
Magister znanosti/magistrica znanosti s področja tehniškega varstva okolja

Selected qualifications

Name of qualification

Magister znanosti/magistrica znanosti s področja tehniškega varstva okolja

Translated title (no legal status)

Master of Philosophy in the field of technical environmental protection

Type of qualification

Magisterij znanosti/umetnosti

Category of qualification

Izobrazba

Type of education

Master's education

Duration

2 years

Credits

120 credits

Admission requirements

Enrolment in the technical environmental protection study programme is open to candidates who have:

- completed an academic higher education programme in an engineering, technological or nature protection field, an industrial engineering or electrical engineering programme (mechatronics stream) with a final grade of at least 8; or taken part in research, as demonstrated by published papers and reports, and have at least two years' work experience,
- are proficient in at least one foreign language

ISCED field

Field
Tehnika, proizvodne tehnologije in gradbeništvo

ISCED subfield

subfield okoljevarstvena tehnologija

Qualification level

SQF 9
EQF 8
Third level

Learning outcomes

Qualification holders are able to:

(general competences)

- search for new sources of knowledge in the relevant professional and academic field,
- use research methods across a broad spectrum of problems and in new or changed circumstances, and take responsibility for leading highly complex work processes and systems,
- demonstrate proficiency in research methods, procedures and processes in the broader field of technical protection of the environment,
- design, advise on, plan and implement technical solutions in the field of environmental protection using professional critical judgement, self-critical assessment and responsibility,
- take into account professional excellence, social utility, ethical responsibility, a commitment to professional ethics and criteria for the environmental integrity of their creations,
- apply systemic concepts and principles of universality,
- carry out an independent technical assessment on the basis of scientific analysis and synthesis,
- display individual creative thinking, 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,
- effectively connect theory and practice,
- analyse problems, exclude unimportant effects, produce a synthesis, foresee possible solutions, select the best decision in a given moment and assess related consequences,
- communicate and work as part of a team in national and international contexts,

(subject-specific competences)

- 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,
- master new procedures in environmental process engineering, in particular advanced procedures for the treatment of waste water, the treatment of waste gases and waste management,
- demonstrate understanding of and apply the methods of environmental analysis,
- plan, evaluate and build advanced technologies, innovative products and systems that can potentially be offered in global markets, either now or in the future.

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 enrol in the second year, candidates must successfully pass examinations from three selected core subjects and complete 30 hours of individual research.

In the second year candidates sit three examinations from the range of elective subjects and complete 120 hours of individual research.

Transitions

Third-cycle doctoral study programme (SQF level 10)

Condition for obtaining certificate

In order to complete the programme, candidates must successfully complete all course units defined by the programme. Graduates of this programme must complete the programme by the 30.9.2016.

Awarding body

Faculty of Mechanical Engineering, University of Maribor

URL

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