GHENT UNIVERSITY

Study Programme

Academic year 2020-2021

SinRem

International Master of Science in Sustainable and Innovative Natural Resource Management

Campus: UGent

Language(s) of instruction: English (Programme sheet as of: 2019)

Programme version 4 Valid as from the academic year 2020-2021 (VOORSTEL)

1 General Courses - IMSINRalg 65.0 credits

1.1 Ghent University - IMSINRalgUGent 22.0 credits

Nr	Course		CRDT	Ref	MT1	MT2	Session	Contact	Study
1	I002766	Introduction to the Circular Economy, Economics and Management of Natural Resources [en] Stijn Speelman -- Department of Agricultural Economics	4.0		1		A:1	40.0	120
2	I002700	Clean Technology [en] Sophie Huysveld -- Department of Green Chemistry and Technology	5.0		1		A:1	50.0	150
3	I002170	Environmental Inventory Techniques [en] Ellen Van De Vijver -- Department of Environment	3.0		1		A:1	30.0	75
4	E065460	Rational Use of Materials [en] Kim Verbeken -- Department of Materials, Textiles and Chemical Engineering	5.0		1		A:1	45.0	150
5	I002767	Resource Recovery and Recycling Technologies [en] Tom Hennebel -- Department of Biotechnology	5.0		1		A:J	50.0	150

1.2 TU Bergakademie Freiberg - IMSINRalgTUBFreiberg 18.0 credits

Nr	Course		CRDT	Ref	MT1	MT2	Session	Contact	Study
1	I002768	Problems and Innovations in the Process Chain of Mineral Resources [en] TU Bergakademie Freiberg, Martin Bertau -- TU Bergakademie Freiberg	4.0		1		A:1	60.0	120
2	I002174	Resources Chemistry [en] TU Bergakademie Freiberg, Gero Frisch -- TU Bergakademie Freiberg	9.0		1		A:J	135.0	270
3	I002769	Literature Study and Business Plan [en] TU Bergakademie Freiberg, Johannes Stephan -- TU Bergakademie Freiberg	5.0		2		A:1	45.0	150

1.3 Uppsala University - IMSINRalgUppsalaU 25.0 credits

Nr	Course		CRDT	Ref	MT1	MT2	Session	Contact	Study
1	I002191	Georesource exploration and characterisation [en] Uppsala University, Abigail Barker -- Uppsala University	5.0		1		A:2	45.0	150
2	I002192	Raw Materials Network Seminar [en] Uppsala University, Per Fors -- Uppsala University	5.0		1		A:2	45.0	150
3	I002770	Innovation Management and Entrepreneurship [en] Uppsala University, Göran Lindström -- Uppsala University	10.0		1		A:2	90.0	300

1.3.1 Elective courses - IMSINRkeuzeUppsalaU 5.0 credits

Subscribe to 5 credit units from the following list. Subject to approval by the faculty.

Nr	Course		CRDT	Ref	MT1	MT2	Session	Contact	Study
1	I002194	Environmental Assessment [en] Uppsala University, Benjamin Fischer -- Uppsala University	5.0		1		A:2	45.0	150
2	I002195	Physical–Chemical Properties of Rocks, Minerals and Materials [en] Uppsala University, Alireza Malehmir -- Uppsala University	5.0		1		A:2	45.0	150
3	I002408	African Mineral Resources: the Science and Politics of Sustainable Extraction of Mineral Resources [en] Uppsala University, Manzi Musa -- Uppsala University	5.0		1		A:2	45.0	150

2 Majors - IMSINRmajor 15.0 credits

Subscribe to 1 major from the following list. Subject to approval by the faculty.

2.1 Georesource Exploration – Uppsala University - IMSINRmajorUppsalaU 15.0 credits

Subscribe to 15 credit units from the following list.

