

# Magister bioinformatike/magistrica bioinformatike

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## Selected qualifications

**Name of qualification** Magister bioinformatike/magistrica bioinformatike

**Translated title (no legal status)** Master of Science of Bioinformatics

**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 first-cycle (Bologna) study programme in relevant professional fields: bioinformatics, computer science, nursing care, medicine, natural sciences, pharmacy, engineering and biotechnology, or
- a first-cycle (Bologna) study programme in other professional fields (social sciences, humanities, social work), if before enrolment in the study programme the student has completed study requirements essential for the continuation of studies totalling 18 ECTS credits in subjects from the fields of healthcare (Healthcare ethics, Legal aspects, Organisation and management, Sociology, Physiology), computer science (Basics of computer science, Basics of ICT) or natural sciences (Basics of biochemistry, Basics of biophysics, Basics of chemistry) or
- a professional higher education programme adopted before 11 June 2004 in relevant professional fields: bioinformatics, computer science, nursing care, medicine, natural sciences, pharmacy, engineering and biotechnology, or
- a professional higher education programme adopted before 11 June 2004 in other professional fields (social sciences, humanities, social work), if before enrolment in the study programme the student has completed study requirements essential for the continuation of studies totalling 18 ECTS credits in subjects from the fields of healthcare (Healthcare ethics, Legal aspects, Organisation and management, Sociology, Physiology), computer science (Basics of computer science, Basics of ICT) or natural sciences (Basics of biochemistry, Basics of biophysics, Basics of chemistry).

## ISCED field

Field  
Zdravstvo in socialna varnost

## ISCED subfield

subfield interdisciplinarne izobraževalne aktivosti/zidi, pretežno zdravstvo in socialna varnost

## Qualification level

SQF 8  
EQF 7  
Second level

## Learning outcomes

The qualification holder will be able to:

General competences:

- ability to correctly apply basic knowledge in the field of scientific methods and laboratory techniques;
- advanced skills for the application of methods of molecular and cellular biology and biophysics to research and solve complex biomedical problems and systems;
- knowledge of genomics and proteomics methods and their application;
- knowledge of information technology methodologies and paradigms for storage, analysis, synthesis and visualization of genomic and proteomic data;

- competences for the design of health information systems in general and more specifically for the design of bioinformation systems;
- integrating organizational skills to support successful business decisions;
- use of scientific research methods for research in the field of bioinformatics.

Students will be able to:

- study modern theories that define the nature of knowledge in the theoretical and practical field of bioinformatics, and to discuss its relevance and application in clinical practice;
- describe the principles and application of research in bioinformatics and critically evaluate the research literature in relation to individual aspects of the field of bioinformatics;
- study the principles and methods for improving quality and consider the application of these principles;
- to study the ethical dimension of human behavior and to address the application of theories of morality in the theoretical and practical field of bioinformatics.

Subject-specific competences acquired through the programme are defined in each subject.

## **Assessment and completion**

Examination performance is scored 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, the candidate must achieve a grade between adequate (6) and excellent (10).

## **Progression**

Students may enrol in a higher year if by the end of the academic year they have met all requirements defined by the study programme for enrolment in a higher year.

## **Transitions**

Third-cycle doctoral study programmes (SQF level 10)

## **Condition for obtaining certificate**

To complete their studies, students must meet all requirements defined by the study programme.

## Awarding body

Univerza v Mariboru, Fakulteta za zdravstvene vede

URL

<https://www.fzv.um.si/en/postgraduate-2nd-degree-study-programme-bioinformatics>

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