REGULATIONS FOR THE DEGREE OF MASTER OF CLIMATE GOVERNANCE AND RISK MANAGEMENT (MCGRM)

These Regulations apply to candidates admitted to the Master of Climate Governance and Risk Management curriculum in the academic year 2024-25 and thereafter.

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

Admission requirements

MCGRM 1. To be eligible for admission to the courses leading to the degree of Master of Climate Governance and Risk Management, candidates shall

- (a) comply with the General Regulations;
- (b) comply with the Regulations for Taught Postgraduate Curricula;
- (c) hold
 - (i) a Bachelor's degree with honors of this University; or
 - (ii) another qualification of equivalent standard from this University or from another University or comparable institution accepted for this purpose; and
- (d) satisfy the examiners in a qualifying examination, if required.

Qualifying examination

MCGRM 2.

- (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.

Advanced standing

MCGRM 3. Advanced standing of up to two required courses, except the capstone course, may be granted if

- (a) the course is completed at a graduate, postgraduate or master level from a recognised curriculum elsewhere within the last four years before admission to the Master of Climate Governance and Risk Management curriculum and achieved a good grade in the course; or
- (b) the candidate possesses a relevant professional qualification which was obtained before admission to the curriculum.

Course exemption

MCGRM 4. Courses exemption of up to two required courses except the capstone course, may be granted (normally by examination) if candidates

- (a) can produce evidence, such as transcript and course syllabus, that a course is equivalent in content to another course taken elsewhere for which a satisfactory grade has been obtained;
- (b) are holding relevant professional qualifications which were obtained before

admission to the curriculum.

No credits will be given for the exempted course and candidates shall be required to take an approved alternative course of the same credit value.

Award of degree

MCGRM 5. To be eligible for the award of the degree of Master of Climate Governance and Risk Management, candidates shall

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

Period of study

MCGRM 6. The curriculum shall normally extend over one academic year of full-time study. Candidates shall not be permitted to extend their studies beyond the maximum period of registration of two academic years of full-time study, unless otherwise permitted or required by the Board of the Faculty.

Completion of curriculum

MCGRM 7. To complete the curriculum, candidates shall

- (a) satisfy the requirements prescribed in TPG 6 of the Regulations for Taught Postgraduate Curricula;
- (b) follow the courses of instruction and complete satisfactorily all prescribed written work and field work;
- (c) satisfy the examiners in all prescribed courses as specified in the syllabuses and in any prescribed form of examination; and
- (d) have achieved a cumulative GPA of 2.0 or above.

Assessment

MCGRM 8. Candidates shall satisfy the examiners in all the prescribed courses as specified in the syllabuses. Examinations shall normally be held at the end of each course, unless otherwise specified. Only passed courses will earn credits.

MCGRM 9. Candidates who have failed a course shall be required to sit for re-assessment/re-examination or to retake the course. If the failure is an elective course, candidates may elect to take another course as a substitute.

MCGRM 10. Candidates who are unable, because of illness, to be present at the written examination of any course may apply for permission to present themselves at a supplementary examination of the same course to be held at some other time. Failure to sit for supplementary examination as arranged shall automatically result in course failure.

MCGRM 11. Candidates shall not be permitted to repeat a course for which they have received a passing grade for the purpose of upgrading.

MCGRM 12. Candidates who have failed in the assessment/examination or re-assessment/re-

examination of more than two courses during the entire period of study of the curriculum or have exceeded the maximum period of registration as specified in Regulation MCGRM 6 shall be recommended for discontinuation under the provisions of General Regulations G12.

MCGRM 13. There shall be no appeal against the results of examinations and all other forms of assessment.

Grading system

MCGRM 14. Courses shall be graded according to the following grading system:

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

Assessment results

MCGRM 15. On successful completion of the curriculum, candidates who have shown exceptional merit at the completion of the curriculum may be awarded a mark of distinction, and this mark shall be recorded in the candidates' degree diploma.

SYLLABUSES FOR THE DEGREE OF MASTER OF CLIMATE GOVERNANCE AND RISK MANAGEMENT (MCGRM)

These syllabuses apply to candidates admitted to the Master of Climate Governance and Risk Management in the academic year 2024-25 and thereafter.

CURRICULUM STRUCTURE

Unless advanced standing is granted, candidates normally need to take a total of ten courses, each carries 6 credits, comprising six core courses (inclusive of one capstone course) and four elective courses. A list of electives will be announced at the beginning of each module.

Not all the courses listed in the syllabuses will necessarily be offered each academic year.

