

Faculty of Bioscience Engineering

Master of Science in Environmental Science and Technology

Campus: UGent

Language(s) of instruction: English (Programme sheet as of: 2020)

Programme version 1 Valid as from the academic year 2020-2021 (VOORSTEL)

1 General Courses - IMESTEalg 60.0 credits

1.1 Module Environmental sustainability and policy - IMESTEalgESP

Nr	Course	CRDT	Ref	MT1	MT2	Session	Contact	Study
1	I002506 Clean Technology [en]	3.0		1		A:1	30.0	90
2	I002585 Sustainability and Environmental Economics [en] Stijn Speelman -- Department of Agricultural Economics	4.0		1		A:2	40.0	120
3	I002586 Multidisciplinary Analysis of Climate Change [en] Pascal Boeckx -- Department of Green Chemistry and Technology	3.0		1		A:2	30.0	90
4	I001571 Environmental Legislation [en] Frank Maes -- Department of European, Public and International Law	3.0		1		A:1	30.0	75

1.2 Module Environmental diagnostics - IMESTEalgED

Nr	Course	CRDT	Ref	MT1	MT2	Session	Contact	Study
1	I002587 Environmental Chemistry and Analysis: Atmospheric Processes [en] Christophe Walgraeve -- Department of Green Chemistry and Technology	5.0		1		A:1	50.0	150
2	I002588 Environmental Chemistry and Analysis: Water, Soil and Sediment [en] Filip Tack -- Department of Green Chemistry and Technology	5.0		1		A:1	50.0	150
3	I002606 Environmental Risk Assessment [en] Karel De Schamphelaere -- Department of Animal Sciences and Aquatic Ecology	5.0		1		A:1	50.0	150

1.3 Module Environmental technology - IMESTEalgET

Nr	Course	CRDT	Ref	MT1	MT2	Session	Contact	Study
1	I002508 Environmental Technology: Water [en] Korneel Rabaey -- Department of Biotechnology	5.0		1		B:2	50.0	150
2	I002589 Environmental Technology: Soil and Sediment [en] Filip Tack -- Department of Green Chemistry and Technology	3.0		1		A:2	30.0	90
3	I002590 Environmental Technology: Air [en] Christophe Walgraeve -- Department of Green Chemistry and Technology	4.0		1		A:2	40.0	120
4	I002591 Environmental Technology: Waste [en] Frederik Ronsse -- Department of Green Chemistry and Technology	3.0		1		A:2	30.0	90

1.4 Module Applied ecology - IMESTEalgAE

Nr	Course	CRDT	Ref	MT1	MT2	Session	Contact	Study
1	I002504 Applied Freshwater Ecology [en] Peter Goethals -- Department of Animal Sciences and Aquatic Ecology	3.0		1		A:1	30.0	90
2	I002535 Applied Marine Ecology [en] Colin Janssen -- Department of Animal Sciences and Aquatic Ecology	3.0		1		A:1	30.0	90
3	I002609 Environmental Microbiology [en] Nico Boon -- Department of Biotechnology	3.0		1		A:1	30.0	90

1.5 Module Environmental research skills - IMESTEalgERS

Nr	Course	CRDT	Ref	MT1	MT2	Session	Contact	Study
1	I002593 Introduction to Environmental Modelling and Simulation [en] Ingmar Nopens -- Department of Data Analysis and Mathematical Modelling	3.0		1		A:2	30.0	90
2	I002594 Environmental Research Skills and Experimental Design [en] Gijs Du Laing -- Department of Green Chemistry and Technology	5.0		1		A:J	50.0	150

2 Majors - IMESTEmajors

24.0 credits

[Subscribe to 24 credit units from 1 major from the following list.](#)

2.1 Major Environmental assessment and management of chemicals - IMESTEmajorChemicals

24.0 credits

[Subscribe to 24 credit units from the following list.](#)

Nr	Course	CRDT	Ref	MT1	MT2	Session	Contact	Study
1	I002595 Emerging Topics and Current Practice in Environmental Risk Assessment [en] Karel De Schamphelaere -- Department of Animal Sciences and Aquatic Ecology	6.0		2		A:2(2021)	60.0	180
2	I002596 Environmental Fate and Management of Pesticides [en] Pieter Spanoghe -- Department of Plants and Crops	6.0		2		A:1	60.0	180
3	I002597 Urban and Indoor Air Quality [en] Christophe Walgraeve -- Department of Green Chemistry and Technology	6.0		2		A:2(2021)	60.0	180
4	I002411 Metals and Metalloids in Environment and Technology [en]	6.0		2		B:1	60.0	180

2.2 Major Resource recovery technology - IMESTEmajorRecovery

24.0 credits

[Subscribe to 24 credit units from the following list.](#)

