

Faculty of Bioscience Engineering

Master of Science in Bioscience Engineering: Forest and Nature Management

Language of instruction: Dutch

Programme version 14

1 General Courses 58 credits

| Nr | Course | CRDT | Ref | MT1 | Session | Study |
|----|---|------|-----|-----|---------|-------|
| 1 | I002686 Wood Anatomy and Identification of Wood Species <i>Joris Van Acker -- Department of Environment</i> | 4 | | 1 | A:1 | 120 |
| 2 | I003022 Forest Exploitation and Nature Management Techniques <i>Joris Van Acker -- Department of Environment</i> | 4 | | 1 | A:1 | 120 |
| 3 | I002689 Inventory of Forest and Nature <i>Jan Van den Bulcke -- Department of Environment</i> | 5 | | 1 | A:1 | 150 |
| 4 | I003055 Biodiversity and Nature Conservation <i>Lander Baeten -- Department of Environment</i> | 4 | | 1 | A:1 | 120 |
| 5 | I002697 Urban Green Management <i>Jan Mertens -- Department of Environment</i> | 4 | | 1 | A:1 | 120 |
| 6 | I002687 Forestry <i>Kris Verheyen -- Department of Environment</i> | 4 | | 1 | A:J | 120 |
| 7 | I002696 Vegetation Modelling [en] <i>Hans Verbeeck -- Department of Environment</i> | 4 | | 1 | A:2 | 120 |
| 8 | I003069 Wood Technology: Basic Material Properties [en] <i>Joris Van Acker -- Department of Environment</i> | 4 | | 1 | A:2 | 120 |
| 9 | I003012 Management for Ecosystem Services <i>Kris Verheyen -- Department of Environment</i> | 5 | | 1 | A:2 | 150 |
| 10 | I003013 Advanced Remote Sensing [en] <i>Kim Calders -- Department of Environment</i> | 5 | | 1 | A:2 | 150 |
| 11 | I002692 Forest and Nature Policy <i>Myriam Dumortier -- Department of Environment</i> | 5 | | 2 | A:1 | 150 |
| 12 | I003064 Planning for Multifunctional Landscapes <i>Kris Verheyen -- Department of Environment</i> | 5 | | 2 | A:2 | 150 |
| 13 | I003065 Integrated Ecosystem Management Practicum <i>Lander Baeten -- Department of Environment</i> | 5 | | 2 | A:2 | 150 |

2 Elective Courses 32 credits

Subscribe to 32 credit units from 2 modules from the following list, of which at least 17 credit units from module 2.1 and at least 5 credit units from module 2.2.

2.1 Discipline-Specific Courses

Subscribe to no less than 17 credit units from the following list.

| Nr | Course | CRDT | Ref | MT1 | Session | Study |
|----|--|------|-----|-----|---------|-------|
| 1 | I002705 Tropical Forestry [en] <i>Joris Van Acker -- Department of Environment</i> | 5 | | | A:1 | 150 |
| 2 | I002706 Wood Technology: Wood Processing and Forest Products [en] <i>Joris Van Acker -- Department of Environment</i> | 5 | | | A:2 | 150 |
| 3 | I002646 Nutrient Management [en] <i>Stefaan De Neve -- Department of Environment</i> | 5 | | | A:2 | 150 |
| 4 | I002708 Soil Water Management [en] <i>Wim Cornelis -- Department of Environment</i> | 5 | | | A:2 | 150 |

| | | | | | |
|----|---------|---|---|-----|-----|
| 5 | I002992 | Soil Biology [en] <i>Stefaan De Neve -- Department of Environment</i> | 4 | A:1 | 120 |
| 6 | I002698 | Water Quality Management [en] <i>Peter Goethals -- Department of Animal Sciences and Aquatic Ecology</i> | 4 | A:2 | 120 |
| 7 | I002710 | Water in the City <i>Katrien Van Eerdenbrugh -- Department of Environment</i> | 4 | A:1 | 120 |
| 8 | I003066 | Agroecology [en] <i>Eduardo de la Pena -- Department of Plants and Crops</i> | 5 | A:1 | 150 |
| 9 | I002655 | Meteorology and Ecoclimatology <i>Hans Verbeeck -- Department of Environment</i> | 5 | A:1 | 150 |
| 10 | E084581 | Sustainable Cities <i>Thomas Block -- Department of Political Sciences</i> | 6 | A:J | 180 |
| 11 | I002535 | Applied Marine Ecology [en] <i>Colin Janssen -- Department of Animal Sciences and Aquatic Ecology</i> | 3 | A:1 | 90 |

2.2 Cross-Disciplinary Elective Courses

15 credits

Subscribe to no less than 5 and no more than 15 credit units from no less than 1 and no more than 2 module(s) from the following list. A minimum of 5 credit units is required from module 2.1.1 "Cross-Disciplinary Elective Set for Bioscience Engineers".

