

Programme jointly offered by Ghent University, Aarhus University, University of Natural Resources and Life Sciences, Vienna, University of Göttingen  
International Master of Science in Soils and Global Change -- Soil Biogeochemistry and Global Change

Language of instruction: English

Programme version 5

## 1 General Courses 30 credits

Nr	Course	CRDT	Ref	MT1	Session	Study
1	I002773 Soil Chemistry <i>Filip Tack -- Department of Green Chemistry and Technology</i>	5		1	A:1	150
2	I002657 Soil Physics <i>Wim Cornelis -- Department of Environment</i>	5		1	A:1	150
3	I002774 Land Information Systems <i>Frieke Vancoillie -- Department of Environment</i>	5		1	A:1	150
4	I002711 Soil Genesis	5		1		150
5	I002756 Applied Statistics <i>Louis Coussement -- Department of Data Analysis and Mathematical Modelling</i>	5		1	A:1	150
6	I002775 Pedology	5		1		150

## 2 Courses Related to the Main Subject 90 credits

### 2.1 Module Sustainable Land Management 30 credits

#### 2.1.1 Mandatory courses

Nr	Course	CRDT	Ref	MT1	Session	Study
1	I002472 Ecosystem Dynamics and their Effect on Greenhouse Gases <i>University of Natural Resources and Life Sciences, Vienna, Sophie Zechmeister-Boltenstern -- University of Natural Resources and Life Sciences, Vienna</i>	3		1	A:2	75
2	I002473 Soil Protection <i>University of Natural Resources and Life Sciences, Vienna, Walter Wenzel -- University of Natural Resources and Life Sciences, Vienna</i>	3		1	A:2	75
3	I002474 Sustainable Land Use in Developing Countries <i>University of Natural Resources and Life Sciences, Vienna, Georg Gratzner -- University of Natural Resources and Life Sciences, Vienna</i>	3		1	A:2	75
4	I002475 Globalisation and Rural Development <i>University of Natural Resources and Life Sciences, Vienna, Stefan Frank -- University of Natural Resources and Life Sciences, Vienna</i>	3		1		75
5	I002476 Soil Problems in Aridic and Semi-Aridic Regions <i>University of Natural Resources and Life Sciences, Vienna, Eugenio Diaz-Pines -- University of Natural Resources and Life Sciences, Vienna</i>	3		1	A:2	75
6	I002477 Summer School IMSOGLO	3		1		75
7	I002478 Field Work IMSOGLO	3		1		75

#### 2.1.2 Elective courses 12 credits

Subscribe to 12 credit units from the following list.

Nr	Course	CRDT	Ref	MT1	Session	Study
1	I002479 Possible Impacts of Climate Change on Water Resources <i>University of Natural Resources and Life Sciences, Vienna, Hubert Holzmann -- University of Natural Resources and Life Sciences, Vienna</i>	3		1	A:2	90
2	I002480 Environmental Risk Analysis and Management <i>University of Natural Resources and Life Sciences, Vienna</i>	3		1		90
3	I002481 Valuation Methods for Natural Resources <i>University of Natural Resources and Life Sciences, Vienna</i>	3		1		90

4	I002482	Soil Management in Tropical and Subtropical Developing Regions <i>University of Natural Resources and Life Sciences, Vienna, Eugenio Diaz-Pines -- University of Natural Resources and Life Sciences, Vienna</i>	3	1	A:2	90
5	I002483	Soil Fertility and Soil Ecology in Organic Agriculture <i>University of Natural Resources and Life Sciences, Vienna, Johannes Friedl -- University of Natural Resources and Life Sciences, Vienna</i>	3	1	A:2	90
6	I002484	Agroforestry in Mountain Regions <i>University of Natural Resources and Life Sciences, Vienna, Georg Gratzner -- University of Natural Resources and Life Sciences, Vienna</i>	3	1	A:2	90
7	I002485	Field Trip – Rural Water Management <i>University of Natural Resources and Life Sciences, Vienna</i>	1	1		30
8	I002486	Forest Soil Biology <i>University of Natural Resources and Life Sciences, Vienna, Andreas Schindlbacher -- University of Natural Resources and Life Sciences, Vienna</i>	3	1	A:2	90
9	I002487	Soil Microbiology Course <i>University of Natural Resources and Life Sciences, Vienna, Katharina Keiblinger -- University of Natural Resources and Life Sciences, Vienna</i>	4	1	A:2	120

