

Faculty of Sciences

International Master of Science in Agro- and Environmental Nematology

Language of instruction: English

Programme version 7

1 General Courses 60 credits

| Nr | Course | CRDT | Ref | MT1 | Session | Study |
|----|--|------|-----|-----|---------|-------|
| 1 | C002798 Data Mining, Processing and Communication <i>Bart Braeckman -- Department of Biology</i> | 3 | | 1 | A:1 | 90 |
| 2 | C002812 Nematode Morphology <i>Wim Bert -- Department of Biology</i> | 5 | | 1 | A:1 | 150 |
| 3 | C003672 Nematode Systematics and Evolution <i>Wim Bert -- Department of Biology</i> | 5 | | 1 | A:1 | 150 |
| 4 | C003682 Nematological Techniques <i>Wim Bert -- Department of Biology</i> | 5 | | 1 | A:1 | 150 |
| 5 | C003817 Molecular Toolbox <i>Tina Kyndt -- Department of Biotechnology</i> | 4 | | 1 | A:1 | 110 |
| 6 | C003948 General Nematode Biology and Interactions <i>Tom Moens -- Department of Biology</i> | 4 | | 1 | A:1 | 120 |
| 7 | I002756 Applied Statistics <i>Aisling Daly -- Department of Data Analysis and Mathematical Modelling</i> | 5 | | 1 | A:1 | 150 |
| 8 | C004358 Nematodes as Model Organisms <i>Bart Braeckman -- Department of Biology</i> | 3 | | 1 | A:2 | 90 |
| 9 | C003107 Entomopathogenic Nematodes: Taxonomy and Biology <i>Ralf-Udo Ehlers -- Department of Biology</i> | 3 | | 1 | A:2 | 90 |
| 10 | C002801 Entomopathogenic Nematodes: Biotechnology and Use in Biological Control <i>Ralf-Udo Ehlers -- Department of Biology</i> | 3 | | 1 | A:2 | 90 |
| 11 | C003949 Diversity of Plant-Parasitic Nematodes <i>Wim Bert -- Department of Biology</i> | 6 | | 1 | A:2 | 180 |
| 12 | C002808 Management of Plant-Parasitic Nematodes <i>Nicole Viaene -- Department of Biology</i> | 4 | | 1 | B:2 | 120 |
| 13 | C003951 Life Cycle Biology, Physiology and Behaviour of Plant-parasitic Nematodes <i>Wim Wesemael -- Department of Biology</i> | 4 | | 1 | A:2 | 120 |
| 14 | C003952 Tropical Plant Nematology <i>Annemie Elsen -- Department of Biology</i> | 3 | | 1 | A:2 | 90 |
| 15 | C002810 Molecular Aspects of Plant-Nematode Relationships <i>Godelieve Gheysen -- Department of Biotechnology</i> | 3 | | 1 | A:2 | 90 |

2 Elective Courses 30 credits

Subscribe to 30 credit units from 1 module from the following list. Subject to approval by the faculty.

2.1 UGent Track

30 credits

Subscribe to 10 credit units from the following list.

Subscribe to 20 credit units from no less than 1 and no more than 2 modules from the following list. Subject to approval by the faculty.

| Nr | Course | CRDT | Ref | MT1 | Session | Study |
|----|--|------|-----|-----|---------|-------|
| 1 | C003675 Summer Course: Networking and Seminars <i>Wim Bert -- Department of Biology</i> | 4 | | 2 | A:J | 120 |
| 2 | C003954 Soil Biodiversity and Nematodes as Bioindicators of Soil Health <i>Ronaldus De Goede -- Department of Biology</i> | 6 | | 2 | A:1 | 180 |

2.1.1 Elective Course List

Subscribe to no more than 20 credit units from the following list.

