

NABIO, Master Programme in Biology, 120 credits

Masterprogram i biologi, 120 högskolepoäng

Second-cycle programme requiring previous university studies / Program med akademiska förkunskapskrav och med slutlig examen på avancerad nivå

Decision

The syllabus was approved by Study programmes board, Faculty of Science on 2017-02-08 (U 2017/32) and was last revised on 2026-05-28 by The Education Board of Faculty of Science (U 2026/337). The revised syllabus comes into effect 2026-10-15 and is valid from the autumn semester 2027.

Specialisations

Code	Swedish name	English name	Credits
EKZO	Animal Ecology	Zoöekologi	120 credits
EKLI	Aquatic Ecology	Akvatisk ekologi	120 credits
EKNA	Conservation Biology	Naturvård och bevarandebiologi	120 credits
EVBI	Evolutionary Biology	Evolutionsbiologi	120 credits
ALLM	General	Allmän inriktning	120 credits
VBIO	Plant Science	Växtbiologi	120 credits

Programme description

The programme for a degree of Master of Science specialising in Biology comprises 120 credits and leads to a degree of Master of Science (120 credits) with a major in Biology.

The programme is based on scholarship and is closely linked to research conducted at the Lund University Faculty of Science. The operations at the faculty uphold academic credibility and good research practice and are arranged to ensure that high standards are attained in courses and study programmes. Furthermore, the operations promote sustainable development, equality between women and men and understanding of other countries and international circumstances. These aspects are integrated in the degree outcomes of the programme.

Second-cycle courses and study programmes in the main field of Biology are fundamentally based on the knowledge acquired by students during first-cycle courses and study programmes.

Second-cycle courses and study programmes in the main field of Biology involve the acquisition of specialist knowledge, competence and skills in relation to first-cycle courses and study programmes, and in addition to the requirements for first-cycle courses and study programmes shall:

- further develop the ability of students to integrate and make autonomous use of their knowledge,
- develop the students' ability to deal with complex phenomena, issues and situations, and
- develop the students' potential for professional activities that demand considerable autonomy, or for research and development work.

The programme applies a learning perspective, in which students take an active role in the learning process, and consciously and continuously reflect on their learning and development towards the degree outcomes.

Goals

Knowledge and understanding

For a Degree of Master (120 credits) the student shall:

- demonstrate knowledge and understanding in the main field of study, including both broad knowledge of the field and a considerable degree of specialised knowledge in certain areas of the field as well as insight into current research and development work, and
- demonstrate specialised methodological knowledge in the main field of study.

Competence and skills

For a Degree of Master (120 credits) the student shall:

- demonstrate the ability to critically and systematically integrate knowledge and analyse, assess and deal with complex phenomena, issues and situations even with limited information
- demonstrate the ability to identify and formulate issues critically, autonomously and creatively as well as to plan and, using appropriate methods, undertake advanced tasks within predetermined time frames and so contribute to the formation of knowledge as well as the ability to evaluate this work
- demonstrate the ability in speech and writing both nationally and internationally to clearly report and discuss his or her conclusions and the knowledge and arguments on which they are based in dialogue with different audiences, and
- demonstrate the skills required for participation in research and development work or autonomous employment in some other qualified capacity.

Judgement and approach

For a Degree of Master (120 credits) the student shall:

- demonstrate the ability to make assessments in the main field of study informed by relevant disciplinary, social and ethical issues and also to demonstrate awareness of ethical aspects of research and development work
- demonstrate insight into the possibilities and limitations of research, its role in society and the responsibility of the individual for how it is used, and
- demonstrate the ability to identify the personal need for further knowledge and take responsibility for his or her ongoing learning.

Independent project (degree project)

A requirement for the award of a degree of Master (120 credits) is completion by the student of an independent project (degree project) for at least 30 credits in the main field of study. The degree project may comprise less than 30 credits, however no less than 15 credits, if the student has already completed an independent project in the second cycle for at least 15 credits in the main field of study or the equivalent from a programme of study outside Sweden.

