

Magister nanoznanosti in nanotehnologij/magistrica nanoznanosti in nanotehnologij

Selected qualifications

Name of qualification

Magister nanoznanosti in nanotehnologij/magistrica nanoznanosti in nanotehnologij

Translated title (no legal status)

Master of Science in nanoscience and nanotechnologies

Type of qualification

Diploma druge stopnje

Category of qualification

Izobrazba

Type of education

Master's education

Duration

2 years

Credits

120 credits

Admission requirements

Enrolment in the first year of the second-cycle programme is open to candidates who have completed:

- a first-cycle study programme consisting of at least 180 credits in a science, engineering or computing field, or a higher education programme in one of these fields comprising at least three years of lectures. Candidates must also be actively proficient in English, which they may prove by means of language certificates.
- Graduates of first-cycle study programmes consisting of 180 credits in other fields may submit an application to the MPŠ studies committee, which defines the course units candidate must complete before enrolling in the first year. These course units determined with reference to how different the field is and taken from the contents of the first-cycle programme - consist of between 10 and 60 credits. Candidates may complete them during the first-cycle programme, during supplementary study programmes or by passing examinations before enrolment in the master's programme.
- Candidates who have completed a first-cycle (undergraduate) programme consisting of 240 credits in the natural science, technology or engineering fields may enrol in the second year of the second-cycle programme; 60 credits are recognised for such candidates. On enrolment, compulsory examinations consisting of between 18 and 21 credits are defined on an individual basis, so that candidates can acquire knowledge that complements their previous studies.

ISCED field

Field

Tehnika, proizvodne tehnologije in gradbeništvo

ISCED subfield

subfield interdisciplinarne izobraževalne aktivnosti/izidi, pretežno

tehnika, proizvodne tehnologije in gradbeništvo

Oualification level

SOF 8 EOF 7

Second level

Learning outcomes

The qualification holder will be able to:

(general competences)

- research, select and organise information and synthesise solutions and anticipate their consequences,
- master research methods, procedures and processes, develop critical and self-critical judgement,
- apply knowledge in practice,
- perform professional work autonomously, and perform activities responsibly and creatively,
- develop communication skills and abilities, particularly in the international environment,
- develop ethical reflection and a commitment to professional ethics and regulations,
- cooperate and work to resolve common tasks and problems within a group and in the international

environment.

(subject-specific competences)

- demonstrate familiarity with basic laboratory and spectroscopic techniques in the field of nanoscience and nanotechnology,
- demonstrate understanding of systems on the atomic and molecular scale,
- integrate various types of knowledge in the identification and analysis of problems in nanotechnology,
- analyse the ethical aspects of practices, institutions and evaluations relating to nanotechnology,
- continue research and development work in the field of nanotechnology,
- demonstrate familiarity with the concepts of nanotechnology,
- acquire the basics of scientific and technical knowledge from the field of nanotechnology in the form of a combination of existing solutions.

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 progress to the next year, students must complete all the course units defined by the study programme for progression to the second year.

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 programme for a total of at least 120 ECTS credits.

Awarding body

Jožef Stefan International Postgraduate School, University of Ljubljana

URL

http://www.mps.si/splet/index.asp?lang=eng