


---

# Magister biotehnologije/magistrica biotehnologije

---

## Selected qualifications

Operativni tehnolog/operativna tehnologinja v farmacevtski proizvodnji 

**Name of qualification** Magister biotehnologije/magistrica biotehnologije

**Translated title (no legal status)** Master of Science in biotechnology

**Type of qualification** Diploma druge stopnje

**Category of qualification** Izobrazba

**Type of education** Master's education

**Duration** 2 years

**Credits** 120 credits

## Admission requirements

- A completed first-cycle programme in biotechnology, either in Slovenia or abroad; or
- a completed first-cycle study programme in another field, either in Slovenia or abroad, if the candidate additionally completes 10–60 credits in subjects from the first-cycle academic study programme in Biotechnology; these credits are determined with reference to how different the field is and are defined for each candidate separately by the competent studies committee; the candidate must pass these additional examinations before enrolling in the master's programme; or
- a completed professional higher education programme in biotechnology under the previous system either in Slovenia or abroad; or
- a completed professional higher education programme in another field under the former system, either in Slovenia or abroad, if the candidate additionally completes 10–60 credits in subjects from the first-cycle academic study programme in Biotechnology; these credits are determined with reference to how different the field is and are defined for each candidate separately by the competent studies committee; the candidate must pass these additional examinations before enrolling in the master's programme.

## ISCED field

Field  
Naravoslovje, matematika in statistika

## ISCED subfield

subfield biokemija

## Qualification level

SQF 8  
EQF 7  
Second level

## Learning outcomes

The qualification holder will be able to:

(general competences)

- demonstrate in-depth knowledge in the field of biological sciences, bioengineering and other natural sciences, and professional knowledge acquired through the study of theoretical and practical cases in the field of biotechnology,
- address problems with the help of sources and an interdisciplinary approach, and transfer and use acquired knowledge in practice,
- work in an interdisciplinary team,
- effectively apply acquired knowledge in practice,
- demonstrate research skills and intuition,
- transfer, critically assess and apply theoretical knowledge in practice and address problems, above all by seeking out new sources of knowledge, through interdisciplinary work and through the application of scientific methods,
- generate new ideas,

- address problems and make decisions in practice,
- make decisions in complex and unexpected situations,
- communicate in an open manner and demonstrate proficiency in the use of information technology,
- pursue lifelong learning,
- communicate various intellectual concepts,
- demonstrate independence and self-criticism,
- show professional ethical responsibility,
- show independence and self-criticism and develop constructive dialogue,
- think analytically and act in the regional and wider area,
- show a sense of professional and ethical responsibility,

(subject-specific competences)

- demonstrate understanding of the operation and specific requirements of biotechnological processes,
- identify and address problems and prepare strategies directly or indirectly linked to a biotechnological process,
- plan new biotechnological processes and critically evaluate existing ones with minimum energy consumption and maximum adherence to sustainable use of environmental resources,
- plan new bioproducts taking into account consumer requirements,
- conserve natural genetic sources, perform target selection of domestic animals, and improve new cultivars and starter cultures,
- acquire and disseminate necessary knowledge using available scientific literature in the field of biotechnology and related fields,
- plan and analyse experiments/observations, evaluate them and select appropriate statistical methods.

## Assessment and completion

Examination performance is graded as follows: 10 (excellent); 9 (very good: above-average knowledge but with some mistakes); 8 (very good: solid results); 7 (good); 6 (adequate: knowledge satisfies minimum criteria); 5-1 (inadequate). In order to pass an examination, a candidate must achieve a grade between adequate (6) and excellent (10).

## Progression

Students may enrol in the next year if by the end of the academic year they have completed all course units prescribed by syllabuses and accumulated at least 54 credits.

## Transitions

Third-cycle doctoral study programmes (SQF level 10)

## Condition for obtaining certificate

In order to complete the programme, students must complete all course units prescribed by the study programme and subject syllabuses, for a total of 120 credits. Students must write a master's thesis, which must be given a passing grade and must be successfully presented and defended in public.

## Awarding body

University of Ljubljana, Faculty of Bioengineering

URL

<http://www.bf.uni-lj.si/en/>

---