacy; implementation gap and policy failure; and policy diffusion, convergence and policy learning. Lectures in Part Two will centre on Hong Kong’s environmental policy development. We will examine the questions of how environmental policy issues have been defined and responses formulated and implemented; and how the policy agenda and processes have evolved over the past 40 years. For illustration purposes, two salient policy issues—nature conservation and waste management—will be highlighted for in-depth discussion. In Part Three, the deliberation of Hong Kong’s environmental policy issues will be situated in a regional setting. Transboundary externalities that have triggered innovative policy responses will be reviewed to highlight the roles of science-policy interplay and policy diffusion in fostering cross-boundary environmental cooperation.

Assessment: 100% coursework assessment

ENVM8006. Environmental Impact Assessment (3 credits)

EIA is one of the most important contemporary instruments of environmental management. Used widely around the world to identify the impacts of development projects as well as strategic plans and policies, EIA plays a key role in many regulatory systems for the environment. This course reviews the development of different approaches to EIA, basic analytical principles, administrative systems for EIA, assessments at the project and strategic levels (SIA) and case study applications in Hong Kong.

Assessment: 50% coursework assessment and 50% examination
ENVM7014  Environmental Quality Management (6 credits)

This course introduces students to the types, sources and effects of environmental pollution and some of the key principles and strategies used in combating pollution and managing environmental quality. Topics include water and air quality management, solid waste management and noise pollution control, with an emphasis on the situation in Hong Kong.

Assessment: 30% coursework assessment and 70% written examinations

ENVM7017  Environmental Law in Hong Kong (3 credits)

This course focuses on the statutory interpretation of the four principal Ordinances and subsidiary legislation dealing with pollution in Hong Kong; namely the Water Pollution Control Ordinance, the Air Pollution Control Ordinance, the Noise Control Ordinance and the Waste Disposal Ordinance. Some consideration will also be given to the Dumping at Sea Ordinance, the Radiation Ordinance, the Merchant Shipping (Prevention and Control of Pollution) Ordinance, the Environmental Impact Assessment Ordinance, the Ozone Layer Protection Ordinance and international conventions effecting the law. Students will study the nature of environmental offences, including the requirement for proving “mens rea” (intent) in order for certain offences to be successfully prosecuted. Students will also be introduced to the principles of judge made law (the Common Law) and will learn to read and interpret relevant case law in order to better understand the current sentencing policies towards environmental offenders, both locally and in other Common Law jurisdictions.

Assessment: 100% coursework assessment

ENVM8012  Environmental Health and Risk Assessment (3 credits)

Environmental Risk Assessments (ERAs) are a tool to determine the likelihood that contaminant releases, either past, current, or future, pose an unacceptable risk to human health or the environment. Currently, ERAs are required under various regulations in many developed countries so as to support decision-makers in risk characterisation or the selection of cost-effective remedial clean-up. This course introduces the theory and practice of human and ecological risk assessments. Students completing the course will gain a sound knowledge of the concepts and principles of ERAs, risk management and risk communication as applied in practice; understand the basic risk assessment tools (i.e. prospective, retrospective and tiered approaches) to environmental risk management; be able to select and apply the simpler tools to tackle risk issues; and appreciate the interpretations of risk and its role in environmental policy formulation and decision making.

Assessment: 60% coursework and 40% written examination

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
URBP6905. Globalization and Urban and Regional Development in China (6 credits)

This course examines the processes of globalisation and studies its implications for urban and regional development in China. It studies the general concepts of urban development and the historical legacy constraining the urban development in China. With China’s accession to WTO membership, special emphasis is placed on the interactions between the transnational corporations (TNCs) and the different level of the state and local governments. Regional dynamics will be examined in the context of global competitiveness.