CORE COURSES

CGRM7001 Global Ecology and Climate System (6 credits)

This course is an interdisciplinary introduction to the science of global environmental change. Emphasis will be placed on understanding principles of earth system science, the scientific basis underlying the major components of global environmental change, the linkages between these components, and the central role of humanity in contributing to the observed changes. This course will emphasize current scientific topics in an interdisciplinary way. While this course is not intended for Biology majors, it is expected that students have some previous coursework in the natural sciences (biology, chemistry or physics). Most notably this course will help students develop: Effective skills in research, writing, speaking, reading and listening; An understanding of the natural world, the scientific method and the power and limits of science; and critical and analytical reasoning skills required to solve abstract and concrete problems.

CGRM 7002 Climate International Development and Management (6 credits)

This course will provide a basic understanding of the main international development issues relating to climate change and cover the latest financial developments relating to climate change. Climate finance is a fast-moving field, and the course will endeavor to expose you to the latest advances. It will cover climate related financial risk, sustainable asset management, climate change risk for financial institutions, and central bank supervision. It aims to unlock solutions within capital markets to address the challenges posed by global climate change. It will examine physical, transition, and legal risks that financial institutions are increasingly exposed to. The course will combine lectures, guest lectures by practitioners, and case studies. The topics covered are among others the pricing of climate change risk, the role of climate risk disclosures, climate stress tests, net zero aligned portfolio construction, financial regulation, monetary policy, government regulation and technical change in renewable energy.

CGRM 7003 Climate Change Policy (6 credits)

The course firstly aims to explore climate change policy at local, national, and international levels. This will include briefly examining the science of climate change; the connection between GHG emissions, climate impacts and the real economy; the theory underpinning the policy response to climate change on mitigation and adaptation; the principal policy and regulatory tools currently in use; as well as the principal connections between policy and the investment environment needed to meet long-term climate goals. The course will also introduce students to the writing of 'policy briefs' – a critical tool and skill set needed for professionals working with the policy community. The course then aims to explore key concepts and considerations related to the topic of international climate finance. The course will focus principally on the role of

governments and public sector actors in providing, catalyzing and mobilizing financial flows for climate change mitigation and adaptation in both developing and developed countries. It explores the connections between the political "100 billion" climate finance commitment at the international level and the "100 trillion" investment challenge governments face to meet the investment needs to transform national economies. It will look at the different tools, instruments, and policies that these mandates entail – as well as the interactions between governments and the private sector as public resources are used to 'leverage', 'redirect' and 'blend' additional private finance and investment. It will go beyond mitigation objectives to present an overview of the challenges related to adaptation, research & development financing, supporting SMEs and the creation of entire climate service value chains. Finally, the course will also introduce the concepts of 'concessionality' and the measuring and evaluation frameworks used by public institutions to determine how public funds are used for climate finance.

CGRM 7004 Climate Solutions and Innovation (6 credits)

The Climate Solutions and Innovation course is designed and delivered by climate change experts and educators. It tackles the biggest challenge of climate change by giving each of us the knowledge and tools we need to make a real difference. Designed to be accessible and engaging throughout, it provides the facts you need to know about what climate change is, and the solutions you need to know so you can be part of fighting it. Look around you and imagine the place you are right now three decades in the future. The wood, glass, cement, steel, and plastics, the electricity you use, and the food you eat—all of it could be made and transported in completely new ways with little to no impact on our climate. In this course, students will learn about emerging solutions for reducing global greenhouse gas emissions and debate the best applications for green technologies.

CGRM 7005 Climate Data Science and Analysis (6 credits)

This course provides the fundamentals needed for analyzing climate datasets and the basics of decision making under uncertain climate conditions. During this course, students will firstly develop an understanding of the main concepts of data science, including specialized terminology and standard techniques for the collection, processing, analysis and interpretation of data. They will develop an awareness of the tools and frameworks used in professional environments in order to assist data science tasks. There is also a focus on gaining an understanding of key concepts surrounding the digitalisation of energy, including the Internet of Things, machine learning, AI and blockchain, and their applications in the context of the energy sector. This course will secondly introduce participants to spatial analysis using GIS software; Introduce the theoretical problems associated with capturing, handling and analysing spatial data; Explore these issues through the practical use of ArcGIS, a widely used commercially available GIS software package.

ELECTIVE COURSES

CGRM 7101 Carbon Accounting and ESG (6 credits)

The course has two aims. In the carbon accounting section, it aims to provide students with an understanding of the range of measurement, calculation, reporting and auditing - in short, accounting - requirements and challenges related to climate change and the policy responses to climate change. Students will come away from the course with the skills to both implement and critique carbon accounting methods. In the ESG section, ESG investing provides participants with the experience, tools and community of practice they will need to become an important part of this global paradigm. Through a combination of lecture, discussion and group exercises, participants will learn about financially material Environmental Social Governance (ESG) indicators and data providers, and learn how to translate corporate performance on sustainability into financial performance. They will also review best practices in ESG and impact investing, and

develop their own sustainable investment strategies. Participants will leave this course with concrete ideas about how to incorporate sustainable investment practices within their organizations.