Course information

The programme comprises 2 years for a degree of Master (120 credits). The appendix *Programme Structure and course requirements for Master Programme in Biology* at the Faculty of Science describes the courses included.

A Degree of Master (120 credits) is awarded after the student has completed the courses required. In addition, the prior award of a Degree of Bachelor of at least 180 credits or a corresponding qualification from abroad is required. To acquire the fundamentally based advanced knowledge and understanding, competence and skills as well as judgement and approach required to meet the learning outcomes for a degree of Master of Science (120 credits) with a major in Biology, new knowledge building upon the underlying Bachelor's degree is necessary.

See attachment *NABIO - Programme Structure and course requirements for Master Programme in Biology, 120 credits.pdf*

Degree

Degree titles

Degree of Master of Science (120 credits)

Main field of study: Biology

Main field of study: Biology with specialization in Animal Ecology

Main field of study: Biology with specialization in Aquatic Ecology

Main field of study: Biology with specialization in Conservation Biology

Main field of study: Biology with specialization in Ecology

Main field of study: Biology with specialization in Evolutionary Biology

Main field of study: Biology with specialization in Plant Science

Naturvetenskaplig masterexamen

Huvudområde: Biologi

Huvudområde: Biologi med fördjupning i akvatisk ekologi

Huvudområde: Biologi med fördjupning i bevarandebiologi och naturvård

Huvudområde: Biologi med fördjupning i ekologi

Huvudområde: Biologi med fördjupning i evolutionsbiologi

Huvudområde: Biologi med fördjupning i växtbiologi

Huvudområde: Biologi med fördjupning i zooekologi

Entry requirements and selection method

Entry requirements

Specialisations: Aquatic Ecology and Conservation Biology

Bachelor's degree of at least 180 credits, of which 90 credits must be in science, including 5 credits in statistics and 60 credits in biology comprising cell biology, genetics, microbiology, ecology, botany and zoology, or the equivalent.

Proficiency in English equivalent to English 6/B from Swedish upper-secondary school.

Specialisation: Animal Ecology

Bachelor's degree of at least 180 credits, of which 90 credits must be in science, including 5 credits in statistics and 60 credits in biology comprising cell biology, genetics, ecology and zoology, or the equivalent.

Proficiency in English equivalent to English 6/B from Swedish upper-secondary school.

Specialisation: Plant Science

Bachelor's degree of at least 180 credits, of which 90 credits must be in science, including 5 credits in statistics and 60 credits in biology comprising cell biology, genetics, microbiology, ecology and botany, or the equivalent.

Proficiency in English equivalent to English 6/B from Swedish upper-secondary school.

or

Bachelor's degree of at least 180 credits, of which 90 credits must be in science, including 30 credits in chemistry and 45 credits in biology comprising cell biology, genetics, microbiology and molecular biology, or the equivalent.

Proficiency in English equivalent to English 6/B from Swedish upper-secondary school.

Specialisation: General Biology

Bachelor's degree of at least 180 credits, of which 90 credits must be in science, including 15 credits in chemistry, 5 credits in statistics and 60 credits in biology comprising cell biology, genetics, microbiology, ecology, botany and zoology, or the equivalent.

Proficiency in English equivalent to English 6/B from Swedish upper-secondary school.

Specialisation: Evolutionary Biology

Bachelor's degree of at least 180 credits, of which 90 credits must be in science, including 5 credits in statistics and 60 credits in biology comprising genetics, cell biology, ecology and organism biology, or the equivalent.

Proficiency in English equivalent to English 6/B from Swedish upper-secondary school.

Selection method

Based on grades awarded for previous academic courses, as well as a statement of purpose for the application and qualifications from research/work of relevance to the study programme (from the applicant's "Summary sheet").

Transition rules

The Faculty Board may decide on the discontinuation of a programme or main field and may also decide, in association with this, on transitional provisions for students who have started these degree programmes.

