

Magister inženir računalništva in matematike/magistrica inženirka računalništva in matematike

Selected qualifications

Name of qualification	Magister inženir računalništva in matematike/magistrica inženirka računalništva in matematike
Translated title (no legal status)	Master of Science in computer science and mathematics
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 interdisciplinary academic study programme in computer science and mathematics, mathematics, financial mathematics, computer science and information science; or
- a completed first-cycle professional higher education in computer and information science or a computer and information science programme leading to a professional higher education qualification adopted before 11 June 2004; or
- a completed first-cycle professional higher education in practical mathematics or a practical mathematics programme leading to a professional higher education qualification adopted before 1 June 2004; or
- a completed first-cycle study programme or a study programme leading to a professional higher education qualification adopted before 1 June 2004 in an engineering or natural science field, where the candidate has also mastered basic knowledge in the field of mathematics and computer science; prior to enrolment candidates must also complete course units essential for further study consisting of 60 credits; or
- a completed equivalent programme at another higher education institution in Slovenia.

ISCED field

Field
Naravoslovje, matematika in statistika

ISCED subfield

subfield interdisciplinarne izobraževalne aktivnosti/izidi, pretežno naravoslovje, matematika in statistika

Qualification level

SQF 8
EQF 7
Second level

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,
- 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 in-depth mastery of knowledge in the field of theoretical computing, logic and discrete

mathematics covering the basic and advanced theoretical knowledge, practical knowledge and skills essential for both the computer science and mathematics fields,

- translate practical problems into the language of mathematics and theoretical computer science and qualitatively analyse the mathematical problems obtained in this way,
- develop algorithms to resolve given problems and implement them in relevant programming environments,
- analyse in depth 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 mastery of practical knowledge and skills in the use of software, hardware and information technologies,
- autonomously perform complex developmental and organisational tasks in their own fields and cooperate with experts from other fields in the addressing of complex tasks and problems.

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, a candidate must achieve a grade between adequate (6) and excellent (10).

Progression

In order to enrol in the second year, students must have completed all first-year course units.

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 in the subjects in which they have enrolled, write and submit a master's thesis in accordance with rules, and successfully defend their master's thesis in public.

Awarding body

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

URL

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