

Module shared with another track  
 Track number and a letter, showing that there is a common part shared with other tracks, with profile/track specific applications

# MSc Programmes Curricula - 2024-2025

Modules imposed by joint programmes

Modules with modified content

Modules with modified TITLE

Version: October 8, 2024

Date	28 Oct – 8 Nov	11 Nov – 22 Nov	25 November – 13 December	16 – 20 Dec	6 January – 24 January	27 – 31 Jan	3 February – 21 February	24 February – 14 March	17 – 21 March	24 March – 11 April	14 – 17 April	22 April – 16 May	19 May – 20 June	23 - 27 June	30 June – 26 September	29 Sept – 3 Oct	6 - 10 October	
Term	T01	T02	T03	MW1	T04	MW2	T05	T06	MW3	T07	MW4	T08	T09	T10				
<b>Thematic track 1: Water Hazards, Risk and Climate</b>	M080	M001	M002 Introduction to Coastal Sci & Eng M030 Urban Drainage and Sewerage M010 Hydrology and Ecosystems M011 Modelling, Programming and Computational Hydraulics M016 Rethinking Water Climate Adaptation Policies, Uneven Distribution Risks Track 1-a	M074	M003 Coastal Processes and Morphology M013 River Basin Modelling M063 Water Quality Assessment & Monitoring M017 Organizing Water River Basins and Cities (incl. law). Track 1-a	M075	M004 Modelling Coastal Hazards M068 Drought Risk Management M012 AI for Water Systems Application to Water Hazards Track 1-a M020 Water Conflict and Cooperation M019 Finance and Implementation Climate Finance Track 1-a M021 Policy Analysis Climate Adaptation, Resilience Track 1-a	M076	M005 Design of Risk Reduction Measures in Coastal Zones M009 Planning Nature-based Solutions For Urban Water Management M014 Flood Risk Management M007 Integrated Modelling of Water, Eco- and Social Systems M021 Climate Adaptation, Resilience Track 1-a	M077	M006 Climate Change Adaptation in Coastal Areas & Ports Climate Change Adaptation in Lowland Areas Water Sensitive Cities (sponge cities) Climate Change Adaptation Measures in River Basins M015 Decision Support Systems in Water Domain M065 Assessing Social and Environmental Impacts		M083					
<b>Thematic track 2: Water and Health</b>		M024	M025 Surface Water Treatment M030 Urban Drainage and Sewerage M035 City-Wide Inclusive Sanitation M016 Rethinking Water Water Supply, Sanitation, Drainage Track 2-a		M026 Groundwater Resources & Treatment M021 Wastewater Treatment Processes and Technologies M036 On-site Sanitation and Treatment M063 Water Quality Assessment & Monitoring M017 Organizing Water Utility, Informal Providers Track 2-b		M027 Water Transport and Distribution M029 Desalination and Water Reuse: Engineering and the Environment M032 Sludge Treatment and Resource Recovery Reuse and Circular Economy M037 Humanitarian WASH M019 Finance and Implementation Value Chain, Tariffs, Investments Track 2-b M021 Policy Analysis WatSan & Health Policies Track 2-b		M028 Drinking Water Treatment Plant Design M054 Wastewater Reuse in Agriculture M034 Experimental Methods for Water, Sanitation and Environmental Technology M038 Industrial Water and Resource Management M041 Transformation, Advocacy and Change Water, Sanitation Track 2-a									
<b>Thematic track 3: Water, Food and Energy</b>		M042	M051 Water-Energy-Food Nexus: Approaches for River Basin Management M016 Rethinking Water Irrigation & Energy Track 3-a M049 Digital Innovations for Water Challenges		M043 Energy Harnessing in the Urban Water Cycle M046 Water and Agriculture M017 Organizing Water Irrigation & WJAs Track 3-a M063 Water Quality Assessment & Monitoring M059 Hydrological Monitoring, Data Collection and Analysis and Assessment.		M048 Irrigation Design, Performance Assessment and Modernisation M020 Water Conflict and Cooperation M050 Food system transformation for sustainable food production and climate change adaptation M012 AI for Water Systems Application Water, Agric and Energy Track 3-a M021 Policy Analysis Agrarian Change, Biofuels, Reuse Track 3-c M053 Remote Sensing for Agricultural Water Management		M044 Dams and Hydropower M041 Transformation, Advocacy and Change Grassroot Initiatives Track 3-a M052 Wetlands for Livelihoods and Conservation M054 Wastewater Reuse in Agriculture M055 Sensing and Geoprocessing for Precision Agriculture									
<b>Thematic track 4: Water Resources and Ecosystem Health</b>		M070	M010 Hydrology and Ecosystems M049 Digital Innovations for Water Challenges M016 Rethinking Water Water Resources, Nature Conservation Track 4-a		M057 Hydraulics for Engineering Applications M059 Hydrological Monitoring, Data Collection and Analysis and Assessment. M063 Water Quality Assessment & Monitoring M013 River Basin Modelling M017 Organizing Water River Basins (incl. law). Track 4-a		M064 River Morphodynamics M060 Surface Water and Groundwater Flow Dynamics M020 Water Conflict and Cooperation M061 Aquatic Ecology and Bioassessment M012 AI for Water Systems Application to Water Resources Track 4-c M019 Finance and Implementation Resource Economics Track 4-c M062 River and Floodplain Rehabilitation M067 Integrated Modelling of Water, Eco- and Social Systems		M044 Dams and Hydropower M052 Wetlands for Livelihoods and Conservation M055 Sensing and Geoprocessing for Precision Agriculture M054 Wastewater Reuse in Agriculture M056 Groundwater modelling Hydrological Modelling Surface water modelling M065 Assessing Social and Environmental Impacts									

