UNIVERSITY OF SKÖVDE

TRANSLATION FROM SWEDISH

**PROGRAMME SYLLABUS**

# Biomedicine - Master's Programme

**60 credits**

**Programme code:** BMEMA
**Version number:** 3
**Valid from:** Spring term 2027
**Ratified by:** Curriculum Committee for Health Sciences
**Date of ratification:** 28 May 2025

## 1. General information about the study programme

The study programme is provided by the University of Skövde and is named Biomedicine - Master's Programme (Biomedicin - magisterprogram). It comprises 60 credits and is a second-cycle programme. The main field of study is Biomedicine.

## 2. Entry requirements

A Bachelor's degree equivalent to a Swedish kandidatexamen of 180 credits, with a major within the main field of Biomedicine, Biotechnology, Cell and Molecular Biology or Medicine (or the equivalent).

An additional requirement is proof of skills in English equivalent of studies at upper secondary level in Sweden, known as the Swedish course English 6 or English level 2. This is normally demonstrated by means of an internationally recognized language test, e.g. IELTS or TOEFL.

The entry requirements above are applicable for admission to the study programme. For further studies within the programme, the entry requirements for each course must be met. These entry requirements are specified in each separate course syllabus.

## 3. Study programme content

The study programme focuses primarily on genetic causes of ill health and how biomedical and digital tools can be used to investigate these. During the final degree project of 30 credits, the student will independently apply their acquired knowledge to solve a current and relevant problem in the field of biomedicine. For those students who wish to carry out their degree project at another higher education institution or at a company, this will be possible.

**The following courses are included in the programme:**

Laboratory skills A1N, 1 credit

Human genetics A1N, 7 credits

Translational genetics A1N, 7 credits

Biomedical and digital tools A1F, 15 credits

Master degree project in biomedicine A1E, 30 credits

## 4. General objectives

**Objectives for education at the second-cycle level in The Higher Education Act**

Second-cycle courses and study programmes shall 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.

## 5. Study programme objectives

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

**Knowledge and understanding**
For a Degree of Master the student shall

- demonstrate knowledge and understanding in the main field of study, including both an overview of the field and 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 the student shall

- demonstrate the ability to 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 autonomously as well as to plan and, using appropriate methods, undertake advanced tasks within predetermined time frames,
- demonstrate the ability in speech and writing to report clearly 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 employment in some other qualified capacity.

**Judgement and approach**
For a Degree of Master 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.

**Local objectives attached to the study programme at the University of Skövde**

After completion of the programme, the student shall be able to

- demonstrate in-depth knowledge of how digital and biomedical tools and models can be used to solve biomedical issues, and
- demonstrate the ability to process, analyse and present freely available biomedical and clinical data from different types of experiments and investigations.

## 6. Language of instruction

The teaching is conducted in English.

## 7. Degree qualification

A student who passes the courses in the study programme fulfills the requirements for earning a Degree of Master of Science (60 credits) with a major in Biomedicine.

Degree certificates are issued after application. Information about how to submit an application can be found on the website of the University of Skövde.

## 8. Changes to the programme syllabus

The programme syllabus and its courses may be changed, within the framework of the objectives for the study programme.

## 9. Student influence

Student influence in the study programme is ensured by means of programme evaluations. The students are informed about the results of the evaluations and potential measures that have been taken or are planned, based on the course evaluations.

## 10. Additional information

Further information about the study programme, as well as national and local governing documents for higher education, is available on the website of the University of Skövde.