Assessment: 100% continuous coursework assessment

URBP8002. International Planning Policy and Practice (6 credits)

This course examines different planning systems across the world. Understanding the key approaches to urban planning in different countries and regions is important in developing an appreciation of how different techniques, policies, and practices emerged and developed to help shape the urban landscapes of various localities within their own contexts. The course takes a comparative approach to understand and evaluate planning policy and practice and the planning outcomes across a spectrum of international case studies, and attempts to explain their differences and similarities by probing into the dynamics between government intervention and market freedom, diversity in development certainty vis-à-vis land use controls and planning governance modes.

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

URBP6906. Urban Planning and Practice in China (6 credits)

The course will first review the history of urban planning practice in the People’s Republic of China. The relationship between economic and urban planning, the evolution of the planning legislation and the practice of planning at different geographical scales will be discussed. The course will then focus on planning practice in the Pearl River Delta region and its major cities where the transitional economy is
evolving rapidly. Issues surrounding the institutionalisation of planning regulations, systems and hierarchy; the formulation and implementation of plans; and problems of development control will be examined.

Assessment: 100% continuous coursework assessment

URBP6907. Special Study in Urban Planning (6 credits)

Detailed study or studies on a topic or topics in contemporary urban and regional planning approved by the Head of the Department.

Assessment: 100% continuous coursework assessment

MUDP2010. Research Methods for Urban Design (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 computers in urban design research.

Assessment: 100% continuous coursework assessment

MUDP1020. Urban Design Technologies & Innovations (6 credits)

The course focuses on technologies-related tools and techniques in professional urban design practice, and urban design research that enables designers to fully exploit technologies and techniques for urban physical environment appraisal, research for and about urban design, urban development design and communication at small and medium spatial scales. It also includes insights of innovations and techniques in urban design.

Assessment: 100% continuous coursework assessment

MUDP1030. Morphologies & Urban Design Theories (6 credits)

This course provides an introduction to the three natures of urban morphology: natural and 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


Urban design and real estate engage the complex mechanisms of environmental and social capital in relation to finance and economics, by seeing design and built environment investment as intrinsically
associated with economics and values. The course is an introduction to the issues arising from these associations: what roles urban economics play in urban design? From regional and spatial economics to spatial initiatives and governance to approaches to values in urban design. Conversely how urban design visioning can have impacts on economics, financial investment and values, including added environmental, social, cultural and aesthetic values?

Assessment: 100% continuous coursework assessment

**CONS8103. Charters and Legislation of Conservation (6 credits)**

This course introduces the guiding principles and legal framework for heritage conservation, as established in international charters and regional legislation, and examines in particular detail their application in Hong Kong, Macao, Mainland China and Southeast Asia.

Assessment: 100% continuous coursework assessment

**CONS8109. Cultural Landscapes (6 credits)**

This course focuses on understanding heritage places using the concept of cultural landscapes – landscapes that reflect distinctive patterns of interaction between people and the natural environment. The course examines the current theory and practice of cultural landscapes, especially within the context of Hong Kong, Macao, Mainland China and Southeast Asia.

Assessment: 100% continuous coursework assessment

**CONS8110. Architectural Heritage and Its Significance (6 credits)**

This course focuses on heritage buildings and sites in relation to their settings within a socio-cultural context. Emphasis is placed on the built heritage of Hong Kong, Macao and Mainland China. Case studies are used to illustrate the process of understanding of the heritage values of these buildings and sites, and how to use these values to prepare a Statement of Significance as part of a conservation plan.

Assessment: 100% continuous coursework assessment

**RECO6032. Law and Practice of Arbitration (6 credits)**

This course provides an introduction to alternative dispute resolution and examines the process of arbitration in Hong Kong and China through: common law and statute; procedure and proof; domestic and international arbitrations; arbitration institutions; the role of expert witnesses; application in the real estate and construction industry. This course examines the process of arbitration in Hong Kong and China: common law and statute; procedure and proof; the role of expert witnesses; domestic and international arbitrations; arbitration institutions; application in the real estate and construction industry.