## 2.2 Module Biogeochemical consequences of global change 30 credits

### 2.2.1 Mandatory courses 18 credits

Nr	Course	CRDT	Ref	MT1	Session	Study
1	I002896 Landscape Ecology <i>Georg-August-Universität Göttingen, Daniela Sauer -- University of Göttingen</i>	6		2	A:1	180
2	I002489 Management of Tropical Plant Production Systems <i>Georg-August-Universität Göttingen, Reimund Rötter -- University of Göttingen</i>	6		2	A:1	180
3	I002495 Mineral Nutrition of Crops under Different Climate and Environmental Conditions <i>Georg-August-Universität Göttingen, Klaus Dittert -- University of Göttingen</i>	6		2	A:1	180

### 2.2.2 Elective courses 12 credits

[Subscribe to 12 credit units from the following list.](#)

Nr	Course	CRDT	Ref	MT1	Session	Study
1	I002493 Pesticides II <i>Georg-August-Universität Göttingen</i>	6		2		180
2	I002926 Soil Biogeochemistry of Agricultural and Forest Ecosystems <i>Georg-August-Universität Göttingen, Martin Maier -- University of Göttingen</i>	6		2	A:1	180
3	I002898 Biochemical Processes in the Rhizosphere <i>Georg-August-Universität Göttingen</i>	3		2		90
4	I002497 Crop Modelling for Risk Management <i>Georg-August-Universität Göttingen, Reimund Rötter -- University of Göttingen</i>	6		2	A:1	180
5	I002899 Isotopes in Ecosystem Sciences (e-learning course) <i>Georg-August-Universität Göttingen</i>	6		2		180
6	I002499 Field Course on Man-Environment Interactions <i>Georg-August-Universität Göttingen, Daniela Sauer -- University of Göttingen</i>	6		2	A:1 <sup>a</sup>	180
7	I002900 Ecosystem - Atmosphere Processes <i>Georg-August-Universität Göttingen</i>	6		2		180
8	I002492 Plant Nutrition and Plant Health <i>Georg-August-Universität Göttingen, Klaus Dittert -- University of Göttingen</i>	3		2	A:1	90

## 2.3 Master dissertation 30 credits

Nr	Course	CRDT	Ref	MT1	Session	Study
1	I002500 Master Dissertation Soil Biogeochemistry and Global Change <i>Wim Cornelis -- Department of Environment</i>	30		2	A:2	900

## Teaching

When a course is not taught (solely) in the programme's language of instruction, the effectively used languages are indicated in square brackets following the course name, using the following ISO codes:

bg: Bulgarian	de: German	es: Spanish	ja: Japanese	pl: Polish	sh: Croatian/Serbian	zh: Chinese
cs: Czech	el: Greek	fr: French	nl: Dutch	pt: Portuguese	sl: Slovene	
da: Danish	en: English	it: Italian	no: Norwegian	ru: Russian	sv: Swedish	

## Semester

Semesters are indicated by their number (1 or 2); semester 3 represents the summer period and J indicates a course spanning semesters 1 and 2. When a capital letter precedes a semester number, the course has multiple offerings. The letter indicates the offering concerned.

When a semester is shown in brackets, the course is not offered this year in the specific offering.

The offering frequency and first year of offering are indicated by the following codes:

a: bi-annually	c: annually, from 2025-2026	f: annually, from 2026-2027	i: annually, from 2027-2028
b: tri-annually	d: bi-annually, from 2025-2026	g: bi-annually, from 2026-2027	j: bi-annually, from 2027-2028
	e: tri-annually, from 2025-2026	h: tri-annually, from 2026-2027	k: tri-annually, from 2027-2028