UNIVERSITY OF SKÖVDE

TRANSLATION FROM SWEDISH

PROGRAMME SYLLABUS

Biomedicine - Bachelor's Programme

180 credits

Programme code: BMEPG
Version number: 21.1
Valid from: Autumn term 2027
Ratified by: Curriculum Committee for Health Sciences
Date of ratification: 20 May 2026

1. General information about the study programme

The study programme is provided by the University of Skövde and is named Biomedicine - Bachelor's Programme (Biomedicinprogrammet). It comprises 180 credits and is a first-cycle programme. The main field of study is Biomedicine.

2. Entry requirements

General entry requirements.
Additional requirements: Mathematics 2a or 2b or 2c, Science studies 2 or Biology 1 and Chemistry 1, English 6
Or:
Mathematics level 2a or level 2b or level 2c, Science studies level 2 or Biology level 1 and Chemistry level 1, English level 2.

The level of English proficiency is normally shown by 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 is based on the academic subject of Biomedicine with focus on sustainable health. The courses are organized thematically, one for each year. The theme for the first year is "Basic knowledge in biomedicine and health" which consists of basic courses in cell biology, chemistry, genetics, microbiology and immunology. The first year provides a solid base for the subject area necessary for further studies into biomedicine and sustainable health.

The theme for the second year is "In-depth knowledge in biomedicine and health promotion" and consists of courses in human physiology, metabolism, neurobiology, training physiology and health promotion. Statistics and study design, information retrieval and academic writing in biomedicine as well as biochemistry are also covered. The connection between biomedicine and sustainable health, with focus on health promotion, is strengthened through the courses during the second year. The second year also includes a course designed to give the students a good insight into the career opportunities in both industry and academia upon completion of the bachelor degree.

The third and final year has the theme "Cause and treatment of illness" and focuses on the most common endemic diseases such as cancer, circulatory diseases, diabetes and mental illness. These will be covered through courses in pathophysiology, pharmacology and tumor- and stem cell biology. The third year also includes a course in ethics and methodology in biomedicine as well as a degree project. It will also be possible for students to carry out their degree project at another university or within the life science sector.

Laboratory work is fundamental for the Biomedicine - Bachelor's Programme and is included in all terms of the three-year Bachelor's programme.

The following courses are included in the programme:

Introduction to Biomedical Science G1N, 6.5 credits
Laboratory Basic Course G1N, 1 credit
Cell Biology G1N, 7.5 credits
Basic Chemistry G1N, 15 credits
Microbiology G1N, 7.5 credits
Genetics G1N, 7.5 credits
Introduction to Bioinformatics G1N, 7.5 credits
Immunology and Infection Biology G1F, 7.5 credits
Human Physiology and Metabolism G1F, 15 credits
Method and Design in Life Science G1F, 7.5 credits
Biochemistry G1F, 7.5 credits
Nutrition and Physical Activity in a Public Health Perspective G1F, 7.5 credits
Professional Development and Applied Communication in Biomedicine G1F, 7.5 credits
Ethics and Methodology in Biomedicine G1F, 7.5 credits
Information Retrieval and Academic Writing in Biomedicine G1F, 7.5 credits
Training Physiology and Neurobiology G1F, 7.5 credits
Pathophysiology and Pharmacology G2F, 20 credits
Tumor- and Stem Cell Biology G2F, 10 credits
Bachelor Degree Project in Biomedicine G2E, 22.5 credits

4. General objectives

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

First-cycle courses and study programmes shall develop:

- the ability of students to make independent and critical assessments,
- the ability of students to identify, formulate and solve problems autonomously, and
- the preparedness of students to deal with changes in working life.

In addition to knowledge and skills in their field of study, students shall develop the ability to:

- gather and interpret information at a scholarly level,
- stay abreast of the development of knowledge, and
- communicate their knowledge to others, including those who lack specialist knowledge in the field.

5. Study programme objectives

Objectives for Bachelor's degree according to the Higher Education Ordinance

Knowledge and understanding
For a Bachelor's Degree, the student should be able to

- demonstrate knowledge and understanding in the major subject area including knowledge of the scientific basis, methodologies in the field, specialization within a sub-area and understanding of current research directions.

Skills and abilities
For Bachelor's Degree, the student should be able to

- demonstrate the ability to search, evaluate and critically interpret relevant information in a study case and to critically discuss relevant phenomena, issues and situations,
- demonstrate the ability to identify, formulate and solve problems and to perform tasks within specified time limits,
- demonstrate the ability to orally and in writing explain and discuss information, problems and solutions in dialogue with different groups, and
- demonstrate the skills required to independently work within the educational field.

Critical judgment and approach
For Bachelor's Degree, the student should be able to

- demonstrate skills in the major field of study, make evaluations with respect to relevant scientific, social and ethical aspects,
- demonstrate an understanding of the role of knowledge in society and people's responsibility for application of knowledge, and
- demonstrate the ability to identify their individual needs for further knowledge and developing their skills.

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 Bachelor of Science 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.