



MASTER BIOLOGY



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VISIE

A Modern Biologist

Modern biologists bridge classical biology with technological and interdisciplinary innovation.

They work on both fundamental research and practical applications, seeking solutions to improve human and ecosystem health, environmental sustainability, and our understanding of life itself.

- 1. Biologen als creatieve, nieuwsgierige en kritische wetenschappers**
- 2. Biologen als zelfstandige kenniswerkers en onderzoekers, in staat tot analyseren van complexe theoretische en praktische vraagstellingen**
- 3. Biologen met grondige communicatievaardigheden en maatschappelijk bewustzijn vertaald naar 25 opleidingspecifieke leerresultaten**

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OVERZICHT

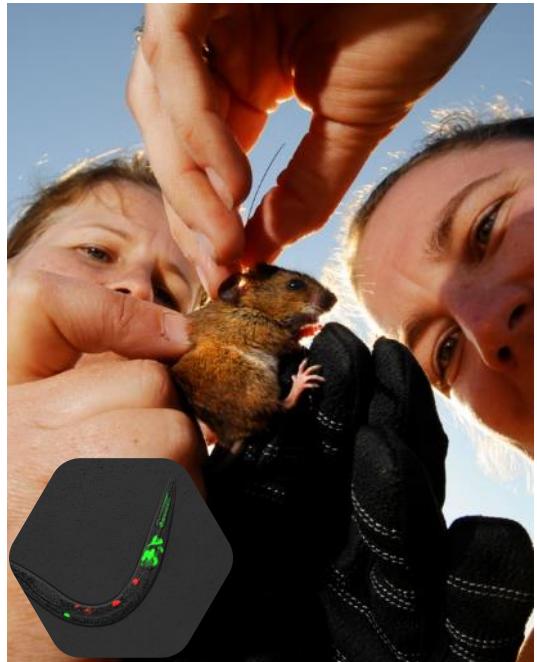


MASTER BIOLOGY

Professionele profiling

Bewuste keuze afgestemd op arbeidsprofiel

Onderzoek



Onderwijs



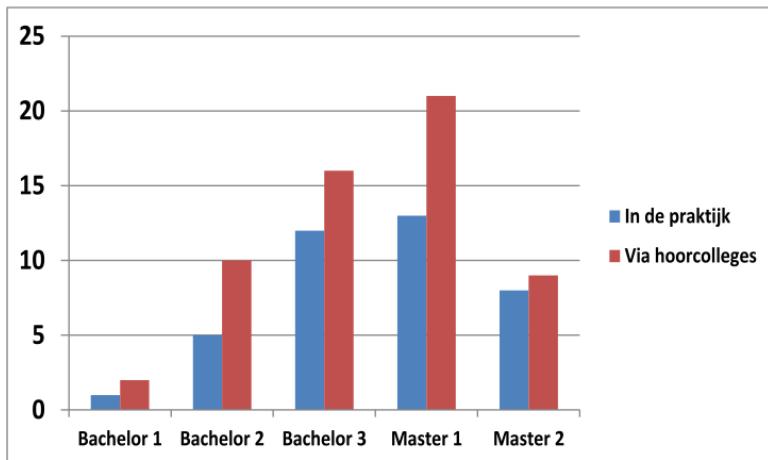
Valorisatie



MASTER BIOLOGY

Internationale aantrekkingspool

- Sterk onderzoeksprofiel
- Profilering in domeinen met uniek internationaal kader
- Internationale uitwisseling wordt gestimuleerd (Ma1,Ma2, thesis)
- Volwaardig Engels
- Gedragen door excellentie in onderzoek

