

Consecutive Master program

Biodiversity: Ecology, Evolution, and Conservation (BEEC)

- with option of double-degree IMABEE -

Info-Session – 07 February 2025

Study program director: Prof. Dr. Stefan Scheu

Coordination: Dr. Barbara Wick

Agenda

1. Application and admission
2. Program and study structure
3. Modules and study plans – where to find information
4. Double-Degree IMABEE
5. Outlook – Professional perspective



Application and admission

- Admission to each winter semester: 40 students
- Application period: 01 April – 15 May
- Criteria see website (below):
 - BSc degree (completed or with at least 150 ECTS at time of application)
 - Proof of German (B1)
 - Proof of English (C1)
 - CV, Letter of motivation

<https://www.uni-goettingen.de/de/123968.html>



Program and study structure - BEEC

- Two years, four semesters (120 ECTS)
- Organized modularly (block and semester-long courses)
 - ✓ Selection from 47 BEEC modules
 - ✓ Selection from 39 modules from other master programs (Biology, Agricultural Sciences, Forest Sciences & Forest Ecology, Geoscience & Geography)
- English as main teaching language
- Possibility of double degree – International Master of Biodiversity, Ecology and Evolution (IMABEE)

Program and study structure

1. – 4. Semester		4. Semester
Professional Studies (78 C)	Compulsory Modules (18 C)	Master's Thesis (26 weeks)
	Area of Specialization (36 C) <ol style="list-style-type: none"> 1. Ecology (plants or animals) 2. Evolution 3. Conservation Biology 	
	Supplementary Modules (24 C)	
	Key Competences (12 C)	
(90 C)		
		(30 C)



Program and study structure - Specialization

➤ **Three main areas of specialization**

- A. Ecology (with specification in plants or animals): Functionality of biodiversity
- B. Evolution: Development of biodiversity
- C. Conservation Biology: Preserving biodiversity

➤ **One area of specialization must be selected**

- ✓ Note: Demand from students for Conservation Biology is high – it might not be possible to take all the desired courses as planned



Program and study structure - Specialization

A. Ecology (with specification in plants or animals)

a. Two core modules (12 C) – selection from 3

- i. Plant ecology & ecosystem research*
- ii. Vegetation ecology & vegetation history*
- iii. Animal ecology*



i. Dr. Hertel



ii. Prof. Behling



iii. Prof. Scheu

b. Compulsory elective modules (12-24 C)

- Plants: selection from 10
- Animals: selection from 5

c. Elective modules (0-12 C) – selection from 18



Program and study structure - Specialization

B. Evolution

a. Two core modules (12 C)

i. *Evolutionary biology*

ii. *Evolution of embryophyta*



i. Prof. Friedl



ii. Prof. Hörandl

b. Compulsory elective modules (12-24 C) – selection from 10

c. Elective modules (0-12 C) – selection from 8



Program and study structure - Specialization

C. Conservation biology

a. Three (from 4) core modules (18 C)

i. *Conservation biology*

ii. *Animal ecology*

iii. *Plant ecology & ecosystem research or*

iv. *Vegetation ecology & vegetation history*



i. Prof. Kamp



ii. Prof. Scheu



iii. Dr. Hertel



iv. Prof. Behling

b. Compulsory elective modules (12-18 C) – selection from 4

c. Elective modules (0-6 C) – selection from 14



Program and study structure – Compulsory modules

➤ **Compulsory modules (18 C)**

a. M. Biodiv.400 (8 C):

- Species identification courses
- 4 one-day field trips: 2 zoological, 2 botanical

b. M.Biodiv.405 (4 C):

- One extended field trip / excursion (botanical or zoological focus)

c. M.Biodiv.417 (6 C) – preparing module for MSc thesis:

- Research colloquia: 14 talks over one or several semester
- Project management: development + defense of thesis proposal, identification of supervisors



Program and study structure

- **Master thesis (30 C, 26 weeks)**
 - ❖ Prerequisite for the beginning of the thesis:
 - 60 C accomplished, including compulsory modules (18 C)
 - ❖ In Göttingen or abroad

Modules and study plans

➤ *Where to find information and overviews?:*

1. **List of modules** – Module handbook: <https://uni-goettingen.de/en/37262.html>
2. **Exemplary study plans for each area of specialization** – in:
Examination and study regulation: <https://uni-goettingen.de/en/37262.html> +
OwnCloud: <https://owncloud.gwdg.de/index.php/s/JSDGzWcQXF4u3bf>
3. **BEEC modules**: times and course places available - OwnCloud:
<https://owncloud.gwdg.de/index.php/s/JSDGzWcQXF4u3bf>