Nr	Course		CRDT	Ref	MT1	MT2	Session	Contact	Study
1	I002197	Critical Metals and Minerals [en] Uppsala University, Erik Jonsson -- Uppsala University	5.0		2		A:1	45.0	150
2	I002198	Exploration and Environmental Geophysics [en] Uppsala University, Alireza Malehmir -- Uppsala University	15.0		2		A:1	135.0	450
3	I002409	Challenges of Deep and High Stress Mining [en] Uppsala University, Raymond Durrheim -- Uppsala University	5.0		2		A:1	45.0	150
4	I002525	Professional Training in Earth Sciences [en] Uppsala University, Ben Slater -- Uppsala University	5.0		2		A:1	50.0	150

2.2 Resource Recovery and Sustainable Materials - Ghent University - IMSINRmajorUGent 15.0 credits

Subscribe to 15 credit units from the following list, with
- 5 credit units from the courses with reference a,
- no less than 6 credit units from the courses with reference b.

Nr	Course		CRDT	Ref	MT1	MT2	Session	Contact	Study
1	I002538	Sustainable Management of Resources in the Circular Economy [en] Gijs Du Laing -- Department of Green Chemistry and Technology	5.0	a	2		A:J	45.0	150
2	E066190	Materials Science Thermodynamics [en] Inge Bellemans -- Department of Materials, Textiles and Chemical Engineering	6.0		2		B:1	60.0	180
3	E900069	Composites [en] Wim Van Paepegem -- Department of Materials, Textiles and Chemical Engineering	6.0	b	2		A:1	60.0	180
4	I002607	Resource Recovery Technology [en] Ramon Ganigué -- Department of Biotechnology	6.0	b	2		A:2	60.0	180
5	E065480	Life Cycle Assessment of Materials and Structures [en] Nele De Belie -- Department of Structural Engineering and Building Materials	3.0		2		A:2	30.0	90
6	I001571	Environmental Legislation [en] Frank Maes -- Department of European, Public and International Law	3.0		2		A:1	30.0	75
7	I002677	Thermochemical Conversion of Biomass [nl] Frederik Ronsse -- Department of Green Chemistry and Technology	4.0		2		A:2	40.0	120
8	I002679	Green Chemistry of Renewable Resources [en] Sven Mangelinckx -- Department of Green Chemistry and Technology	4.0		2		A:1	40.0	120
9	E066661	Corrosion and Surface Technology [en] Kim Verbeken -- Department of Materials, Textiles and Chemical Engineering	6.0	b	2		A:2	60.0	180
10	E065471	Metal Extraction and Recycling [en] Stephanie Vervynckt -- Department of Materials, Textiles and Chemical Engineering	3.0	b	2		A:2	30.0	90
11	I002749	Metals and Metalloids in Environment and Technology [en] Filip Tack -- Department of Green Chemistry and Technology	6.0		2		A:1	60.0	180
12	I001522	Environmental Constructions [en] Eveline Volcke -- Department of Green Chemistry and Technology	5.0		2		A:1	60.0	135
13	I002405	Basics of Control Engineering [en] Eveline Volcke -- Department of Green Chemistry and Technology	3.0		2		A:1	30.0	75
14	I002406	Basics of Process Engineering [en] Frederik Ronsse -- Department of Green Chemistry and Technology	3.0		2		A:1	30.0	75
15	E071131	Sustainable Chemical Production Processes [en] Kevin Van Geem -- Department of Materials, Textiles and Chemical Engineering	6.0		2		A:1	60.0	180
16	C003995	Geology of Building Stones [en] Veerle Cnudde -- Department of Geology and Soil Science	6.0		2		A:1	52.0	176
17	C003693	Imaging Techniques of consolidated and unconsolidated Sediments [en] Veerle Cnudde -- Department of Geology and Soil Science	6.0		2		A:1	74.0	176
18	C001505	Optical Mineralogy & Petrography [nl] Veerle Cnudde -- Department of Geology and Soil Science	5.0		2		A:1	62.5	150
19	I002591	Environmental Technology: Waste [en] Frederik Ronsse -- Department of Green Chemistry and Technology	3.0	b	2		A:2	30.0	90
20	E039060	Sustainable Energy and Rational Use of Energy [en] Jeroen Beeckman -- Department of Electronics and Information Systems	4.0		2		A:2	45.0	120
21	I002771	Resource Recovery from Wastewater [en] Gijs Du Laing -- Department of Green Chemistry and Technology	3.0	b	2		A:J	30.0	90

2.3 Sustainable Processes – TU Bergakademie Freiberg - IMSINRmajorTUBFreiberg 15.0 credits

Subscribe to 15 credit units from the following list.