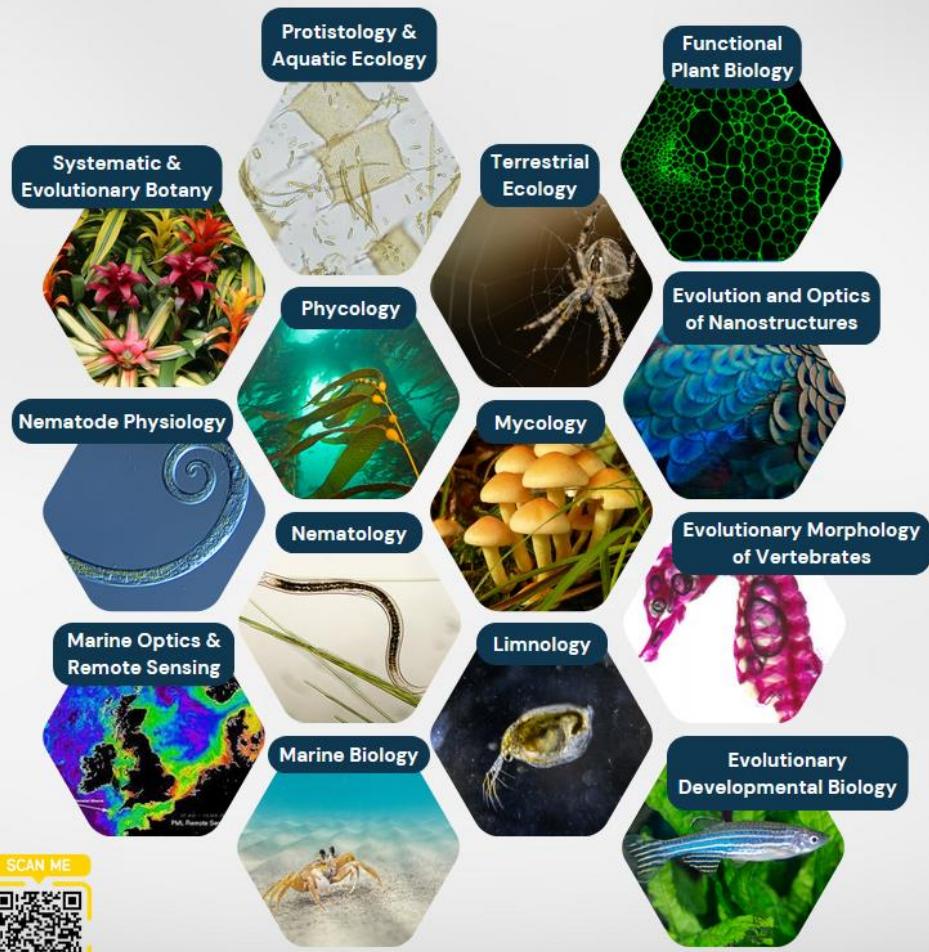


Figuur 5 – Overzicht van aantal lesgevers die aangeven studenten in contact te brengen met onderzoek tijdens hun lessen en/of praktische oefeningen.



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Excellentie in onderzoek



Professional internships

Equivalent to 3-6 course weeks



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Algemene structuur

General Courses

50 ECT

- Integrated Research Project
- Academic Grant Writing
- Scientific Communication
- Advanced Biostatistics
- Master's Dissertation

Majors

40 ECT

Functional Biology



Biodiversity & Evolution



Global Change Ecology



Educational Master



Vereist reeds 15SP in Ba3

Elective courses & Focus

30 ECT

- From any other major or from a wide variety of elective courses
- Marine Biology
- Professional skills
- Bio-inspired innovation and sustainability

SCAN ME



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Algemene training

Praktische vaardigheden: Integrated Research Project (8 ECTS)

Focus op onderzoeksvaardigheden, ervaring binnen de onderzoeks groep

Geen specifieke wetenschappelijke rapportering, Modules

Jaarvak, kan al starten in zomer bij veldwerk (voorstelling in Ba3, stages)

Onderzoeksvaardigheden:

Academic Grant writing (4 ECTS)

Advanced Biostatistics (5 ECTS), not for major Education

Master's Dissertation (30 ECTS)

Focus op uitvoeren, analyse en rapportering wetenschappelij

Wetenschappelijke onderzoeksvraag stuurt invulling

Voorbereiden professionele loopbaan:

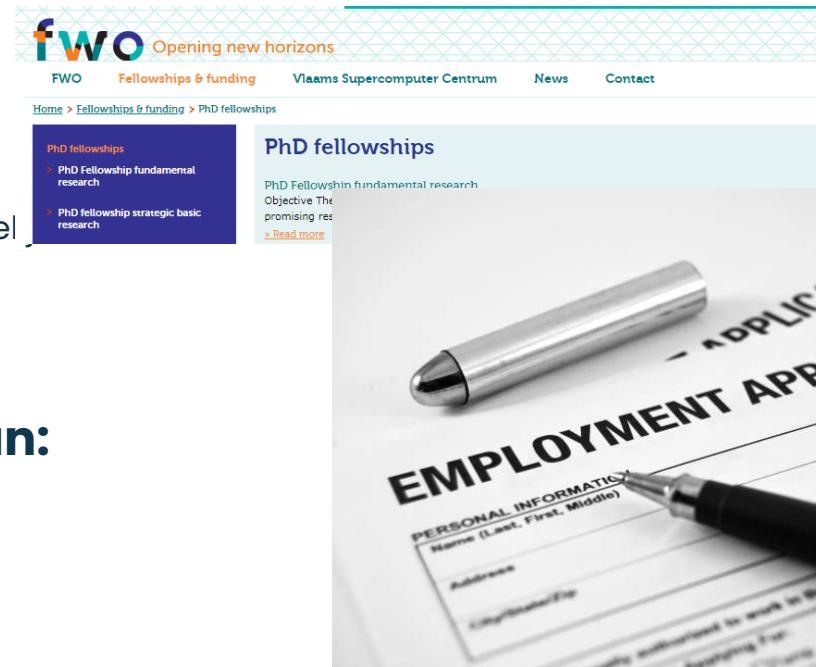
Scientific Communication (4 ECTS)

