

## **Department of Biology Education**

# Education plan

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Masterprogram i mikrobiologi Master's Programme in Microbiology

120.0 Higher Education Credits 120.0 ECTS credits

Programme code: NMICO
Valid from: Autumn 2024
Date of approval: 2023-09-05
Changed: 2023-12-06

**Department:** Department of Biology Education

#### **Decision**

Finalized by: Områdesnämnden för naturvetenskap, 2023-09-05

## 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. English 6 or equivalent.

## **Programme structure**

The programme consists of compulsory of 60 HEC, a degree project in biology of 45/60 HEC and optional courses of up to 15 HEC

#### Goals

The main field of study is Microbiology. After completing the education programme 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;

- 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;
- demonstrate an ability to identify their need of further knowledge and to take responsibility for developing their knowledge.

#### **Courses**

Compulsory courses:

Molecular cell biology SC, 15 HEC (BL7046)

Immunology SC, 15 HEC (BL7074)\*

Microbiology SC, 15 HEC (BL7045)\*

Infection biology SC, 15 HEC (BL8058)\*

Degree project in microbiology 45/60 HEC.

Optional courses of up to 15 HEC.

\*The course is within the main field of study.

### **Degree**

Master's degree.

#### Misc

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