Molekylär bioteknik - magisterprogram
Molecular Biotechnology - Master’s Programme
60 credits

Programme Code: MOBAA
Academic Level: Advanced level
Version: 3

The Programme Syllabus is valid from: Autumn term 2020
Date of Approval: 11 September 2018

1 Name and Scope of the Study Programme
The programme is provided by the University of Skövde and is named Molecular Biotechnology - Master’s Programme. It comprises 60 credits.

2 General Objectives
Courses and study programmes on the advanced level shall involve the acquisition of specialist knowledge, competence and skills in relation to courses and study programmes on the basic level, and in addition to the requirements for courses and study programmes on the basic level 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 considerably autonomy, or for research and development work.

(Objectives for courses and study programmes on the advanced level, The Higher Education Act)

3 Programme Objectives
Main area of education is Bioscience.

Objectives for Master's Degree according to the Higher Education Ordinance

Knowledge and Understanding

For a Master’s Degree the students shall be able to

- show knowledge and understanding within the main area of the education, inclusive of wide knowledge within the area, a considerable in depth knowledge within certain parts of the area as well as deeper insight into current research and development
- show in depth knowledge of methodology within the main area of the education.

Proficiency and Ability
For a Master’s Degree the students shall be able to

- show the ability to critically and systematically integrate knowledge and analyse, assess and manage complex phenomena, questions and situations even with limited information
- show the ability to identify and formulate questions, independently, as well as to plan and, with adequate methods, carry out advanced assignments within specified time limits
- show the ability to, orally and in writing, account for and discuss their conclusions and the knowledge and arguments these are based on in dialogue with different groups
- show the proficiency required to participate in research and development in other advanced activity.

Ability to Evaluate and Relate
For a Master’s Degree the students shall be able to

- show the ability, within the main area of the education, to make assessments in accordance with relevant research, societal and ethical
aspects as well as show awareness of ethical aspects in research and development

- show insight into the possibilities and limitations of research, its role in society and human beings’ responsibility for how it is used
- show the ability to identify the need for further knowledge and to take responsibility for the development of their knowledge.

4 Programme Content
The programme involves in-depth research oriented studies in the areas of Molecular Biology and Biotechnology. Independent laboratory work is a prominent part of the studies. The second part of the programme consists of a 30 credits master degree project where the student independently shall apply his/her acquired knowledge to solve a relevant research problem.

The following courses are included in the programme

- Experimental Methods and Design in Bioscience A1N, 10 credits
- Molecular Biotechnology A1N, 7.5 credits
- Bioinformatics Concepts and Methods A1N, 7.5 credits
- Experimental Design and Data Analysis for Life Science A1N, 5 credits
- Master Degree Project in Bioscience A1E, 30 credits

5 Admission Requirements
To be eligible for the program a Bachelor’s Degree (equivalent to a Swedish Bachelor’s Degree) with a major in the biological or medical area is required. The biological area can be defined as e.g. Molecular Biology, Biochemistry, Microbiology or Physiology. The medical area is here defined as Biomedicine but can also include subjects like Pharmacology.

A further requirement is proof of skills in English equivalent of studies at upper secondary level in Sweden, known as English course 6 / English course B. This is normally demonstrated by means of an internationally recognized test, e.g. IELTS or TOEFL or the equivalent.

The above admission requirements apply for admission to the programme. For further studies within the programme, the admission requirements for each course must be complied with. These admission requirements are specified in each separate course syllabus.

6 Degree
A student who passes the courses in the programme fulfills the requirements for obtaining a Degree of Master of Science (60 credits) with a major in Bioscience.

Degrees are awarded after application. Information about how to submit an application can be found on the University's website.

7 Approval of Study Programme and Programme Syllabus
The study programme was established by the Vice-Chancellor at the University of Skövde on 27 September 2013. This programme syllabus was ratified by the Curriculum Committee for Bioscience on 11 September 2018. It is valid from the autumn semester of 2020.

8 Changes to the Programme Syllabus
The programme studies are carried out in accordance with the current programme syllabus in effect at the time when the studies were initiated, provided that the structure of the programme is followed and that no leave of studies has been granted.

In the event of continued studies after a period of approved leave of studies, the students is to follow the programme syllabus in effect the term that the student resumes his/her studies. If substantial changes to the programme syllabus have been made, the student may contact a student and career counsellor in order to set up an individual study plan.

Reservations are made for the fact that the programme syllabus and its courses are subject to change, within the framework of the objectives of the programme.

9 Additional Information
Further information about the study programme will be available on the University’s web pages prior to a programme start.

National and local regulations for higher education are available on the University’s website.

During the programme, as well as after its completion, there are follow-ups. The main purpose of these follow-ups is to contribute to improvements of the programme. The students’ experiences and views consti-
one of the criteria for the follow-up and are gathered by means of programme evaluations. The students will be informed of the results of the follow-up and any decisions regarding actions that are to be taken.