Modules and study plans

2. Exemplary study plans for each area of specialization - Ecology

Schwerpunkt „Ökologie“ / Specialization „Ecology“					
Sem. Σ C	Modul	Modul	Modul	Modul	Modul
1. Σ 30 C	M.Biodiv.404 Animal ecology 6 C (Mon & Tue, 16.15-17.45)	M.Biodiv.403 Vegetation ecology and vegetation history 6 C (401.1: Wed, 14:15-15:45, 403.4: Mon, 09:00-10:30)	M.Biodiv.492 Molecular methods for “Next Generation Sequencing” 6 C (10.02.-21.02.)	M.Biodiv.441 Animal ecology: Evolutionary ecology 6 C (03.03.-21.03.)	Key competences 6 C
2. Σ 30 C	M.Biodiv.400 Species identification and natural history 8 C (400.1d, 1e, early mornings or evenings)	M.Biodiv.445 Molecular analysis of soil food webs 6 C (05.05.-23.05.)	M.Biodiv.442 Community ecology of animals 6 C (26.05.-13.06.)	M.Biodiv.422 Plant Ecology: CO₂ and water relations of plants 6 C (23.06.11.07.)	M.Biodiv.405 Botanical or zoological field trip 4 C (Jul or Sep)
3. Σ 30 C	M.Biodiv.417 Research colloquia and project management 6 C (individual)	M.Biodiv.470* Morphology of animals 6 C (21.10.-08.11.)	M.Biodiv.447 Biodiversity, ecology and evolution of <u>terrestrial invertebrates</u> 6 C (02.12.-20.12.)	M.Biodiv.421 Project course: Plant Ecology 6 C (03.03.-21.03.)	Key competences 6 C
4. Σ 30 C	Master thesis				
Σ 120 C					

*or M.Biodiv.480, 06.01.-24.01. or M.Biodiv.435 Project studies (individual)

Modules and study plans

3. BEEC modules: times and course places available – WS 2024/25

General overview of modules (block courses, lectures and seminars) offered in the winter semester 2024/25 - allocation to different areas of specialization

