

# MSc in Biodiversity Conservation

Faculty of Science, University of Neuchâtel

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## An interdisciplinary curriculum

The Master of Science in Biodiversity Conservation is an interdisciplinary programme that addresses the major societal challenge of understanding the causes and halting the loss of biodiversity in a changing world.

The programme covers the conservation biology of organisms, species and ecosystems, as well as the human dimensions of conservation such as law, economics, anthropology and psychology.

Students will undertake fieldwork, receive practical training in scientific methods, and acquire transferable skills at the interface between science and the practice of biodiversity conservation.

## Profs. in charge of the curriculum

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## Version

Study plan dated 04 May 2026  
Valid for the academic year 2026-2027

## General structure of the programme :

The Master in Biodiversity Conservation is a programme given over the span of three semesters and requires 90 ECTS to be completed. The first semester is dedicated to the core curriculum, whereas the second semester already includes preparation work for the Master thesis and elective courses. The third semester is entirely dedicated to field work and the completion of the Master thesis.

Core curriculum	Elective courses & Master thesis project
Disciplinary knowledge	Preparation work and elective courses
Scientific methods and transferable skills	
Integrative biodiversity conservation sciences	Master thesis
Human dimensions of biodiversity conservation	
Conservation biology	
45 ECTS	15 ECTS Preparation work and electives 30 ECTS Master thesis

## Core curriculum

Modules/courses	Duration	Semester	ECTS	Principal Lecturer	Evaluation
<b>Disciplinary knowledge</b> (see remarks on p. 4)			<b>3</b>		
Qualitative methodes	28	A	3	Prof. A Aebi	CA (pass)
Directed readings in conservation biology	28	A	3	Prof. C. Zemp	CA (pass)
<b>Scientific methods and transferable skills module</b>			<b>9</b>		
Introduction to geomatics for biodiversity conservation	28	A	3	Dr S. Boillat	CA (graded)
Effective communication for biodiversity conservation	28	S	3	J. Perrot (La Salamandre)	CA (graded)
Biodiversity and agriculture: a transdisciplinary perspective	28	S	3	Prof. A. Aebi	CA (graded)
<b>Integrative biodiversity conservation sciences module</b>			<b>9</b>		
Seminar : Biodiversity Conservation	28	A	3	Prof. C. Zemp	CA (graded)
Biodiversity conservation in context (workshops/excursions)	5 d	A	3	Dr S. Ursenbacher (InfoFauna)	CA (pass)
Socio-ecological systems and interactions	28	A	3	Dr S. Boillat	CA (graded)
<b>Human dimensions of biodiversity conservation module</b>			<b>12</b>		
Anthropology and biodiversity conservation	28	A	3	Prof. J. Forney	CA (graded)
Conservation economics	28	A	3	Dr. A. Zabel	CA (graded)
Conservation psychology	28	A	3	Prof. L. Kloetzer	CA (graded)
Introduction to the law of biodiversity conservation	28	S	3	Dr. V. Wyssbrod	CA (graded)

## Core curriculum

Modules/courses	Duration	Semester	ECTS	Principal Lecturer	Evaluation
<b>Conservation biology module</b>			<b>12</b>		
Animal conservation	28	A	3	Dr. C. Duccoterd	Written, 2 hours
Methods in biodiversity monitoring	28	A	3	Prof. C. Praz	Written, 1 hour
Evidence-based conservation of species and habitats	28	S	3	Prof. C. Praz	CA (graded)
Evidence-based conservation of ecosystems	28	S	3	Prof. C. Zemp	CA (graded)
<b>Total ECTS Core curriculum</b>			<b>45</b>		

## Elective courses and Master thesis project

Modules/courses	Duration	Semester	ECTS	Supervisor	Evaluation
<b>Thesis preparation work and elective courses</b>			<b>15</b>		
Elective courses and mobility ( <i>listed on Moodle</i> )		A / S	3 - 15		
Internship	tbd	A / S	3 - 15	Master thesis supervisor	CA (pass)
Animal species knowledge: internship	tbd	A / S	3	Profs. C. Zemp and C. Praz	CA (pass)
Animal species knowledge	28	A	3	Prof. C. Praz (InfoFauna)	CA (graded)
Long-term ecological monitoring (field project)	5d	S	3	Dr. E. Martin	CA (graded)
Readings in preparation of the Master thesis	tbd	A / S	3	Master thesis supervisor	CA (pass)
<b>Total ECTS Prep. work and electives</b>			<b>15</b>		
<b>Master thesis</b>			<b>30</b>		
Master thesis		A and S	30		CA (graded)
<b>Total ECTS MSc in Biodiversity conservation</b>			<b>90</b>		