| Nr | Course | CRDT | Ref | MT1 | Session | Study |
|----|--|------|-----|-----|----------|-------|
| 1 | C002825 Strategies for Research: Project Development and Paper Writing <i>Matthew Shawkey -- Department of Biology</i> | 3 | | | A:1 | 90 |
| 2 | I002611 Plant Biotechnology <i>Godelieve Gheysen -- Department of Biotechnology</i> | 5 | | | A:2 | 150 |
| 3 | I002626 Plants, Pathogens and Pests <i>Monica Höfte -- Department of Plants and Crops</i> | 5 | | | A:2 | 150 |
| 4 | C003097 Plant Biotic Interactions <i>Sofie Goormachtig -- Department of Plant Biotechnology and Bioinformatics</i> | 3 | | | A:2 | 80 |
| 5 | C003347 Biology of Ageing <i>Bart Braeckman -- Department of Biology</i> | 4 | | | A:2 | 120 |
| 6 | C003676 Diversity of Aquatic Nematodes <i>Ann Vanreusel -- Department of Biology</i> | 6 | | | | 180 |
| 7 | I002718 Economics and Management of Natural Resources <i>Stijn Speelman -- Department of Agricultural Economics</i> | 4 | | | A:2 | 120 |
| 8 | I002606 Environmental Risk Assessment <i>Karel De Schampelaere -- Department of Animal Sciences and Aquatic Ecology</i> | 5 | | | A:1 | 150 |
| 9 | E078061 Introduction to Environmental Risk Assessment <i>Karel De Schampelaere -- Department of Animal Sciences and Aquatic Ecology</i> | 3 | | | A:1 | 90 |
| 10 | C003311 Phylogenetics <i>Olivier De Clerck -- Department of Biology</i> | 4 | | | A:1 | 120 |
| 11 | I002589 Environmental Technology: Soil and Sediment <i>Filip Tack -- Department of Green Chemistry and Technology</i> | 3 | | | A:2 | 90 |
| 12 | C003482 Professional Internship <i>Wim Bert -- Department of Biology</i> | 5 | | | A:J | 150 |
| 13 | C002381 Biotechnology: Biosafety, GMP and Intellectual Property <i>Koen Vanhalst -- Department of Molecular Biology</i> | 3 | | | A:1 | 80 |
| 14 | I002765 Sustainable Food Systems <i>Marijke D'Haese -- Department of Agricultural Economics</i> | 5 | | | A:2 | 150 |
| 15 | A003107 Advanced Academic English <i>Geert Jacobs -- Department of Linguistics</i> | 3 | UKV | | A:1, B:2 | 90 |
| 16 | C003334 Scientific Communication <i>Danny Haelewaters -- Department of Biology</i> | 5 | | | A:1 | 150 |
| 17 | I002415 Food Safety and Risk Analysis <i>Liesbeth Jacxsens -- Department of Food Technology, Safety and Health</i> | 5 | | | A:1 | 125 |
| 18 | I002779 Development Economics <i>Marijke D'Haese -- Department of Agricultural Economics</i> | 5 | | | A:1 | 150 |
| 19 | C002822 Quantitative Plant Nematology <i>Thomas Been -- Department of Biology</i> | 3 | | | A:1 | 90 |
| 20 | E076431 Introduction to Entrepreneurship <i>Petra Andries -- Department of Marketing, Innovation and Organisation</i> | 3 | | | A:1 | 90 |
| 21 | E076460 Dare to Venture <i>Johan Verrue -- Department of Marketing, Innovation and Organisation</i> | 4 | | | A:2 | 120 |
| 22 | E076471 Dare to Start <i>Frank Gielen -- Department of Information Technology</i> | 3 | | | A:2 | 90 |

2.1.2 Elective Courses UGent

Subscribe to no more than 20 credit units choosen from the courses of UGent.

2.2 Kenya – International Capacity Building & Sustainability

30 credits

Subscribe to 30 credit units from the following list.

Course 5 in this module needs to be done in a country in the South. Courses 6 and 7 take place at the International Institute of Tropical Agriculture and the International Centre of Insect Physiology and Ecology in Kenya. The 3 courses take place in November-December of the second master year.

| Nr | Course | CRDT | Ref | MT1 | Session | Study |
|----|--|------|-----|-----|---------|-------|
| 1 | C003675 Summer Course: Networking and Seminars <i>Wim Bert -- Department of Biology</i> | 4 | | 2 | A:J | 120 |

| | | | | | | |
|---|---------|--|---|---|-----|-----|
| 2 | C003954 | Soil Biodiversity and Nematodes as Bioindicators of Soil Health <i>Ronaldus De Goede -- Department of Biology</i> | 6 | 2 | A:1 | 180 |
| 3 | C002822 | Quantitative Plant Nematology <i>Thomas Been -- Department of Biology</i> | 3 | 2 | A:1 | 90 |
| 4 | C002825 | Strategies for Research: Project Development and Paper Writing <i>Matthew Shawkey -- Department of Biology</i> | 3 | 2 | A:1 | 90 |
| 5 | C003482 | Professional Internship <i>Wim Bert -- Department of Biology</i> | 5 | 2 | A:J | 150 |
| 6 | C004448 | Tropical Crop Pests and Diseases & Extension Service Practice <i>Daniel Coyne -- Department of Biology</i> | 5 | 2 | A:1 | 150 |
| 7 | C004447 | Nematology Didactics & Capacity Building <i>Laura Cortada-Gonzalez -- Department of Biology</i> | 4 | 2 | A:1 | 120 |

2.3 International Mobility Track

30 credits

Subscribe to 30 credit units from the following list.

Within semester 1 of year 2 and subject to approval by the faculty: the student selects for 26 credit units courses within one foreign university; for detailed information see www.imanema.ugent.be.

| Nr | Course | CRDT | Ref | MT1 | Session | Study |
|----|--|------|-----|-----|---------|-------|
| 1 | C003675 Summer Course: Networking and Seminars <i>Wim Bert -- Department of Biology</i> | 4 | | 2 | A:J | 120 |
| 2 | C003830 Study Programme Abroad | 26 | | 2 | A:1 | 728 |

3 Master's Dissertation

30 credits

| Nr | Course | CRDT | Ref | MT1 | Session | Study |
|----|---|------|-----|-----|---------|-------|
| 1 | C002809 Master's Dissertation <i>N. N.</i> | 30 | | 2 | A:J | 840 |

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 2024-2025 | f: annually, from 2025-2026 | i: annually, from 2026-2027 |
| b: tri-annually | d: bi-annually, from 2024-2025 | g: bi-annually, from 2025-2026 | j: bi-annually, from 2026-2027 |
| | e: tri-annually, from 2024-2025 | h: tri-annually, from 2025-2026 | k: tri-annually, from 2026-2027 |