		Lecture weeks																
		Lecture-free	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Lecture-free	
Winter term	By arrangement		21.10. - 8.11.24		11.11. - 29.11.24		02.12. - 20.12.24		06.01. - 24.01.25		27.01. - 07.02.25		10.02. - 28.02.2025		03.03. - 21.03.2025			
	M.Biodiv.450 Impact of global climate change on plant communities (Ferreira Arruda, Hertel) (12 pl., 25.09.-16.10.)	M.Biodiv.470 Morphology of animals (Fischer/Helm) (6 pl., 21.10.-08.11.)	M.Biodiv.447 Biodiversity, ecology and evolution of terrestrial invertebrates (Scheu) (15 pl., 11.11.-29.11.)	M.Biodiv.483 Assessment of wildlife species for nature conservation (Waltert) (7 pl., 02.12.-20.12.)	M.Biodiv.480 Nature conservation inventories (Hondong) (12 pl., 06.01.-24.01.2024)	M.Biodiv.400.1a Pollen analysis (Behling) (15 pl., 27.1.-07.02.)	M.Biodiv.400.1b Mosses & lichens (Kaufmann, Drehwald) (12 pl., 10.02.-21.02.)	M.Biodiv.421 Project course: Plant ecology (Hertel) (8 pl., 03.03.-21.03)										
	M.Biodiv.481^A Population biology in nature conservation (Gottschalk) (2 pl., 21.10.-08.11.)		M.INC.1006 Data analysis for field biologists (Daskalova, Kamp) (15 pl., 11.11.-29.11.)				M.Biodiv.492 Molecular methods for Next Generation Sequencing (Tomasello) (12 pl., 10.02.-21.02.)	M.Biodiv.441 Animal ecology: Evolutionary ecol (Heimburger) (12 pl., 03.03.-21.03.)										
	M.Biodiv.462^A Genetic biodiv of algae + cyano-bacteria (Friedl) (6 pl.)	M.Biodiv.402 Vegetation and ecology of the world (Lecture series, Hertel)										(Wed, 14:15-15:45)	M.Biodiv.400.1f Hymenoptera (Westphal, Bleidorn) (10 pl., 10.02.-21.02.)	M.Biodiv.606 Identification of bird feathers (Stumpner) (16 pl., 03.03.-07.03.)				
		M.Biodiv.402.4 Current topics in plant ecology and nature conservation (Seminar, Hertel) (20 pl.)										(Thur, 08:15-09:45)						
		M.Biodiv.403.4 Modern issues of vegetation science in agricultural landscapes (Seminar, Bergmeier, Schellenberg) (12 pl.)										(Mon, 09:00-10:30)						
		M.Biodiv.404 Animal ecology (Lecture, Scheu)										(Mon, 16:15-17:45)	M.Biodiv.610 Science communication in biodiversity research (Aguado Molina) (12 pl., 10.02.-28.02.)					
		M.Biodiv.404 Topics of animal ecology and evolution (Seminar, Scheu) (25 pl.)										(Tue, 16:15-17:45)						
		M.Biodiv.406 Habitat types of the EU habitats directive (Lecture, Bergmeier/Walentowski)										(Tue, 17:15-18:45)						
		M.Biodiv.412.1 Origins of Conservation Biology (Lecture, Waltert)										(Tue, 16:15-17:45)						
	M.Biodiv.412.2 International Nature Conservation (Lecture, Kamp)										(Wed, 14:15-15:45)							
	M.Biodiv.412.3 Current topics in conservation biology (Seminar, Kamp) (20 pl.)										(Wed, 16:15-17:45)							
	M.Biodiv.415 Evolutionary biology (Lecture series, Friedl)										(Thur, 16:15-17:45)							
	M.Biodiv.425 Speciation and evolution of land plants (Lecture, Hörandl)										(Wed, 16:15-17:45)							
	M.Biodiv.425 Plant systematics and phycology (Seminar, Hörandl) (20 pl.)										(Tue, 13:15-14:45)							
	M.Biodiv.430 Current topics in palynology and climate dynamics (Seminar, Behling) (20 pl.)										(Mon, 16:15-17:45)							
	M.Biodiv.438 Isolation of plants and animal species in fragmented habitats (Lecture+Seminar, Goedecke, Ramirez)										B							

Compulsory modules

Core and compulsory elective modules in specialization "Evolution"

Core and compulsory elective modules in specialization "Ecology" and "Conservation (402, 403, 404)"

Core and compulsory elective modules in specialization "Conservation"

Elective modules (M.INC.1006 / Conservation+ M.Biodiv.438 / Ecology) and Key Competencies (M.Biodiv.619 + M.Biodiv.606)

^AOn request

^BStart WiSe 2025/26



Double – Degree IMABEE

- **Double Degree Program (<https://www.imabee.eu/>)**
 - Partner universities: Rennes 1, France (coordination) + Vrije Universiteit Amsterdam, Netherlands
 - 12 Incomings + 12 Outgoings per year: 6 FRA and 6 NL
 - Double Degree
 - ✓ 1st year home university (60 C)
 - ✓ 2nd year host university (60 C, including MSc thesis)



Double – Degree IMABEE

- Göttingen students who start in winter term 2025/26 move to host university in winter term 2026/27 – start: 01 September
- No separate application needed – indication of interest in letter of motivation for regular application to the Master program BEEC
- The students' final decision is made at the end of the first semester



Outlook – Professional perspectives

- **Scientific career** – PhD programs at Göttingen, e.g. Biological Diversity and Ecology (<https://www.uni-goettingen.de/de/promotion/20917.html>)
- **Governmental authorities** (e.g. Federal Agency for Nature Conservation)
- **Inter/National Environmental Organisations** (e.g. WWF, BUND - German Federation for the Environment and Nature Conservation, NABU - The Nature and Biodiversity Conservation Union, IUCN - International Union for Conservation of Nature)
- **Educational Institutions** (e.g. museum, regional environmental education centers)
- **Public media** (e.g. science journalism)



Communication and documentation/information

Contact – Barbara Wick:

- E-mail: studienbuero@biologie.uni-goettingen.de; bwick@gwdg.de

Documentation and information:

- Website
- OwnCloud (tab [Programme overview / Information](#), website BEEC)
- BioBlog: <https://bioblog.uni-goettingen.de/>



Questions?

Thank you for your attention.....

Image-Film about studying and life
in: [Collect Lasting Memories |
University of Göttingen - YouTube](#)



..... we look forward to receiving your applications