Other information

Rules pertaining to grades and examination are stated in the course syllabi approved by the Faculty Board.



FACULTY OF SCIENCE

Appendix 1 for programme syllabus,
NABIO Master Programme in
Biology, 120 credits

Reg. No.
U 2026/337

Date 2026-05-28

Department of Biology

Programme Structure and course requirements for Master Programme in Biology, 120 credits

The programme comprises two years of full-time studies (120 credits) and leads to a Degree of Master in Science with major in Biology, and can be pursued through several specialisations, each with its associated study path. Depending on the chosen specialisation, the Degree of Master of Science will lead to a specialization in Animal Ecology, or a specialization in Aquatic Ecology, or a specialization in Conservation Biology, or a specialization in Ecology, or a specialization in Evolutionary Biology or a specialization in Plant Science.

Specialisations

- Aquatic Ecology
- General
- Animal Ecology
- Conservation Biology
- Evolutionary Biology
- Plant Science

Aquatic Ecology

Compulsory Courses

Compulsory courses of 45 credits.

BIOR82, Biology: Aquatic Ecology, 15 credits

BIOS19, Biology: Limnology and Marine Ecology - Concepts and Processes, 15 credits

BIOS18, Biology: Limnology and Marine Ecology - Organisms and Habitats, 15 credit

Elective courses

Elective courses of at least 15 credits.

BIOS15, Biology: Processing and Analysis of Biological Data, 7.5 credits
 BIOR83, Biology: Conservation Biology, 15 credits
 BIOR41, Biology: Ecotoxicology, 15 credits
 BIOS13, Biology: Modelling Biological Systems, 7.5 credits
 BIOR52, Biology: Applied Ecotoxicology, 15 credits
 BIOS17, Water Management, 15 credits
 BIOR90, Evolutionary Biology - Methods and Applications 15 credits
 BIOT03, Biology: Project, 15 credits

Optional courses

Optional courses between 0 to 30 credits.

Degree Project

Degree project between 30 to 60 credits.

BIOM02, Biology: Master's Degree Project, 30 credits
 BION02, Biology: Master's Degree Project, 45 credits
 BION03, Biology: Master's Degree Project, 60 credits

General

Compulsory Courses

Compulsory courses of 15 credits.

BIOR58, Biology: Neurobiology, 15 credits
Or
 BIOR69, Biology: Population and Community Ecology, 15 credits
Or
 BIOR85, Biology: Immunology, 15 credits

Elective courses

Elective courses of at least 45 credits.

BIOR82, Biology: Aquatic Ecology, 15 credits
 BIOR56, Biology: Antibiotics - Biology and Chemistry, 7.5 credits
 BIOS15, Biology: Processing and Analysis of Biological Data, 7.5 credits
 BIOR83, Biology: Conservation Biology, 15 credits
 BINP17, Bioinformatics: Bioinformatics and Sequence Analysis, 7.5 credits
 BIOR39, Biology: Biological Monitoring, 15 credits

