

Education plan

for

Master's Programme in Molecular Life Sciences
Masterprogram i molekylära livsvetenskaper

120.0 Higher Education
Credits
120.0 ECTS credits

Programme code: NMLIO
Valid from: Autumn 2012
Date of approval: 2011-06-01
Department: Department of Biology Education

Decision

This programme syllabus has been approved by the Board of the Faculty of Science at Stockholm University.

Prerequisites and special admittance requirements

Admission to the programme requires a Bachelor's degree in Molecular biology, including a minimum of 30 credits in Chemistry with at least 7,5 credits in Biochemistry or equivalent. Swedish upper secondary school course English B or equivalent.

Programme structure

The programme consists of elective courses at the second level in the main field of study of at least 30 HEC, a degree project in Molecular Life Sciences of 30/45/60 HEC and optional courses of up to 60 HEC.

Goals

The main field of study is Molecular Life Sciences, which is the science that studies the structure and function of living organisms at the molecular level, and that explains biological processes in terms of interactions between molecules.. After completing the education program the student is expected to

- demonstrate knowledge and understanding in their main field of study, including both broad knowledge in the field and substantially deeper knowledge of certain parts of the field, together with deeper insight into current research and development work; and
- demonstrate deeper methodological knowledge in their main field of study.
- demonstrate an ability to critically and systematically integrate knowledge and to analyse, assess and deal with complex phenomena, issues and situations, even when limited information is available;
- demonstrate an ability to critically, independently and creatively identify and formulate issues and to plan and, using appropriate methods, carry out advanced tasks within specified time limits, so as to contribute to the development of knowledge and to evaluate this work;
- demonstrate an ability to clearly present and discuss their conclusions and the knowledge and arguments behind them, in dialogue with different groups, orally and in writing, in national and international contexts; and
- demonstrate the skill required to participate in research and development work or to work independently in other advanced contexts.
- demonstrate an ability to make assessments in their main field of study, taking into account relevant scientific, social and ethical aspects, and demonstrate an awareness of ethical aspects of research and development work;
- demonstrate insight into the potential and limitations of science, its role in society and people's responsibility for how it is used; and
- demonstrate an ability to identify their need of further knowledge and to take responsibility for developing their knowledge.

Courses

Year 1 & 2. Compulsory courses:

Courses at the second level in Molecular Life Sciences of at least 30 HEC from a list of elective courses. The elective courses are decided by the department board. The list of all elective courses should be updated before each new academic year. Before the start of a programme, there should be a list of the minimum number of courses where teaching is guaranteed during the programme.

Degree project in Molecular Life Sciences 30/45/60 HEC

Optional courses of up to 60 HEC.

Degree

Master's degree.

Misc

Students who have been admitted to the programme but not completed it during the scheduled two/three years can request to complete the program even after the programme syllabus no longer applies. In such cases, the limitations stated in the course syllabus apply.