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# Doktor znanosti/doktorica znanosti s področja elektrotehnike

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## Selected qualifications

<b>Name of qualification</b>	Doktor znanosti/doktorica znanosti s področja elektrotehnike
<b>Translated title (no legal status)</b>	Doctor of Philosophy in the field of electrical engineering
<b>Type of qualification</b>	Doktorat
<b>Category of qualification</b>	Izobrazba
<b>Type of education</b>	Doctoral education
<b>Duration</b>	3 years
<b>Credits</b>	180 credits

## Admission requirements

Admission requirements Enrolment in the doctoral study programme in Electrical Engineering is open to:

- graduates of second-cycle study programmes,
- graduates of former study programmes leading to an academic higher education qualification,
- graduates of former study programmes leading to a pre-Bologna research master's degree in engineering or science/mathematics subjects. Completed course units totalling 90 credits are recognised for such candidates,
- graduates of former study programmes leading to a specialisation following completion of an academic higher education programme in electrical engineering. Completed course units totalling 60 credits are recognised for such candidates,
- graduates of former study programmes leading to a specialisation following completion of a professional higher education programme in an electrical engineering field. Additional course units totalling 30 to 60 credits are set for such candidates by the Research, Postgraduate and Doctoral Studies Committee at the Faculty of Electrical Engineering,
- graduates of other universities in Slovenia or abroad in accordance with the conditions set out in the previous paragraphs.

## ISCED field

Field  
Tehnika, proizvodne tehnologije in gradbeništvo

## ISCED subfield

subfield tehnika, podrobneje neopredeljeno

## Qualification level

SQF 10  
EQF 8  
Third level

## Learning outcomes

Qualification holders are qualified to:

(general competences)

- carry out autonomous creative research and development work in the field of electrical engineering and beyond;
- keep abreast of and correctly evaluate the latest achievements in the wider field of electrical engineering;
- demonstrate a critical attitude to the results of their own research and development work;
- engage in active technical communication in written and oral form;
- work in a team with experts from various fields;
- show professional, environmental and social responsibility

(subject-specific competences)

- build on basic knowledge of electrical engineering;
- do creative research and development work in the following fields: power engineering, photovoltaic systems, electronics, microelectronics, optoelectronics, microsensor technology and nanostructures, mechatronics, embedded systems, intelligent systems, automation and robotics, metrology and quality assurance, biomedical engineering and informatics, information, communication and multimedia technologies;
- supplement their knowledge with knowledge of complementary fields and general skills, particularly communication skills in research and development and, more broadly, on the basis of the principle of selectivity and mobility.

## 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

Study requirements amounting to at least 50 credits must be met for progression from the first to the second year of doctoral studies.

Candidates who have met all of the study requirements for organised forms of study from the first and second year may enrol in the third year of post-graduate doctoral studies.

## Condition for obtaining certificate

In order to complete the programme and obtain the academic title of doktor/doktorica znanosti, candidates must successfully complete all course units defined by the programme and successfully defend a doctoral dissertation, for a total of 180 credits. Doctoral candidates must publish at least one scholarly article in the field of their doctorate in a journal indexed in SCIE. The doctoral candidate must be the lead author of the article. The scholarly article must be published or accepted for publication before submission of the doctoral dissertation.

## Awarding body

Faculty of Mechanical Engineering, University of Ljubljana

URL

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

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