Communicatie van wetenschappelijk onderzoek

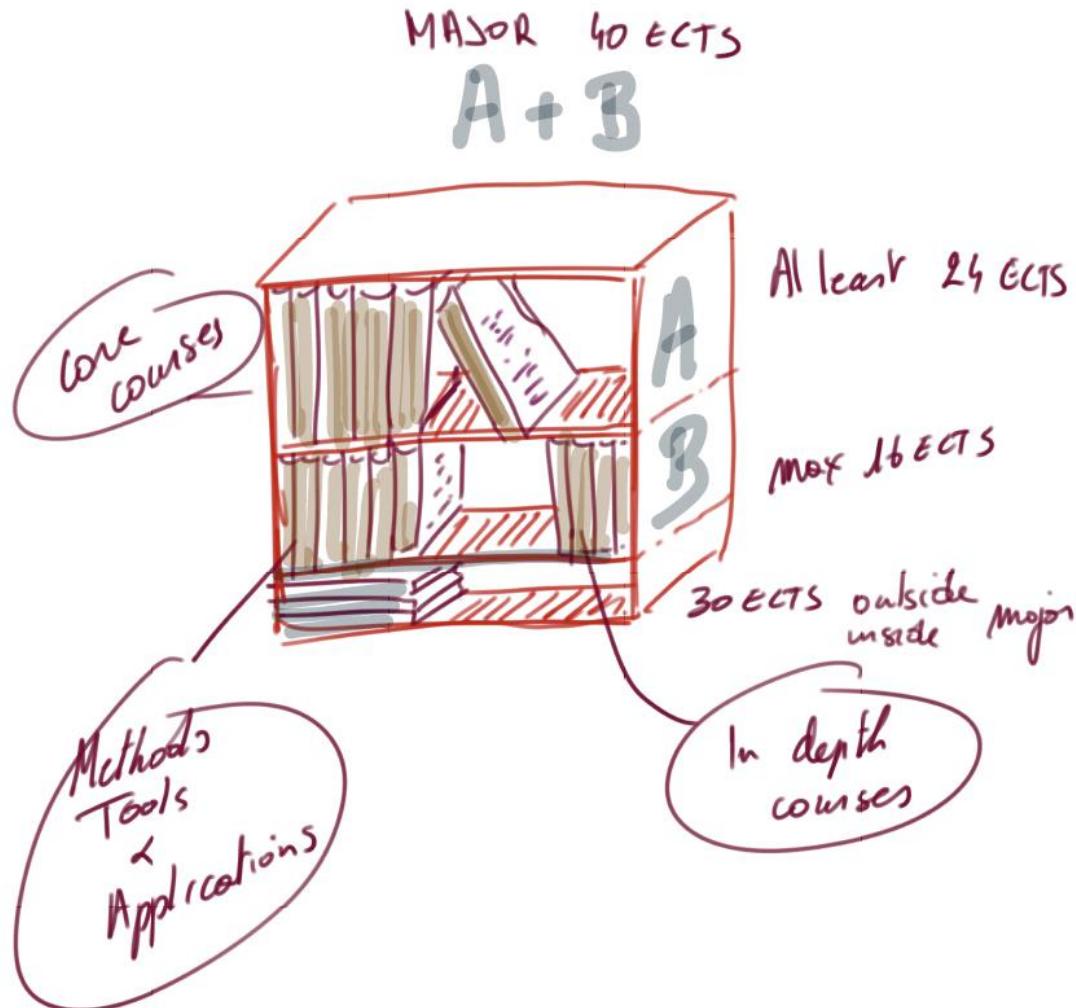
Argumentering in wetenschappelijke debatten