<b>Number of Modules in Terms:</b>	4	9	11	12	12	12
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**For information: curricula of joint programmes:**

<b>CoastHazar 120 EC</b>	Modules at partner institute	M003 Coastal Processes and Morphology	M075	M004 Modelling Coastal Hazards	M005 Design of Risk Reduction Measures in Coastal Zones	M076	M006 Climate Change Adaptation in Coastal Areas & Ports Water Sensitive Cities (sponge cities) Climate Change Adaptation Measures in River Basins	M077	M194 Seminar & Fieldtrip #1	M072 Dynamic and Statistical Regional Wave Modelling	M073 Flood Protection in Lowland Areas	Exams	M195 Seminar & Fieldtrip #2	M196 Short Course 1	M197 Short Course 2	M198 Summer School: Integrating CZM in a Changing World	Modules at partner institute
<b>HERBD with Kuala Lumpur 97 EC</b>	M080 Introduction to the Water and Sustainable Development Programme M070 Introduction to Water Resources and Ecosystems Health M051 Water-Energy-Food Nexus: Approaches for River Basin Management	M074	M057 Hydraulics for Engineering Applications	M064 River Morphodynamics	M045 Hydraulic Design of Structures River Structures Track 4-b		M044 Dams and Hydropower	M083 Interdisciplinary Project and Fieldwork	M091 Environmental Flows (Online course)	Modules at partner institute							Modules at partner institute
<b>LWM 120 EC</b>	Modules at partner institute			M061 Aquatic Ecology and Bioassessment	M067 Integrated Modelling of Water, Eco- and Social Systems M062 River and Floodplain Rehabilitation		M052 Wetlands for Livelihoods and Conservation	M083 Interdisciplinary Project and Fieldwork	Modules at partner institute	Capita selecta / electives	This research proposal development	This research and thesis writing					Modules at partner institute
<b>IMETE 120 EC</b>	Modules at partner institute	M141 Groundwater Treatment – (online)		M032 Sludge Treatment and Resource Recovery M069 Unit Processes for Saline Water Treatment	M033 Wastewater Treatment Design And Selection		M038 Industrial Water and Resource Management M054 Wastewater Reuse in Agriculture	M083 Interdisciplinary Project and Fieldwork	M081 Interdisciplinary project / Communication and Writing Skills for Engineers M178 Internship (Optional) 6 weeks July/August	Modules at partner institute							Modules at partner institute
<b>Flood Risk Mngt 120 EC</b>	Modules at partner institute				M218 Flood Modelling I		M015 Decision Support Systems in Water Domain	M083 Interdisciplinary Project and Fieldwork	M219 Flood Modelling II	M014 Flood Risk Management	M012 AI for Water Systems Application to Water Hazards Track 1-a	Exams					Modules at partner institute
<b>GroundWatch 120 EC</b>	Modules at partner institute						M058 Geochemistry and Tracers for Hydrological Studies M067 Integrated Modelling of Water, Eco- and Social Systems	M083 Interdisciplinary Project and Fieldwork	M088 Groundwater in Adaptation to Climate Change Impacts	M226 Electives and/or Internship							Modules at partner institute