Courses for which the final competencies are already (largely) achieved by another course in the curriculum cannot be included as part of the elective set.

Subject to approval by the faculty.

2.2.1 Elective Set

2.2.1.1 Cross-Disciplinary Elective Set for Bioscience Engineers

Subscribe to course units from the following list, with no more than 10 credit units with reference A.

| Nr | Course | CRDT | Ref | MT1 | Session | Study |
|----|---|------|-----|-----|---------|-------|
| 1 | I003053 Machine Learning for Life Sciences [en] <i>Willem Waegeman -- Department of Data Analysis and Mathematical Modelling</i> | 4 | | | A:1 | 120 |
| 2 | I003054 Computer Vision for Life Sciences [en] <i>Jan Verwaeren -- Department of Data Analysis and Mathematical Modelling</i> | 5 | | | A:2 | 150 |
| 3 | I003021 Advanced Biosystems Modelling [en] <i>Paul Van Liedekerke -- Department of Data Analysis and Mathematical Modelling</i> | 5 | | | A:1 | 150 |
| 4 | I001280 Experimental Design [en] <i>Stijn Luca -- Department of Data Analysis and Mathematical Modelling</i> | 3 | | | A:2 | 75 |
| 5 | I003068 Management for Engineers [en] <i>Jeroen Buysse -- Department of Agricultural Economics</i> | 4 | | | A:1 | 120 |
| 6 | I002718 Economics and Management of Natural Resources [en] <i>Stijn Speelman -- Department of Agricultural Economics</i> | 4 | | | A:2 | 120 |
| 7 | I002750 Isotopes in Biosciences [en] <i>Pascal Boeckx -- Department of Green Chemistry and Technology</i> | 5 | | | A:1 | 150 |
| 8 | I003055 Biodiversity and Nature Conservation <i>Lander Baeten -- Department of Environment</i> | 4 | | | A:1 | 120 |
| 9 | I002586 Multidisciplinary Analysis of Climate Change [en] <i>Pascal Boeckx -- Department of Green Chemistry and Technology</i> | 3 | | | A:2 | 90 |
| 10 | I003056 Human Nutrition and Health [en] <i>John Van Camp -- Department of Food Technology, Safety and Health</i> | 5 | | | A:1 | 150 |
| 11 | I002758 Food Marketing and Consumer Behaviour [en] <i>Wim Verbeke -- Department of Agricultural Economics</i> | 5 | | | A:1 | 150 |
| 12 | I003067 Bioethics [en] <i>Michiel De Proost -- Department of Philosophy and Moral Sciences</i> | 3 | | | A:1 | 75 |
| 13 | I002637 Internship [en, nl] <i>Peter Ragaert -- Department of Food Technology, Safety and Health</i> | 5 | A | | A:J | 150 |
| 14 | I002638 International Internship [en, nl] <i>Peter Ragaert -- Department of Food Technology, Safety and Health</i> | 5 | A | | A:J | 150 |
| 15 | I002639 Extended Internship [en, nl] <i>Peter Ragaert -- Department of Food Technology, Safety and Health</i> | 10 | A | | A:J | 300 |
| 16 | I002640 Extended International Internship [en, nl] <i>Peter Ragaert -- Department of Food Technology, Safety and Health</i> | 10 | A | | A:J | 300 |

2.2.2 Open Choice

Subscribe to course units from courses offered at Ghent University, including the [Ghent University Elective Courses](#).
Maximum 8 credit units language courses are allowed within this master programme.

3 Master's Dissertation

30 credits

| Nr | Course | CRDT | Ref | MT1 | Session | Study |
|----|--|------|-----|-----|---------|-------|
| 1 | I001483 Master's Dissertation <i>Joris Van Acker -- Department of Environment</i> | 30 | | 2 | A:J | 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 2027-2028 | f: annually, from 2028-2029 | i: annually, from 2029-2030 |
| b: tri-annually | d: bi-annually, from 2027-2028 | g: bi-annually, from 2028-2029 | j: bi-annually, from 2029-2030 |
| | e: tri-annually, from 2027-2028 | h: tri-annually, from 2028-2029 | k: tri-annually, from 2029-2030 |