SLOVENSKO
OGRODJE
KVALIFIKACIJ

Magister matematike/magistrica matematike

Selected qualifications

Name of qualification	Magister matematike/magistrica matematike
Translated title (no legal status)	Master of Science in 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 study programme in mathematics, of any stream, consisting of at least 180 credits; or
• a completed first-cycle programme consisting of at least 180 credits in the field of natural sciences, computer science, engineering sciences or economics, if prior to enrolment the candidate has completed the following course units essential for further study, consisting of 60 credits: Analysis II (8 Credits), Algebra (8 credits), Discreet Mathematics I (7 credits), Analysis III (11 credits), Numerical Methods and Symbolic Computation (11 credits), Algorithms and Data Structures (8 credits), Probability (7 credits); or
• a completed professional higher education programme, adopted before 11 June 2004, in the field of mathematics, of any stream; or
• a completed professional higher education programme, adopted before 11 June 2004, in the field of natural sciences, computer science, engineering sciences or economics, if prior to enrolment the candidate has completed the following course units essential for further study, consisting of 60 credits: Analysis II (8 Credits), Algebra (8 credits), Discreet Mathematics I (7 credits), Analysis III (11 credits), Numerical Methods and Symbolic Computation (11 credits), Algorithms and Data Structures (8 credits), Probability (7 credits).

ISCED field

Field
Naravoslovje, matematika in statistika

ISCED subfield

subfield matematika

Qualification level

SQF 8
EQF 7
Second level

Learning outcomes

The qualification holder will be able to:

(general competences)

- think analytically and demonstrate understanding of complex systems that enable participation in various interdisciplinary teams,
- demonstrate in-depth knowledge of general mathematics, computational mathematics or financial mathematics,
- think mathematically and provide proofs and arguments in a variety of mathematical fields,
- demonstrate a capacity for in-depth analytical thinking and argumentation,
- critically assess developments in the field of mathematics,
- resolve complex technical/work problems by finding sources of knowledge and applying scientific methods,
- develop communication skills,
- demonstrate autonomy in professional work,

- show cooperativeness and work in a team,

(subject-specific competences)

- demonstrate understanding of and solve more complex mathematical problems at a qualitative and quantitative level,
- describe a non-trivial situation through the correct use of mathematical symbols and notations,
- explain their understanding of more complex mathematical concepts and principles,
- solve more difficult mathematical (and other) problems through the application of modern technology,
- apply an algorithmic approach; develop an algorithm to resolve a given problem,
- analyse a given problem numerically, graphically and algebraically,
- deduce new logical conclusions from given data,
- confidently address a given non-trivial mathematical problem and find a solution,
- apply the approaches of scientific thinking to the quantitative treatment of problems in nature, the environment and society,
- demonstrate knowledge and understanding of the influence of mathematics on the development of other sciences.

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 accumulated at least 45 credits by passing examinations in any first-year subjects, and have completed all first-year lab class requirements.

Transitions

Third-cycle doctoral study programmes (SQF level 10)

Condition for obtaining certificate

In order to complete the programme, students must pass all examinations set out by the programme for a total of at least 120 credits, pass a master's examination and write and defend a master's thesis.

Awarding body

University of Maribor, Faculty of Natural Sciences and Mathematics

URL

http://fnm.um.si/index.php?lang=en