Assessment: 100% examination
RECO7091. Construction Claims (6 credits)

This course provides an introduction of the law relating to construction claims in the following aspects: Types of claims: contractual claims, extra contractual claims, ex-gratia claims and quantum meruit claims; Principles and assessment of claims: acceleration and prolongation, loss and expense, common law damages, delay and extension of time, program analysis, burden and standard of proof, procedural requirements, common heads of claim.

Assessment: 50% coursework and 50% examination

RECO7097. Modern Developments in Construction (6 credits)

This course explores modern developments in construction from institutional, strategic, commercial and technological perspectives. This includes the effects of globalisation, evolving competitive strategies, procurement innovation, and industrialisation of construction, as well as theoretical developments and new technologies and approaches in construction project management and their applications in contemporary construction practice. A particular focus is given to the changes in practice enabled by state-of-the-art digital and smart technologies.

Assessment: 100% Coursework

URBA6002. Urban Big Data Analytics (6 credits)

This course further develops students’ knowledge and skills in handling, analysing and modelling urban data, especially big data. Students will learn conceptual frameworks for analysing and modelling urban issues, methodologies and software tools for processing and modelling urban data; as well as applying urban models and analytics to empirical cases. The aim of this course is to equip students with advanced urban modelling and analytics to explain current urban conditions and predict future urban changes beyond the smart era.

Assessment: 100% continuous coursework assessment
Prerequisite: URBA6007 Geographic Information System (GIS) for Urban and Regional Planning Development

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: URBA6007 Geographic Information System (GIS) for Urban and Regional Planning Development
URBA6007. Geographic Information System (GIS) for Urban and Regional Planning Development (6 credits)

This course introduces the basic concepts and methods in the use of geographic information system as a spatial planning support system in different areas of urban and regional planning and development. It examines the basic principles and functions of geographic information system in data input, manipulation, retrieval, visualisation and modelling of geographical data for supporting spatial planning decisions.

Assessment: 100% continuous coursework assessment

Urban Planning Studios and Dissertation

URBP7001. Spatial Planning Studio (12 credits)

This is the first of three studios in the Urban Planning Program and provides the basic foundation for Planning Studios at regional and territorial, and local community levels. Through class lectures and literature reviews students are introduced to spatial planning undertaken at these various levels and the importance of location and space in the resulting spatial pattern. Students are also introduced to and develop a basic proficiency in graphic (manual and computer 2D/3D visualisations), written and oral communication skills. Students get hands-on experience working in teams of four or five preparing and making presentations of preliminary spatial planning projects.

Assessment: 100% continuous coursework assessment

URBP7004. Strategic Planning Studio (12 credits)

This studio is designed to enhance student’s understanding of the complex multi-faceted nature of planning in the international, regional and metropolitan context. Students will be exposed to the strategic planning context of Hong Kong. A compulsory fieldtrip outside Hong Kong will be arranged to provide a better understanding of the international and practical planning issues. The territorial component of this studio will investigate and evaluate an urban planning and development policy issue. Students will work in a multi-disciplinary team, simulating a consultancy/task force situation. They will carry out a literature review, data collection, qualitative and quantitative analysis, evaluation and making recommendations. They are expected to relate theory to practice with a multi-dimensional perspective, and through interaction with concerned stakeholders, to recognise the social, environmental, economic and political challenges so as to reach a balanced recommendation.

Assessment: 100% continuous coursework assessment

URBP8001. Community Planning Studio (12 credits)

In this studio, students will work in partnership with local community groups and relevant stakeholders and apply their theoretical knowledge and practical skills to generate visionary, imaginative and realistic sustainable development plans for a local district in Hong Kong. Students will have ample opportunities to practise and refine their questionnaire design, survey, analysis, communication, urban design and presentation techniques and skills.

Assessment: 100% continuous coursework assessment
URBP6865.  Dissertation (24 credits) (Capstone experience)

The candidate shall present a dissertation of not more than 15,000 words 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 specialisation. The examiners may prescribe an oral examination on the subject of the dissertation.

Assessment: 100% continuous coursework assessment

21 May 2021