BIOR84, Biology: Cellular and Molecular Neurobiology, 15 credits
 BIOR41, Biology: Ecotoxicology, 15 credits
 BIOR89, Biology: Evolutionary Biology - Patterns and Processes, 15 credits
 BIOR90, Biology: Evolutionary Biology - Methods and Applications, 15 credits
 BIOR98, Biology: Pharmacology, 15 credits
 BIOR92, Biology: Genetic Analysis, 7.5 credits
 BIOR85, Biology: Immunology, 15 credits
 BIOR88, Biology: Immunology and Infection Biology, 15 credits
 BIOS19, Biology: Limnology and Marine Ecology – Concepts and Processes, 15 credits
 BIOS18, Biology: Limnology and Marine Ecology - Organisms and Habitats, 15 credits
 BIOS16, Biology: Soil and Plant Ecology, 15 credits
 BIOR18, Biology: Microbiology, 15 credits
 BIOS08, Biology: Microscopy - Bio-Imaging, 7.5 credits
 BIOS13, Biology: Modelling Biological Systems, 7.5 credits
 BIOR94 Biology: Molecular biotechnology and methods, 15 hp
 BIOR25, Biology: Molecular Ecology and Evolution, 15 credits
 BIOR95, Biology: Molecular Genetics of Eukaryotes, 15 credits
 BIOR63, Biology: Molecular Microbiology, 15 credits
 BIOR11, Biology: Mosses, Lichens, Fungi - Biodiversity and Conservation, 15 credits
 BIOR97, Biology: Bryophyte Morphology and Identification, 5 credits
 BIOR58, Biology: Neurobiology, 15 credits
 BIOR51, Biology: Ornithology, 15 credits
 BIOR69, Biology: Population and Community Ecology, 15 credits
 BINP16, Bioinformatics: Programming in Python, 7.5 credits
 BIOR20, Biology: Sensory Biology, 15 credits
 BIOR52, Biology: Applied Ecotoxicology, 15 credits
 BIOR93, Biology: Applied Bioinformatics, 7.5 credits
 BIOS17, Water Management, 15 credits
 BIOR76, Biology: Plant Function, 15 credits
 BIOR99, Biology: Evolutionary Plant Ecology, 15 credits
 BIOR96, Biology: Plant Systematics and Diversity, 10 credits
 BIOR91, Biology: Animal Ecology, 15 credits
 BIOT03, Biology: Project, 15 credits

Optional courses

Optional courses between 0 to 30 credits.

Degree Project

Degree Project between 30 to 60 credits.

BIOM02, Biology: Master's Degree Project, 30 credits

BION02, Biology: Master's Degree Project, 45 credits

BION03, Biology: Master's Degree Project, 60 credits

Conservation Biology

Compulsory Courses

Compulsory courses of 45 credits.

BIOR69, Biology: Population and Community Ecology, 15 credits

BIOR83, Biology: Conservation Biology, 15 credits

BIOR39, Biology: Biological Monitoring, 15 credits

Or

BIOS17, Water Management, 15 credits

Elective courses

Elective courses of 15 credits.

BIOS15, Biology: Processing and Analysis of Biological Data, 7.5 credits

BIOR39, Biology: Biological Monitoring, 15 credits

BIOS13, Biology: Modelling Biological Systems, 7.5 credits

BIOR51, Biology: Ornithology, 15 credits

BIOS17, Water Management, 15 credits

BIOR99, Biology: Evolutionary Plant Ecology, 15 credits

BIOR91, Biology: Animal Ecology, 15 credits

BIOT03, Biology: Project, 15 credits

Optional courses

Optional courses between 0 to 30 credits.

Degree Project

Degree Project between 30 – 60 credits.

BIOM02, Biology: Master's Degree Project, 30 credits

BION02, Biology: Master's Degree Project, 45 credits

BION03, Biology: Master's Degree Project, 60 credits

Evolutionary Biology

Compulsory Courses

Compulsory courses of 30 credits.

BIOR89, Biology: Evolutionary Biology - Patterns and Processes, 15 credits
 BIOR90, Biology: Evolutionary Biology - Methods and Applications, 15 credits

Elective courses

Elective courses of 30 credits at an advanced level, of which at least 15 credits must include the following courses:

BINP17, Bioinformatics: Bioinformatics and Sequence Analysis, 7.5 credits
 BIOS15, Biology: Processing and Analysis of Biological Data, 7.5 credits
 BIOR92, Biology: Genetic Analysis, 7.5 credits
 BIOS13, Biology: Modelling Biological Systems, 7.5 credits
 BIOR25, Biology: Molecular Ecology and Evolution, 15 credits
 BIOR95, Biology: Molecular Genetics of Eukaryotes, 15 credits
 BIOR69, Biology: Population and Community Ecology, 15 credits
 BIOR93, Biology: Applied Bioinformatics, 7.5 credits
 BIOR99, Biology: Evolutionary Plant Ecology, 15 credits
 BIOR91, Biology: Animal Ecology, 15 credits
 BIOT03, Biology: Project, 15 credits

Optional courses

Optional courses between 0 to 30 credits.

