

# Diplomirani inženir računalništva in matematike (un)/diplomirana inženirka računalništva in matematike (un)

# **Selected qualifications**

Name of qualification	Diplomirani inženir računalništva in matematike (un)/diplomirana inženirka računalništva in matematike (un)
Translated title (no legal status)	Bachelor of Science in computer science and mathematics
Type of qualification	Diploma prve stopnje (UN)
<b>Category of qualification</b>	Izobrazba
Type of education	Academic bachelor's education
Duration	3 years
Credits	180 credits

Admission requirements	<ul> <li>Matura or</li> <li>vocational matura in any four-year secondary school programme and an examination in the matura subject of Mathematics; if the candidate has already passed this subject in the vocational matura, an examination in any other matura subject; the chosen subject may not be a subject which the candidate has already taken in the vocational matura; or</li> <li>school-leaving examination (prior to 1 June 1995) under any four-year secondary school programme.</li> </ul>
ISCED field	Field Naravoslovje, matematika in statistika
ISCED subfield	subfield interdisciplinarne izobraževalne aktivnosti/izidi, pretežno naravoslovje, matematika in statistika
Qualification level	SQF 7 EQF 6

#### Learning outcomes

The qualification holder will be able to:

(general competences)

- use abstraction and analyse problems,
- synthesise and critically assess solutions,
- apply knowledge in practice,
- share knowledge, communicate professionally and express themselves in writing,

First level

- · search for sources and critically assess information,
- undertake autonomous professional work and work in an (international) group,
- develop professional responsibility and ethics,

(subject-specific competences)

- demonstrate basic competences in the field of theoretical computing, logic and discrete mathematics covering the basic theoretical knowledge, practical knowledge and skills essential for the interdisciplinary study of computer science and mathematics,
- translate practical problems into the language of mathematics and theoretical computer science and qualitatively analyse the mathematical problems obtained in this way,
- create algorithms to solve problems and implement developed algorithms in relevant programming environments,
- analyse and present results,
- demonstrate understanding of computer science and information science content and integrate it in other professionally relevant fields (economics, financial mathematics, organisational science, etc.),
- demonstrate practical knowledge and skills in the use of software, hardware and information technologies,

- independently perform less complex and complex developmental engineering and organisational tasks in their own fields,
- demonstrate basic competences in the field of computer science and mathematics that enable the continuation of studies in the second cycle.

#### **Assessment and completion**

Students' knowledge is assessed by means of practical exercises and seminar papers, and also via products, projects, performances, services, etc. and by examinations. 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, a candidate must achieve a grade between adequate (6) and excellent (10).

#### Progression

In order to enrol in the next year, students must have passed all examinations from the current year and previous years.

## **Transitions**

Second-cycle master's study programmes (SQF level 8)

### **Condition for obtaining certificate**

In order to complete the programme, students must pass all examinations and complete all other course units, including a bachelor's thesis for a total of 180 credits.

#### **Awarding body**

University of Ljubljana, Faculty of Mathematics and Physics, Faculty of Computer and Information Science

URL

http://www.fri.uni-lj.si/en/