Nr	Course		CRDT	Ref	MT1	MT2	Session	Contact	Study
1	I002183	Sensors and Actuators [en] TU Bergakademie Freiberg, Yvonne Joseph -- TU Bergakademie Freiberg	4.0		2		A:1	45.0	120
2	I002526	Selective Separation of Strategic Elements TU Bergakademie Freiberg	5.0		2			50.0	150
3	I002527	Resources Chemical Technology TU Bergakademie Freiberg	5.0		2			50.0	150
4	I002528	Biotechnology in Mining TU Bergakademie Freiberg	5.0		2			50.0	150
5	I002529	Microbiology for Resource Scientists: Lab Course TU Bergakademie Freiberg	3.0		2			15.0	75
6	I002530	Microbiology for Resource Scientists: Lecture [en] TU Bergakademie Freiberg, Michael Schlöhmann -- TU Bergakademie Freiberg	3.0		2		A:1	30.0	90
7	I002531	Simulation of Sustainable Metallurgical Process TU Bergakademie Freiberg	6.0		2			60.0	180

2.4 Circular Societies - Ghent University - IMSINRmajorUGentCirSoc 15.0 credits

Subscribe to 15 credit units from the following list, with 8 credit units with reference a.

Nr	Course		CRDT	Ref	MT1	MT2	Session	Contact	Study
1	I002538	Sustainable Management of Resources in the Circular Economy [en] Gijs Du Laing -- Department of Green Chemistry and Technology	5.0	a	2		A:J	45.0	150
2	I002772	Circular Cities [en] Gijs Du Laing -- Department of Green Chemistry and Technology	3.0	a	2		A:1	60.0	90
3	I002591	Environmental Technology: Waste [en] Frederik Ronsse -- Department of Green Chemistry and Technology	3.0		2		A:2	30.0	90
4	I002771	Resource Recovery from Wastewater [en] Gijs Du Laing -- Department of Green Chemistry and Technology	3.0		2		A:J	30.0	90
5	I001571	Environmental Legislation [en] Frank Maes -- Department of European, Public and International Law	3.0		2		A:1	30.0	75
6	E065480	Life Cycle Assessment of Materials and Structures [en] Nele De Belie -- Department of Structural Engineering and Building Materials	3.0		2		A:2	30.0	90
7	E039060	Sustainable Energy and Rational Use of Energy [en] Jeroen Beeckman -- Department of Electronics and Information Systems	4.0		2		A:2	45.0	120
8	K000253	Sustainable Development [en] Bernard Mazijn -- Department of Conflict and Development Studies	5.0		2		A:2	45.0	150
9	B001439	Urban Mobility and Logistics [en] Frank Witlox -- Department of Geography	3.0		2		A:1	30.0	90
10	I002607	Resource Recovery Technology [en] Ramon Ganigué -- Department of Biotechnology	6.0		2		A:2	60.0	180
11	B001514	Transport Economics and Policy [en] Frank Witlox -- Department of Geography	3.0		2		A:1	30.0	90

3 Work Placement - IMSINRstage 10.0 credits

Institution where the internship is to be taken depends on the chosen major:
- major at Uppsala University = internship coordinated by TU Bergakademie Freiberg
- major at Ghent University = internship coordinated by TU Bergakademie Freiberg
- major at TU Bergakademie Freiberg = internship coordinated by Ghent University

Nr	Course		CRDT	Ref	MT1	MT2	Session	Contact	Study
1	I002410	Training in Industry [en]	10.0		2		A:J	105.0	300

4 Master's Dissertation - IMSINRmasterproef 30.0 credits

Subscribe to course units from the following list.
The Master's Dissertation can be taken at either Uppsala University (Sweden) ; TU Bergakademie Freiberg (Germany); Ghent University (Belgium) : to be taken at the institution that offers the chosen major.

Nr	Course		CRDT	Ref	MT1	MT2	Session	Contact	Study
1	I002199	Master's Dissertation [en]	30.0		2		A:J	300.0	900