Degree Project

Degree Project between 30 – 60 credits.

BIOM02, Biology: Master's Degree Project, 30 credits
 BION02, Biology: Master's Degree Project, 45 credits
 BION03, Biology: Master's Degree Project, 60 credits

Plant Science

Compulsory courses

Compulsory courses of 15 credits.

BIOR76, Biology: Plant Function, 15 credits
Or
 BIOR99, Biology: Evolutionary Plant Ecology, 15 credits

Elective courses

Elective courses of 45 credits.

KEMM23, Chemistry: Advanced Biochemistry, 15 credits
 BINP17, Bioinformatics: Bioinformatics and Sequence Analysis, 7.5 credits
 BIOS15, Biology: Processing and Analysis of Biological Data, 7.5 credits
 BIOR89, Biology: Evolutionary Biology - Patterns and Processes, 15 credits
 BIOR90, Biology: Evolutionary Biology - Methods and Applications, 15 credits
 BIOR99, Biology: Evolutionary Plant Ecology, 15 credits
 BIOR92, Biology: Genetic Analysis, 7.5 credits
 BIOS16, Biology: Soil and Plant Ecology, 15 credits
 BIOS08, Biology: Microscopy - Bio-Imaging, 7.5 credits
 BIOS13, Biology: Modelling Biological Systems, 7.5 credits
 BIOR94, Biology: Molecular biotechnology and methods, 15 hp
 BIOR25, Biology: Molecular Ecology and Evolution, 15 credits
 BIOR95, Biology: Molecular Genetics of Eukaryotes, 15 credits
 BIOR76, Biology: Plant Function, 15 credits
 BIOR69, Biology: Population and Community Ecology, 15 credits
 BIOR93, Biology: Applied Bioinformatics, 7.5 credits
 BIOR96, Biology: Plant Systematics and Diversity, 10 credits
 BIOT03, Biology: Project, 15 credits

Optional courses

Optional courses between 0 to 30 credits.

Degree Project

Degree Project between 30 to 60 credits.

BIOM02, Biology: Master's Degree Project, 30 credits
 BION02, Biology: Master's Degree Project, 45 credits
 BION03, Biology: Master's Degree Project, 60 credits

Animal Ecology

Compulsory Courses

Compulsory courses of 45 credits.

BIOR69, Biology: Population and Community Ecology, 15 credits
 BIOR91, Biology: Animal Ecology, 15 credits
 BIOR83, Biology: Conservation Biology, 15 credits
Or
 BIOR25, Biology: Molecular Ecology and Evolution, 15 credits

Elective courses of 15 credits.

BIOR83, Biology: Conservation Biology, 15 credits
BINP17, Bioinformatics: Bioinformatics and Sequence Analysis, 7.5 credits
BIOS15, Biology: Processing and Analysis of Biological Data, 7.5 credits
BIOR89, Biology: Evolutionary Biology - Patterns and Processes, 15 credits
BIOR90, Biology: Evolutionary Biology - Methods and Applications, 15 credits
BIOS13, Biology: Modelling Biological Systems, 7.5 credits
BIOR25, Biology: Molecular Ecology and Evolution, 15 credits
BIOR51, Biology: Ornithology, 15 credits
BIOR20, Biology: Sensory Biology, 15 credits
BIOR93, Biology: Applied Bioinformatics, 7.5 credits
BIOT03, Biology: Project, 15 credits

Optional courses

Optional courses between 0 to 30 credits.

Degree Project

Degree Project between 30 to 60 credits.

BIOM02, Biology: Master's Degree Project, 30 credits
BION02, Biology: Master's Degree Project, 45 credits
BION03, Biology: Master's Degree Project, 60 credits