
Diplomirani inženir tehniškega varstva okolja (un)/diplomirana inženirka tehniškega varstva okolja (un)

Selected qualifications

Name of qualification	Diplomirani inženir tehniškega varstva okolja (un)/diplomirana inženirka tehniškega varstva okolja (un)
Translated title (no legal status)	Bachelor of Science in technical environmental protection
Type of qualification	Diploma prve stopnje (UN)
Category of qualification	Izobrazba
Type of education	Academic bachelor's education
Duration	3 years
Credits	180 credits

Admission requirements

- Matura or
- vocational matura in any secondary school programme and an examination in one of the following matura subjects: mechanics, physics, mathematics, computing, electrical engineering, chemistry, biology, foreign language; the selected subject may not be a subject which the candidate has already taken in the vocational matura
- school-leaving examination prior to 1 June 1995

ISCED field

Field
Tehnika, proizvodne tehnologije in gradbeništvo

ISCED subfield

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

Qualification level

SQF 7
EQF 6
First level

Learning outcomes

The qualification holder will be able to:

(general competences)

- write technical reports on completed practical classes or a completed project/seminar,
- give oral presentations of seminars,
- find information online and use specific software tools
- draw up a timetable for project implementation
- calculate errors in laboratory measurements
- think creatively
- demonstrate understanding of the functioning of the environment and ways to manage it,
- demonstrate understanding of common relations and connections between processes and people at various levels of their operation in connection with the environment,
- demonstrate understanding of the impact of human actions on the environment at various levels (local and global),
- demonstrate understanding of the problem of environmental protection as an interdisciplinary problem, the management of which (in terms of prevention and remediation) requires familiarity with engineering, natural science, social science and other disciplines,
- transfer and apply theoretical knowledge from the field of technical environmental protection in practice and solve problems, above all by seeking new sources of knowledge and applying scientific methods,
- develop opportunities for communication within the discipline and across disciplines,
- show initiative and autonomy in decision-making and in managing complex work,

(subject-specific competences)

- construct and design technical and environmental systems,
- demonstrate knowledge of and use computer modelling of environmental phenomena,

- demonstrate understanding of existing and effective new technological procedures and processes,
- demonstrate understanding of and apply the methods of environmental analysis,
- demonstrate knowledge of and use physical modelling of environmental phenomena,
- demonstrate understanding of good management in environmental protection,
- demonstrate knowledge of and use advanced waste water treatment processes,
- demonstrate knowledge of the impact of energy production on the environment and prevent the negative impact of these processes,
- demonstrate knowledge of hazardous substances released into the environment,
- demonstrate knowledge of legislation, strategies and control in environmental protection,
- demonstrate understanding of transmission phenomena in environmental systems,
- demonstrate understanding of the holistic approach to waste management,
- plan management of groundwater as a source of drinking water,
- plan management of waste water and treatment plant sludge,
- plan the management and handling of waste,
- address air protection through analysis of immission and emission parameters of anthropogenic sources,
- incorporate the findings of other disciplines into the broader field of technical protection of the environment,
- identify 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 the preparation and implementation of international environmental agreements,
- demonstrate understanding of the organisation and implementation of national and local public environmental protection services.
- Maintain ecoremediation facilities and implement holistic environmental management using competences gained through fieldwork.

Assessment and completion

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 pass first-year examinations totalling at least 44 ECTS credits, which must include examinations in the following subjects: Abiotic factors, Biotic factors, Introduction to ecosystem technologies, Ecosystems, Water ecosystems and Land ecosystems. In order to progress to the third year, students must have passed all first-year examinations and second-year examinations totalling at least a further 40 ECTS credits. Examinations in the following second-year subjects are compulsory: Environmental legislation, Education for sustainable development, Ecosystem services and Ecoremediation in practice.

Transitions

Second-cycle master's study programmes (SQF level 8)

Condition for obtaining certificate

Students complete their studies when they have successfully met all prescribed requirements of a study programme.

Awarding body

Faculty of Mechanical Engineering, University of Maribor

URL

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