CV opstellen en solliciteren, netwerken

Arbeidsmarkt verkennen

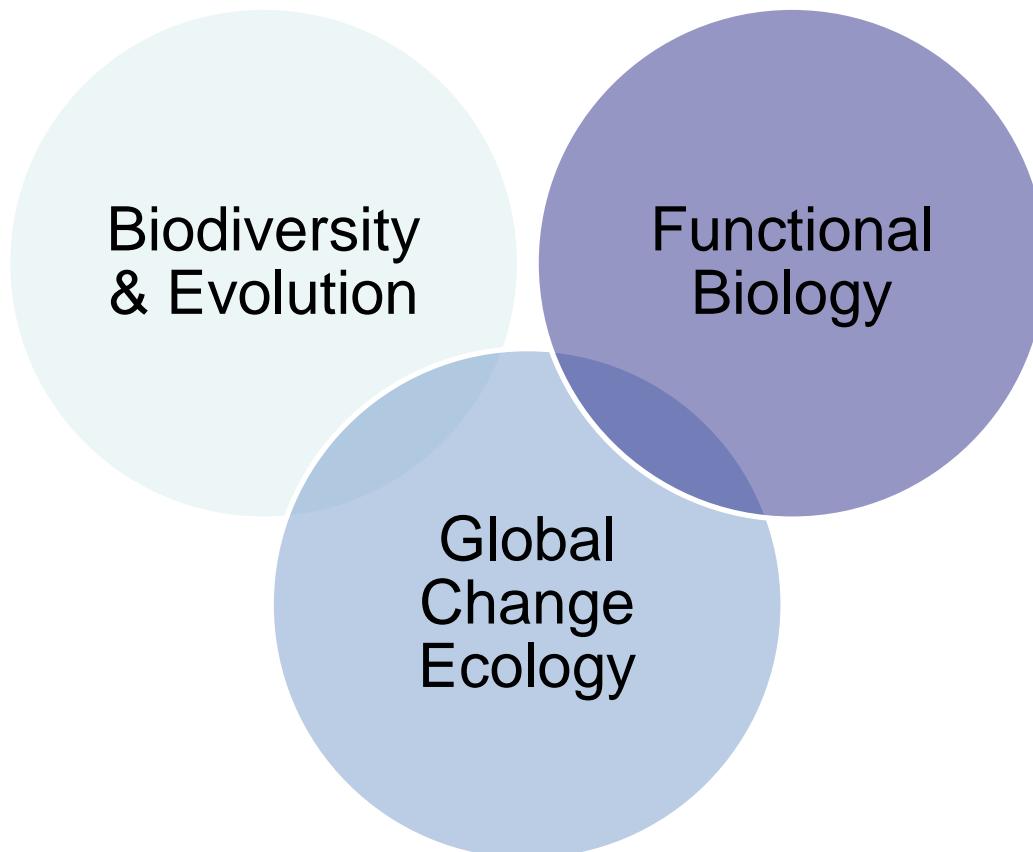


Majorstructuur



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Majorstructuur



Biodiversity & Evolution

Subscribe to no less than 24 credit units from the following list.

Nr	Course	CRDT	Ref	MT1	Session
1	C003310 Taxonomy and Systematics	4		1	A:1
2	C003311 Phylogenetics	4		1	A:1
3	C004527 Spatial Processes and Patterns in Biodiversity	4		1	A:1
4	C003314 Paleobiology	5		1	A:1
5	C003315 Biodiversity Conservation	4		1	A:2
6	C004274 Evolutionary Morphology	5		1	A:1
7	C004526 Evolutionary Genomics	6		1	A:1

2.1.2 In-depth Courses

Subscribe to no more than 16 credit units from the following list.

Nr	Course	CRDT	Ref	MT1	Session
1	C004580 Advanced Mycology	5			A:1
2	C004581 Ornithology	4			(A:2) ^d
3	C004386 Phylogenetics and Evolution of Flowering Plants	5			A:2 ^a
4	C004082 Evolution of Primates and Paleo-anthropology	3			(A:2) ^d
5	C003307 Functional Diversity of Prokaryotes	4			A:1 ^a
6	C004602 Multivariate Analysis of Biological Data	3			A:2 ^a



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Functional Biology

Subscribe to no less than 24 credit units from the following list.