Nr	Course	CRDT	Ref	MT1	MT2	Session	Contact	Study
1	I000260 Life Cycle Assessment [en] Sophie Huysveld -- Department of Green Chemistry and Technology	3.0		2		A:1	30.0	75
2	I002598 Physico-Chemical Resource Recovery from Aqueous Waste Streams [en] Arne Verliefde -- Department of Green Chemistry and Technology	6.0		2		A:1(2021)	60.0	180
3	I002599 Digitalisation for Resource Recovery [en] Ingmar Nopens -- Department of Data Analysis and Mathematical Modelling	6.0		2		A:1	60.0	180
4	I002607 Resource Recovery Technology [en] Ramon Ganigué -- Department of Biotechnology	5.0		2		B:2	50.0	150
5	I002600 Non-technological Drivers and Challenges of Resource Recovery [en] Stijn Speelman -- Department of Agricultural Economics	4.0		2		A:2(2021)	40.0	120

2.3 Major Environmental health and technology for developing economies - IMESTEmajorDeveloping

24.0 credits

[Subscribe to 24 credit units from the following list.](#)

Nr	Course	CRDT	Ref	MT1	MT2	Session	Contact	Study
1	I002601 Basic Concepts in Environmental Health [en] Stefaan De Henauw -- Department of Public Health and Primary Care	4.0		2		A:1(2021)	40.0	120
2	I002608 Decentralized Sanitation and Treatment Technologies for Developing Economies [en] Korneel Rabaey -- Department of Biotechnology	6.0		2		A:1(2021)	60.0	180
3	I002607 Resource Recovery Technology [en] Ramon Ganigué -- Department of Biotechnology	5.0		2		B:2	50.0	150
4	I001848 Water Quality Management [en]	4.0		2		A:2	45.0	105
5	I001584 Rural Project Management [en]	5.0		2		A:2	60.0	135

2.4 Major Urban environmental management - IMESTEmajorUrban

24.0 credits

[Subscribe to 24 credit units from the following list.](#)

Nr	Course	CRDT	Ref	MT1	MT2	Session	Contact	Study
1	I001568 Urban Ecology and Management [en] Martin Hermy -- Catholic University of Leuven	3.0		2		B:1	30.0	90
2	I002597 Urban and Indoor Air Quality [en] Christophe Walgraeve -- Department of Green Chemistry and Technology	6.0		2		A:2(2021)	60.0	180
3	C003534 Urban Mobility and Logistics [en] Frank Witlox -- Department of Geography	3.0		2		B:1	30.0	90
4	I001439 Environmental Noise [en] Timothy Van Renterghem -- Department of Information Technology	4.0		2		B:1	40.0	120
5	E084571 Urban Analysis and Design [en] Michiel Dehaene -- Department of Architecture and Urban Planning	3.0		2		B:1	30.0	90
6	I001542 Environmental Impact Assessment: Integrated Project [en] Sophie Huysveld -- Department of Green Chemistry and Technology	5.0		2		A:2(2021)	60.0	135

2.5 Major Environmental health and technology for marine systems - IMESTEmajorMarine

24.0 credits

[Subscribe to 24 credit units from the following list.](#)

Nr	Course	CRDT	Ref	MT1	MT2	Session	Contact	Study
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1	I002603	Blue Growth: An Interdisciplinary Approach to Research and Innovation in the Marine Environment [en] Colin Janssen -- Department of Animal Sciences and Aquatic Ecology	3.0	2	A:1(2021)	30.0	90
2	C003870	Marine Policy and Governance [en] Andrew Serdy -- Department of European, Public and International Law	3.0	2	A:1	30.0	75
3	I000928	Aquaculture Environmental Impact [en] Peter Bossier -- Department of Animal Sciences and Aquatic Ecology	3.0	2	A:2	30.0	90
4	I002604	Oceans and Human Health [en] Jana Asselman -- Department of Animal Sciences and Aquatic Ecology	3.0	2	A:1	30.0	90
5	E054820	Inland Waterways and Locks [nl, en] Tom De Mulder -- Department of Civil Engineering	4.0	2	C:2, D:2	40.0	120
6	C002642	Dredging and Offshore Constructions [en] Adam Bezuijen -- Department of Civil Engineering	3.0	2	A:2	30.0	75
7	I002605	Seminars and Company Visits [en] Colin Janssen -- Department of Animal Sciences and Aquatic Ecology	5.0	2	A:J(2021)	50.0	150

3 Elective Courses - IMESTEkeuze 6.0 credits

Subscribe to 6 credit units from no less than 1 and no more than 3 modules from the following list.

3.1 Courses from the Majors - IMESTEmajorskeuze

Subscribe to no more than 6 credit units from the majors, with the exception of the courses taken within the chosen major.

3.2 Internship - IMESTESstage

Nr	Course	CRDT	Ref	MT1	MT2	Session	Contact	Study
1	I001884 Internship [en] Karel De Schampheleere -- Department of Animal Sciences and Aquatic Ecology	6.0		2		A:J(2021)	60.0	150

3.3 Ghent University Elective Courses in English - IMESTEUnivbredek

Subscribe to no more than 6 credit units from the Ghent University elective courses in English (<https://studiegids.ugent.be/current/EN/FACULTY/I/UBKV/IUKEUZ/IUKEUZ.html>)

4 Master's Dissertation - IMESTEmasterproef 30.0 credits

Nr	Course	CRDT	Ref	MT1	MT2	Session	Contact	Study
1	I001508 Master's Dissertation [en]	30.0		2		A:J	300.0	900