

Magister inženir elektrotehnike/magistrica inženirka elektrotehnike

Selected qualifications

Name of qualification	Magister inženir elektrotehnike/magistrica inženirka elektrotehnike
Translated title (no legal status)	Master of Science in electrical engineering
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 study programme Electrical Engineering is open to candidates who have completed:

- a first-cycle academic or professional higher education programme consisting of at least 180 ECTS credits in the field of electrical engineering or related engineering or natural science/mathematics disciplines,
- a first-cycle academic or professional higher education programme consisting of at least 180 ECTS credits in fields not listed in the preceding paragraph, on condition that before enrolment in the second-cycle study programme Electrical Engineering they complete course units essential for further study consisting of 46 ECTS credits: Mathematics I, Mathematics II, Basics of Electrical Engineering I, Basics of Electrical Engineering II, Basics of Programming and Measurements.
- a professional higher education programme in the field of electrical engineering or related engineering or natural science/mathematics disciplines (before adoption of the Higher Education Act in 2004),
- a professional higher education programme (before adoption of the Higher Education Act in 2004) in fields not listed in the preceding paragraph, on condition that before enrolment in the second-cycle study programme Electrical Engineering they complete course units essential for further study consisting of 46 ECTS credits: Mathematics I, Mathematics II, Basics of Electrical Engineering I, Basics of Electrical Engineering II, Basics of Programming and Measurements.

In the case of restricted enrolment, candidates will be selected on the basis of the results of a test of their knowledge (selection examination) covering contents from the electrical engineering field

ISCED field

Field
Tehnika, proizvodne tehnologije in gradbeništvo

ISCED subfield

subfield elektronika in avtomatizacija

Qualification level

SQF 8
EQF 7
Second level

Learning outcomes

The qualification holder will be able to:

(general competences)

- carry out autonomous and creative research in the field of electrical engineering and more widely,
- autonomously keep abreast of the latest achievements in the electrical engineering field and critically assess them,

- communicate actively in writing and orally, both at a high technical level and at a popular level adapted to the target audience,
- make effective use of information and communication technologies and develop them,
- show professional, environmental and social responsibility,
- work in a team with experts from various fields

(subject-specific competences)

- demonstrate comprehensive mastery of basic and high-level expert
- electrical engineering knowledge,
- acquire knowledge from complementary technical fields and the business sector, demonstrate that they understand it,
- and assess it critically,
- plan and implement complex automated systems,
- plan and implement complex devices in the field of biomedical engineering,
- plan and implement complex power installations,
- plan and implement complex electronic assemblies and devices,
- plan and implement complex mechatronic systems and power electronics devices,
- plan and implement complex robotic systems,
- plan and implement complex telecommunications networks and information systems.

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, full-time and part-time students must have completed the course units prescribed by the study programme (lectures, practical classes, written tests, seminars, etc.) and gained the prescribed number of credits from the study programme by passing examinations.

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 in all subjects in which they have enrolled, and write and defend a master's thesis.

Awarding body

Faculty of Mechanical Engineering, University of Ljubljana

URL

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