

# Magister profesor fizike/magistrica profesorica fizike

## **Selected qualifications**

Name of qualification

Magister profesor fizike/magistrica profesorica fizike

**Translated title (no legal status)** 

Master of Arts in teaching physics

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 consisting of at least 180 ECTS credits in the field of physics (physics, physics for education); or
- a completed first-cycle study programme consisting of at least 180 ECTS credits from a scientific, mathematical or technical field, if prior to enrolment the candidate has completed the course units that are essential for further study. These course units consist of 7 ECTS credits, which candidates obtain by sitting differential examinations; or
- a completed professional higher education programme in the field of physics, adopted before 11 June 2004; or
- a completed professional higher education programme in a scientific, mathematical or technical field adopted before 11 June 2004, if prior to enrolment the candidate has completed the course units that are essential for further study. These course units consist of 7 ECTS credits, which candidates obtain by sitting differential examinations.

**ISCED** field

Field

Izobraževalne znanosti in izobraževanje učiteljev

**ISCED** subfield

subfield izobraževanje učiteljev s predmetno

specializacijo

**Qualification level** 

SQF 8 EQF 7

Second level

### **Learning outcomes**

The qualification holder will be able to: (general competences)

- demonstrate understanding and application of curriculum theories and basic didactic principles,
- analyse, synthesise and envisage solutions to technical and didactic problems,
- integrate contents in an interdisciplinary manner,
- apply knowledge in practice for the resolution of various problems,
- think creatively and encourage creative thinking in students,
- demonstrate a research approach and problem-solving orientation and responsibly direct own professional development in the process of lifelong learning,
- work creatively and autonomously,
- demonstrate knowledge and understanding of the development processes, differences and needs of individuals or groups,
- demonstrate knowledge and understanding of diversity and multiculturalism and observe the principle of non-discrimination in work,
- use a research approach both in the discipline and in education,
- use ICT in teaching and other professional work and develop information literacy in students,
- conduct technical dialogue, participate in international projects and design and manage projects,
- reflect on and evaluate the results of own work,
- demonstrate good knowledge of own profession and regulations governing the work of schools,

(subject-specific competences)

- apply the approaches of scientific thinking to the quantitative treatment of problems in nature, the environment and society,
- provide adequate technical literacy to students in the field of education in physics,
- demonstrate knowledge and application of established scientific terminology,
- demonstrate professional proficiency in the syllabuses, contents and concepts of secondary, vocational and elementary subjects with physics content in order to create learning conditions that enable students to build high-quality knowledge (durability, transferability, integrity),
- demonstrate the highest level of proficiency in the specific organisational forms of teaching science subjects: demonstration experiments and mass experiments during lessons, design of project days, leading study circles, mentoring research projects, cross-curricular planning and implementation of lessons, and research,
- demonstrate an excellent capacity to evaluate, select and use existing learning materials, teaching aids and ICT in the teaching of physics,
- demonstrate an excellent capacity to face the challenges of innovative approaches to learning, e.g. e-learning,
- demonstrate knowledge of contemporary achievements and trends in the teaching of physics and the possibility of incorporating these into lessons,
- think analytically and understand more complex systems that facilitate inclusion in various interdisciplinary groups,
- organise and lead education.

#### **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).

A condition for progression to the second year is the completion of at least 36 ECTS credits. The subjects completed must include Didactics of physics I and Practical training for teaching physics I.

Students must complete all requirements defined by the study programme in order to complete their studies.

#### **Progression**

A condition for progression to the second year is the completion of at least 36 ECTS credits. The subjects completed must include Didactics of physics I and Practical training for teaching physics I.

#### **Transitions**

Third-cycle doctoral study programmes (SQF level 10)

## **Condition for obtaining certificate**

Students must complete all requirements defined by the study programme in order to complete their studies.

## **Awarding body**

University of Maribor, Faculty of Natural Sciences and Mathematics

URL

http://www.fnm.um.si/index.php/en/home/