

bachelor of science

in **biology**

#### OBJECTIVES

**Studies leading to the Bachelor of Science in Biology degree give the broadest possible view of different areas of biology as well as the various levels of organisation of living beings, from the molecule to ecosystems.**

**Many courses include practical work that is increasingly integrated with research laboratories as studies progress.**

#### POSSIBLE STUDY OPTIONS AT THE UNIL AFTER THE BACHELOR'S DEGREE (WITHOUT ANY FURTHER STUDY)

- > Master of Science in Behaviour, Evolution and Conservation
- > Master of Science in Molecular Life Sciences
- > Master of Science in Medical Biology
- > Master of Science in Biogeosciences

#### ORGANISER

Faculty of Biology and Medicine:  
[www.unil.ch/fbm](http://www.unil.ch/fbm)  
School of Biology

#### DEGREE AWARDED

Bachelor of Science (BSc)  
in Biology

#### ECTS CREDITS

180

#### DURATION

6 semesters

#### TEACHING LANGUAGE

French (certain third year courses are taught in English)

#### ADMISSIONS

[www.unil.ch/immat](http://www.unil.ch/immat)  
Deadline: 30 April. Candidates needing a visa to study in Switzerland must apply for enrolment at least two months prior to this deadline.

#### START OF COURSES

Mid-September

#### ADDITIONAL INFORMATION ON THE DEGREE COURSE AND REGULATIONS

[www.unil.ch/fbm](http://www.unil.ch/fbm)

#### CONTACT

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## EDUCATIONAL CONTENT

### Description

The first year of study includes courses in basic science and biology.

The second year provides a wider grasp of the forms of organisation of life and offers more insight into genetics, biochemistry and physiology. Important foundations are laid in the biology of organisms and populations. Statistical and experimental design tools are also part of the programme. Optional courses allow students either to broaden their horizons or deepen their knowledge in a particular field while developing their analytical capabilities and critical faculties.

The third year offers more specialised teaching in the fields of cellular and molecular biology, as well as in the fields of evolution and biology of populations. Particular emphasis is laid on methodological approaches. A choice of practical work in molecular biology at the end of autumn semester offers an introduction to specialisation. The spring semester introduces students to different specialist themes and the chance to choose courses from among a range of optional modules.

Throughout the study programme, the teaching of "Biology and Society" gives students an overview of the socio-historical construction of scientific knowledge, an awareness of its dynamic aspect and the chance to reflect critically on its role in society.

THIRD YEAR EXAMINATION							
6 <sup>th</sup> semester	<b>3 optional modules to be chosen in the following fields:</b> 45% Ecology and Behaviour, Molecular Bases of Development and Evolution, Genetics and Evolution of Genomes, Physiology of Complex Systems, Biodiversity and Habitats, Functional Investigation Techniques, Pathogen Hosts, Symbiont Hosts; Signalling and Interaction						<b>Optional Courses</b>  Courses freely chosen from among those proposed by the School of Biology, other UNIL faculties or university level institutions 20%
5 <sup>th</sup> semester	<b>Obligatory Theoretical and Methodological Subjects</b> 32%			<b>PW in Molecular Biology</b> 13%			
SECOND YEAR EXAMINATION							
4 <sup>th</sup> semester	<b>Development</b> 8%	<b>Biology and Society</b> 3%	<b>Basic Sciences</b> Physics, Statistics, Experimental Design 21%	<b>Bio-chemistry, Cellular Biology</b> Protein Biochemistry, Metabolism Biochemistry 12.5%	<b>Physiology</b> Immunology, Animal Physiology, Plant Physiology 16%	<b>Microbiology, Genetics</b> Microbiology of the Prokaryotes, Bioinformatics, Bacteria Genetics, etc. 21%	<b>Biol. of Organisms, Ecology, Evolution</b> 8.5%
3 <sup>rd</sup> semester							
FIRST YEAR EXAMINATION							
2 <sup>nd</sup> semester	<b>Basic Sciences</b> Mathematics, Physics, Chemistry 42%*			<b>Cellular and Tissue Biology, Genetics</b> Biochemistry, Genetics, Cellular and Molecular Biology, Histology 32%	<b>Diversity of Living Organisms</b> Zoology, Botany, Microbiology 21%	<b>Biology and Society</b> 2.5%	<b>Course support</b> 2.5%
1 <sup>st</sup> semester							

## INFORMATION

### Examinations

In the 1<sup>st</sup> and 2<sup>nd</sup> years, the exams must be taken in the session directly following the teaching (winter or summer, with a possible autumn remedial session).

In the 3<sup>rd</sup> year, every subject is examined at the end of the two semesters (January and June), with a remedial session in autumn.

### Mobility

Students registered for the second or third year of the Bachelor's degree may complete part of their studies in a partner institution recognised by UNIL.

Information on mobility:  
[www.unil.ch/ri](http://www.unil.ch/ri)

### Academic Calendar

[www.unil.ch/central/page4804.html](http://www.unil.ch/central/page4804.html)

### Timetables

[www.unil.ch/programmes](http://www.unil.ch/programmes)

### General information on studies, career prospects and guidance

Guidance and advisory service:  
[www.unil.ch/soc](http://www.unil.ch/soc)

### Accommodation and financial assistance

Office for socio-cultural affairs:  
[www.unil.ch/sasc](http://www.unil.ch/sasc)

### International students

International relations office:  
[www.unil.ch/ri](http://www.unil.ch/ri)

\* The percentages shown represent the proportion of ECTS credits allocated to each subject in relation to the total number for one year (60 ECTS).