

Doktor znanosti/doktorica znanosti s področja tehniškega varstva okolja

Selected qualifications

Name of qualification

Doktor znanosti/doktorica znanosti s področja tehniškega varstva okolja

Translated title (no legal status)

Doctor of Philosophy in the field of technical environmental protection

Type of qualification

Doktorat

Category of qualification

Izobrazba

Type of education

Doctoral education

Duration

3 years

Credits

180 credits

Admission requirements

- A completed second-cycle study programme; or
- a completed integrated master's programme consisting of 300 credits; or
- a completed study programme leading to an academic higher education qualification, adopted before 11 June 2004, consisting of at least 240 credits; or
- a completed study programme leading to a professional higher education qualification, adopted before 11 June 2004, and a study programme leading to a specialisation, together totalling at least 240 credits; such candidates are required to complete course units on ecology and environmental protection from the second-cycle programme totalling 30 credits before enrolling in the programme. Course units (selection of content) are determined for such candidates by the academic affairs committee of the Faculty of Mechanical Engineering, which takes into account the candidate's field of education (type of programme the candidate has completed),
- completed equivalent education in another country.

ISCED field

Field
Tehnika, proizvodne tehnologije in gradbeništvo

ISCED subfield

subfield interdisciplinarne izobraževalne aktivnosti/izidi, pretežno tehnika, proizvodne tehnologije in gradbeništvo

Qualification level

SQF 10
EQF 8
Third level

Learning outcomes

Qualification holders are qualified to:

- demonstrate mastery of knowledge in a chosen scientific field (e.g. construction and design of engineering and environmental systems, computer modelling of engineering and environmental systems, computer modelling and experimental modelling of environmental phenomena, advanced concepts in environmental protection management) and further develop that knowledge,
- find new sources of knowledge in the academic and professional spheres of environmental protection,
- plan, evaluate and build advanced technologies, innovative products and systems that can potentially be offered in global markets, either now or in the future,
- develop research methods across a broad spectrum of problems and in this way respond rapidly to new circumstances in both national and international contexts,
- master new technological procedures and processes,
- communicate knowledge in the form of lectures, expert appraisals and advice,
- find new solutions and use a research approach to the design and manufacture of products that are connected to new techniques and the most advanced technologies, and take a holistic approach to waste management,
- incorporate the findings of other disciplines into the broader field of technical protection of the environment,

- demonstrate individual creative thinking,
- demonstrate coherent mastery of basic knowledge and integrate knowledge from various areas,
- place new information and interpretations in the context of the fundamental discipline,
- demonstrate understanding of the basic structure of the fundamental discipline and the links between its sub-disciplines,
- demonstrate understanding of and apply the methods of environmental analysis,
- create detailed models of environmental systems,
- demonstrate understanding of economics of environmental protection,
- demonstrate knowledge of advanced waste water treatment processes,
- demonstrate understanding of the geology of the environment, the impact of energy production on the environment and the prevention of the negative impacts of these processes,
- demonstrate knowledge of hazardous substances released into the environment,
- demonstrate knowledge of legislation, strategy and control in environmental protection,
- demonstrate understanding of transmission phenomena in environmental systems.

Assessment and completion

Examination performance is graded 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 complete the following first-year course units: all three compulsory subjects (18 credits), at least two elective subjects (12 credits) and Research Methods 1 (12 credits). If a student fails to meet all progression requirements, the academic affairs committee of the relevant university member may approve enrolment in the second year at the student's request provided he or she has completed more than half of the first-year course units (more than 30 credits), was unable to complete the course units for justified reasons, as laid down in the Statute of the University of Maribor, and may be expected to complete the course units.

In order to progress to the third year, students must have completed all first-year course units (60 credits) and the following second-year course units: individual research I (30 credits) and II (30 credits), which must be presented to the competent chair. If a student fails to meet all progression requirements, the academic affairs committee of the Senate of the Faculty of Mechanical Engineering may approve enrolment in the third year at the student's request provided he or she has completed all first-year course units (60 credits) and more than half of the second-year course units (more than 30 credits), if he or she was unable to complete the course units for justified reasons, as laid down in the Statute of the University of Maribor, and may be expected to complete the course units.

Condition for obtaining certificate

In order to complete the programme, candidates must successfully complete all course units defined by the programme.

Awarding body

Faculty of Mechanical Engineering, University of Maribor

URL

<http://www.fs.um.si/en/study/study-programme/>
