

Archived

Doktor znanosti/doktorica znanosti s področja elektrotehnike

Selected qualifications

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

Admission requirements	 Enrolment in the doctoral programme in Electrical Engineering is open to candidates who have successfully completed an academic higher education (undergraduate) programme in one of the following subjects: electrical engineering, computing and informatics, physics, mathematics, industrial engineering (electrical engineering stream), mechanical engineering (mechatronics stream) with a final grade of at least 8 (very good); or who have taken part in research, as demonstrated by published papers and reports, and have had two years' work experience since graduation, and have at least passive proficiency in two world languages or active proficiency in one world language.
ISCED field	Field Tehnika, proizvodne tehnologije in gradbeništvo
ISCED subfield	subfield elektrotehnika in energetika
Qualification level	SQF 10 EQF 8

Learning outcomes

Qualification holders are qualified to:

general competences:

- develop innovative solutions by combining different original strategies or improving existing methods and approaches,
- solve complex problems by designing new tools or methods,
- prepare rational plans for the implementation of new ideas in order to bear results,

Third level

- quickly find, extract and synthesize information from both complete and incomplete sources,
- face the unknown, uncertain and anticipate change and difficulties,
- accept any failure and take appropriate action,
- act independently, persistently and accurately,
- look at things more broadly, flexibly and interdisciplinary,
- work with others
- manage time as well as material, human and financial resources,
- constantly cultivate curiosity, follow developments and quickly acquire new skills and knowledge,
- communicate successfully for different purposes and using different media,
- develop key competences for teamwork in interdisciplinary research groups.

subject-specific competences:

- in-depth understanding of theoretical and methodological concepts in selected narrow segments,
- excellent appropriate deep knowledge of past achievements in selected segments and their relationship with the wider research field,

- ability to use research methods and tools specific to selected segments,
- ability to independent, (self-) critical, conceptual and analytical thinking and synthesis of new knowledge, methods, technologies in selected segments,
- the ability to plan the research phases and divide the tasks required for the selected segments to achieve the intended result,
- ability to operate optimally in selected segments within the research group,
- the ability to document and report lessons learned in a way that is specific to selected segments,
- ability to use knowledge, ways of thinking, methods from selected narrow segments in solving new problems in selected and other segments of electrical engineering.

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 second year, students must have completed first-year course units totalling at least 40 ECTS credits, which must include a successfully passed examination in Research Methods and completion of Seminar 1. Students progress to the third year if they have completed all first-year examinations and accumulated at least 40 additional ECTS credits by completing second-year examinations. They must also complete Seminar 2.

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 180 ECTS credits.

Awarding body

Faculty of Electrical Engineering and Computer Science, University of Maribor

URL

https://feri.um.si/en/