CGRM 7102 Climate Data and Remote Sensing (6 credits)

Remote sensing from satellite platforms has become increasingly important as the only way to obtain environmental data at the spatial and temporal coverage needed to understand the processes governing global climate change. The aim of this course is to explore the role of remote sensing in monitoring planetary scale phenomena, with particular focus on the use of techniques and instruments designed to monitor the global environmental properties of the Earth. The course will also consider the significance of these measurements for testing existing models, such as ozone depletion, the hydrological cycle, global climate change and other aspects of the Earth's environment.

CGRM 7103 Climate Risk and Investment (6 credits)

The course provides students with an understanding of principal concepts emerging within the financial sector to taken climate change into account in decision-making and portfolio management. Across both public and private sector financial actors, two principal areas of focus are the management of risks and opportunities associated with climate change and the alignment of assets and portfolios with climate goals agreed by governments. The application and implementation of these management strategies, in turn, is highly dependent different types of forward-looking assessments such as scenarios, forecasting and modelling. The course develops practical knowledge for implementing these practices. Students will develop the critical thinking skills to evaluate whether emerging practices are fit for purpose for use by different financial actors (banking, asset management, institutional investors) as well as for different mandates (impact-driven versus maximising financial returns).

CGRM 7104 Public Health and Climate Impact (6 credits)

This course is a comprehensive course that provides foundational, theoretical, and practical knowledge and skills in the field of climate change and its impact on public health. The course prepares participants to be knowledgeable in climate change principles and implementation of adaptation and mitigation strategies. By looking at air quality, nutrition, infectious diseases, and human migration, this course will show students how increases in greenhouse gases impact public health. Experts working in a variety of settings will present their recommendations for responding to these challenges, and interested students will have the opportunity to learn about the research methods that measure the health effects of climate change. Created with support from the HKU School of Public Health, this course will explain how climate change impacts people around the globe, but also how it directly affects you and your life. Though the risk rises with the rising global temperatures, climate change is a solvable problem, and there are things you can do to mitigate that risk.

CGRM 7105 Climate Change Law (6 credits)

This course addresses the process of climate law formation by interactions between movement-building, the private sector, and government law-writing, with a particular focus on equity and just transition concepts affecting the formation of law. The course considers how litigation is one tool among many involved in the formation of climate law. It investigates the political and organizing forces that create the law, and the way lawyers (including students) might work with them. It starts with the interactions between litigation, legislation, and political negotiation and then builds to more specific climate law examples. The course is intended to be complementary to Climate Change Litigation: Practice and Theory.

The concepts of urban sustainability are driving the regulation of the built form of our increasingly large, complex and smart cities. The global sustainable development goals have also led urban regulators to embrace more participatory and innovative forms of governance for our society and economy. This course explores how those concepts apply in the regulation of planning and construction and the framework and governance for the development of smart, resilient and sustainable cities. In particular, it will focus on the role of local policies in achieving livable communities. The course will cover the Environmentally Sustainable Development (ESD) Local Planning Policies and consider whether planning regulation in Hong Kong incorporates best practice in environmental assessment. It will explore the interesting tension between building and planning law and the respective contribution of each in driving sustainable outcomes. Another component of this course will follow the introduction of building information modelling (BIM) arising out of the architecture, engineering and construction management sectors. This topic offers a further but alternate perspective of shifting regulatory dynamics that pitch towards sustainability objectives, whether on built environment projects or across broad-scaled applications.

CAPSTONE COURSE

CGRM 7006 Climate risk and Sustainability Strategies (6 credits)

This course provides students a foundation in managing and analyzing financial strategy for climate risk and adaptation in companies. The first part of the course focuses on building skills – how to craft a decarbonization strategy. Through the study of practice on real-world, students will ascertain the effectiveness of company's decarbonization strategy. The course then turns to explore climate risks and resilience metrics, looking at how to define metrics that are measurable, computable and comparable, which include both mean and variability, recent past, current trends, and projection of risks. Possible indicators to measure climate finance potential include financial and impact-driven ones. A very restricted focus on monetary indicators might not create the right incentives to support a mix of projects contributing to transformational change. This course will also explore the measurement and disclosure of climate risk as to the first step to developing strategies to address risk as part of all investment decisions. Course learning will be supplemented with exposure to industry speakers from the local financial industry.

ASSESSMENT

Candidates shall be assessed for each of the courses for which they have registered, and assessment is normally conducted in the form of coursework assessment (40-100%) and examinations (0-60%), unless otherwise specified by the course instructor.