Nr	Course	CRDT	Ref	MT1	Session
1	C003329 Physiological Regulation in Plants	5	1	A:1	
2	C003352 Physiological Regulation in Animals	5	1	A:2	
3	C004532 Functional Abiotic Interactions: Animals	3	1	A:1	
4	C004533 Functional Abiotic Interactions: Plants	3	1	A:1	
5	C004534 Functional Abiotic Interactions: Microbes	3	1	A:1	
6	C002714 Host-Parasite Interactions	3	1	A:1	
7	C003097 Plant Biotic Interactions	3	1	A:2	
8	C003328 Plant Developmental Biology	5	1	A:2	
9	C003333 Evolutionary Developmental Biology of Animals	5	1	A:2	
10	C004535 Plant Evolutionary Developmental Biology	3	1	A:2	
11	C004529 Ecophysiology	4	1	A:1	

2.3.2 In-depth Courses

Subscribe to no more than 16 credit units from the following list.

Nr	Course	CRDT	Ref	MT1	Session
1	C003347 Biology of Ageing	4			(A:2) ^d
2	C002755 Biological Excursions in the Human Brain	5			A:2 ^a
3	C002770 Insect Physiology [nl]	5			(A:1) ^d
4	C002775 Molecular Plant Physiology	5			A:1 ^a
5	C003306 Advanced Cell Biology	5			A:1 ^a
6	C002769 Immunology and Pathology	5			(A:2) ^d
7	C002713 Glycobiology	3			A:1
8	C004385 Laboratory Animal Science	9			A:J
9	C002865 Bioethics	3			A:1
10	C003104 Plant Research Technologies	3			A:1
11	C003102 The Plant Factory	3			A:1
12	C002708 Experimental Molecular Cell Biology	3			A:2
13	C003616 Systems Biology	4			A:2
14	H002440 Animal Cognition	4			A:1



Subscribe to no less than 24 credit units from the following list.

Nr	Course	CRDT	Ref	MT1	Session
1	C003320 Climate Change	4	1		A:2
2	C004527 Spatial Processes and Patterns in Biodiversity	4	1		A:1
3	C003322 Ecosystem Dynamics	5	1		A:1
4	C003324 Behavioural Ecology	4	1		A:2
5	C004528 Ecological Modelling	4	1		A:1
6	C004564 Human and Political Ecology: Global Perspective	4	1		A:1
7	C004529 Ecophysiology	4	1		A:1

2.2.2 In-depth Courses

Subscribe to no more than 16 credit units from the following list.

Nr	Course	CRDT	Ref	MT1	Session
1	C004530 Individual Based Modelling	4			(A:1) ^d
2	C003326 Conservation Genetics	5			A:2 ^a
3	C004602 Multivariate Analysis of Biological Data	3			A:2 ^a
4	C004466 Limnology	4			A:2
5	C003874 Marine Ecology	6			A:1
6	C004582 Microbial Ecology	4			(A:1) ^d
7	C004531 Soil Ecology	4			A:2 ^a



MASTER BIOLOGY

Education

Component domein (54 ECTS)

12 ECTS algemene training (zie eerder)

24 ECTS binnen een major (core vakken)

18 ECTS uit één van de majoren naar keuze

Component leraar (36 ECTS)

12 ECTS theoretische vorming (leraar in school & Maatschappij, klasmanagement, adolescentiepsychologie)

6 ECTS vakdidactiek Biologie

12 ECTS stage (STEM, Biologie, Chemie)

6 ECTS keuze didactiek

Masterproef, incl. educatieve component (21 + 9 ECTS)

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30 ECTS vrije keuzes

Focus majors: te kiezen uit aanbod alle majoren

Focus Bio-inspired Innovation & Sustainability

Entrepreneurship, Dare to venture, bio-inspired project, Environmental economics & policy, sustainable thinking, Global minds



Focus Marine Biology:

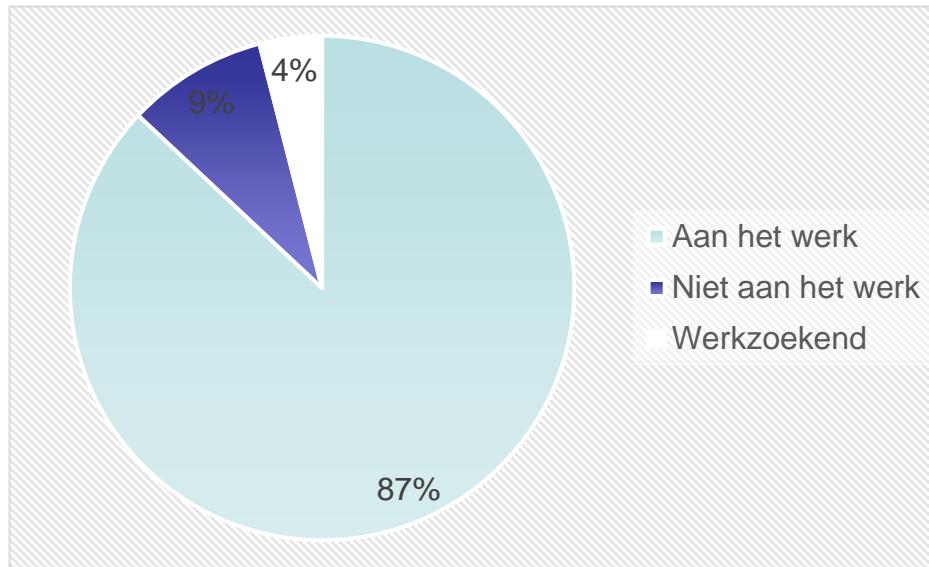
Oceanography, Aquatic food webs, marine policy & governances

Focus Professional Skills

Professional Internship (I,II), International project, International course, History & Philosophy Biology, Practical skills in Academic Biological Education

MASTER BIOLOGY

Wat daarna?



77% werk binnen 3 maanden na afstuderen

92% binnen 6 maand

MASTER BIOLOGY

Waar komen jullie terecht?

>50% in onderzoek ('R&D')

- Universiteiten en Wetenschappelijke instellingen
- Bedrijven: farmaceutische sector, vinding, biomedische, milieusanering, ruimtelijke planning
- Data-analyse & programmeren

Onderwijs

- Milieu-educatie
- 26% volgde lerarenopleiding (17% werkzaam in secundair, 2% in hoger onderwijs)

Industrie & overheden

- Biotechnologie, Biomedische sectoren s.l.
- Milieuadviesbureaus
- Projectbeheer overheden (ANB, MDK, regionale landschappen, VLM,...)

Vacatures op www.biology.ugent.be

MASTER BIOLOGY

Of verder studeren?

Rechtstreekse toegang tot:

- UGent
 - Biologie
 - Master in Agro- and Environmental Nematology
 - Master in Bio-informatics (mits verplichte keuzevakken)
 - Sustainable Land Management (Fac. Wet. + Bio-ing. Wet.)
 - Aquaculture (Fac. Bio-ing. Wetensch.)
 - Environmental Sanitation (Fac. Bio-ing. Wetensch.)
 - Nutrition and Rural Development (Fac. Bio-ing. Wetensch.)
- Vlaamse masteropleiding
 - Oceans & Lakes (UGent, UA, VUB)
 - Europese opleidingen (Erasmus Mundus)
 - International Master in Marine Biological Resources – IMBRSea
 - Master in Agro- and Environmental Nematology
- Of elders in binnen- en buitenland (eventueel voorbereidingsprogramma's of vrijstellingen)

Vacatures op www.biology.ugent.be

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Deze info op:



The screenshot shows a website for the Faculty of Sciences, specifically the Vakgroep Biologie. The header includes the Ghent University logo and the text "VAKGROEP BIOLOGIE". The navigation menu has links for "Onderzoek", "Onderwijs", "Over de vakgroep", "Contact", and "Info voor". Below the menu, a breadcrumb trail shows the path: "Home UGent > Vakgroep Biologie > Voor toekomstige studenten > Wat na de opleiding Bachelor Biologie ?". The main content features a large blue heading "Wat na de opleiding Bachelor Biologie ?". Underneath it, there is a section titled "Master biologie" with a link to "Andere master-na-bacheloropleidingen". This section lists several master's programs with their respective links and download icons:

- [Master in Mariene en Lacustriene Wetenschappen \(Oceans & Lakes\)](#) ↗
- [Slides infosessie Oceans & Lakes oktober 2019](#) ↗
- [overzicht, programma, toelatingsvoorwaarden...](#) ↗
- [International Master of Science in Marine Biological Resources \(IMBRsea\)](#) ↗
- [Slides infosessie IMBRsea oktober 2019.](#) ↗
- [overzicht, programma, toelatingsvoorwaarden...](#) ↗
- [International Master of Science in Agro- and Environmental Nematology](#) ↗
- [Slides infosessie Nematology oktober 2019](#) ↗
- [overzicht, programma, toelatingsvoorwaarden...](#) ↗