## Complementary information

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### Evaluations and regulations

- Course and exam registration in IS-Academia is compulsory for course validation.
- For details regarding Faculty regulations, please consult the *Règlement d'études et d'examens de la Faculté des sciences* and existing directives on the Faculty's webpage ([www.unine.ch/sciences](http://www.unine.ch/sciences)).
- Continuous assessment evaluations (pass or graded) are specified in the corresponding course description.
- Elective courses must be validated with a sufficient mark (4.0) and cannot be compensated.
- A conflict-free schedule cannot be guaranteed for elective courses.

### Abbreviations and grades

<b>CA</b>	= continuous assessment
<b>hd</b>	= half-days
<b>d</b>	= days
<b>N.N.</b>	= teacher to be designated
<b>A</b>	= autumn semester
<b>S</b>	= spring semester

### Remarks and transitional provisions:

- **Transitional provisions :**  
Students that began the curriculum in 2024-2025 or previously must validate the "Scientific methods and transferable skills module" according to the 2024-2025 study plan. The same principle applies to the "Conservation Biology" module, except for students who have not registered for the "Plant and Ecosystem Conservation" course. These students will be contacted by the Faculty Secretary's office to arrange individual transitional provisions.
- **Disciplinary knowledge :**  
Students should follow one of the options presented based on their previous studies:
  - Background in biology or natural sciences: "Qualitative methods"
  - Background in social sciences: "Directed readings in conservation biology"
  - Students with an interdisciplinary background (notably BSc in Biology and Ethnology) may choose an elective course (3 ECTS credits) that will be added to the Elective courses bloc mentioned on page 3 of the study plan. Their total number of elective credits will thus be 18 ECTS instead of 15 ECTS. **This requires prior approval from the Professors in charge of the curriculum.**
- **Master thesis project :** The master thesis project which includes elective courses, possible internship and free electives, as well as the Master thesis itself are regulated by the Guidelines document established by the scientific committee.
- **Internship :** Students can validate an internship of varying length for up to 15 ECTS credits during their Master program. For all related details, please contact the thesis supervisor.
- **Free electives :** Other elective courses can be chosen. They must be Master level courses and it is advised that they are related to the Master thesis. Courses can also be taken at other universities in Switzerland in compliance with established conventions (BeNeFri, AZUR, etc).
- **Readings in preparation of the Master thesis :** The reading assignment provides a first contact with a personal work in biodiversity conservation sciences, a prelude to more substantial work such as the Master's thesis.

## Learning outcomes

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**On completion of the program, students will be able to:**

**Knowledge and understanding:**

- Describe the status and trends of biodiversity change in time and space, and the underlying direct and indirect drivers, relying on fundamental ecological principles and accounting for human impacts.
- Identify the diverse socio-ecological relations characterizing biodiversity conservation issues in a specific context, by integrating the perspective of social sciences and natural sciences.
- Analyze existing conservation strategies and ongoing challenges in the field of biodiversity conservation (for example, considering multiple dimensions and spatial scales, reflecting on conflicting objectives, etc..).

**Applying knowledge and understanding:**

- Use methods and tools for biodiversity monitoring and for evaluating the effectiveness of conservation practices.
- Use methods and conceptual tools to analyse the social dimension of biodiversity conservation.
- Develop conservation approaches (for example, participatory or landscape approaches).
- Design action plans for conservation of species and ecosystems adapted to specific contexts.

**Making judgments:**

- Critically evaluate available scientific evidence, knowledge and qualitative or quantitative data, examining its reliability, validity and relevance for a specific context.
- Integrate different disciplinary perspectives before drawing conclusions about a conservation issue and solution.

**Communication skills:**

- Facilitate communication and understanding between diverse types of knowledge and epistemologies (e.g. scientific, local, Indigenous, experiential, political).
- Communicate biodiversity conservation knowledge to diverse audiences.
- Design creative material to engage target audiences.

**Learning skills:**

- Learn autonomously, actively seeking information, exploring new concepts and solving problems independently.
- Work effectively in multidisciplinary teams.
- Participate in transdisciplinary collaborations.