

# Magister profesor tehnike/magistrica profesorica tehnike

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## Selected qualifications

<b>Name of qualification</b>	Magister profesor tehnike/magistrica profesorica tehnike
<b>Translated title (no legal status)</b>	Master of Arts in teaching engineering
<b>Type of qualification</b>	Diploma druge stopnje
<b>Category of qualification</b>	Izobrazba
<b>Type of education</b>	Master's education
<b>Duration</b>	2 years
<b>Credits</b>	120 credits

## Admission requirements

- A completed first-cycle technical study programme consisting of at least 180 credits; or
- a completed first-cycle study programme in the field of the natural sciences or related fields, if prior to enrolment the candidate has completed the course units that are essential for further study. These course units consist of 24 ECTS credits, which candidates obtain by sitting differential examinations; or
- a completed study programme leading to a professional higher education qualification in a technical field, adopted before 1 June 2004; or
- a completed study programme leading to a professional higher education qualification in the field of the natural sciences or related fields, 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 24 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,

- apply previously acquired theoretical knowledge in practical cases,

(subject-specific competences)

- provide adequate technical literacy to students in the field of education in engineering,
- demonstrate knowledge and application of established technical terminology,
- demonstrate professional proficiency in the syllabuses, contents and concepts of higher education, secondary, vocational and elementary subjects with technical 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 technical subjects: design of project days, leading study circles, mentoring research projects, cross-curricular planning and implementation of lessons, and research,
- demonstrate advanced knowledge in the field of modelling and construction,
- demonstrate knowledge and application of modern numerical procedures for the dimensioning of mechanical components and structures,
- demonstrate knowledge and application of conventional and modern materials in the planning and manufacture of products,
- demonstrate knowledge and application of conventional and modern processing technologies (CAM, CIM, CQM, robotics, etc.),
- demonstrate knowledge and application of methods for programming modern computer-controlled machines and devices,
- demonstrate knowledge and application of modern methods for planning processes and systems,
- demonstrate knowledge and application of calculations, financial calculations and financial analysis in the design of products,
- 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).

## 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 engineering I, Modelling and construction, Modern materials and technologies and Practical training for teaching engineering 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?option=com\\_content&view=article&id=389&Itemid=34&lang=en](http://www.fnm.um.si/index.php?option=com_content&view=article&id=389&Itemid=34&lang=en)

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