

# Inženir varstva okolja in komunale/inženirka varstva okolja in komunale

# **Selected qualifications**

Name of qualification

Inženir varstva okolja in komunale/inženirka varstva okolja

Translated title (no legal status)

Environmental protection and utilities engineer

Type of qualification

Višja strokovna izobrazba

**Category of qualification** 

Izobrazba

Type of education

Short cycle higher vocational education

**Duration** 

2 years

**Credits** 

120 credits

## **Admission requirements**

- Matura or vocational matura (previously school-leaving examination); or
- master craftsman/foreman/shop manager examination, three years' work experience and test in general education subjects at the level required for the vocational matura in secondary vocational education.

### **ISCED** field

Field

Tehnika, proizvodne tehnologije in gradbeništvo

## **ISCED** subfield

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

## **Qualification level**

SQF 6 EQF 5 Short cycle

## **Learning outcomes**

Students will be able to:

(general competences)

- keep records of and define environmental problems, analyse problems and prepare technically justified solutions,
- integrate knowledge from various fields when using and developing new technical environmental protection measures and applications in the field of supply chains and spatial planning,
- apply acquired knowledge for successful professional communication in the local and international environment,
- demonstrate mastery of standard methods, procedures in technological supply systems and environmental protection systems,
- manage and resolve specific work problems in the field of environmental protection, spatial planning and management of protected areas,
- develop a moral and ethical sense for honesty, accuracy and conscientiousness at work,
- use ICT on a constant basis in their own specific professional field.

#### (specific vocational competences)

- demonstrate understanding of the importance of prevention for environmental and nature conservation,
- use ICT and information management systems intensively and constantly in their specific field of work.
- resolve real-world specific environmental problems in the field of supply systems, environmental technologies, production processes, key activities in the natural environment (agriculture, forestry, hunting, fishing) and the urban environment,
- demonstrate awareness of the limited nature of raw materials and energy sources, the importance of economic use and re-use and the laws of the natural material and energy cycle,
- integrate knowledge from various areas and build it into specific solutions in environmental supply chains, technical environmental protection measures, spatial planning and management of

protected areas,

- develop skills in the application of knowledge in their specific technical area of work,
- autonomously monitor the development of the profession,
- plan and operate environmental supply systems,
- apply theoretical scientific bases in the planning and operation of sanitary engineering systems and the management of municipal waste, urban roads, other urban networks or utilities infrastructure and spatial systems,
- demonstrate familiarity with sectoral legislation with an emphasis on public services in the fields of
  environmental protection, nature protection and businesses, and with procedures relating to the
  planning and siting of utilities, industrial and small business activities in an area,
- demonstrate familiarity with processes of prevention of environmental impacts in settlements, industry and other activities and measures to prevent negative impacts on the environment,
- plan and manage the operation and maintenance of urban transport, spatial planning and, in part, other urban networks (municipal energy supply – hot water and gas supply networks) and demonstrate mastery of practical engineering knowledge for the maintenance and operation of facilities and plants,
- use practical engineering knowledge from the field of hydraulic engineering in the commercial sector (industrial water, process water and fire suppression water supply systems, industrial sewerage, treatment of industrial waste water) and energy supply, management of industrial waste, treatment of flue gases and prevention of emissions of various pollutants into the atmosphere, -demonstrate familiarity with the basics of sustainable farming and forest management, natural resources, watercourse regulation, landscape planning and rural renewal, -apply theoretical scientific knowledge in the management of ecosystems, protected areas and other areas with special or protected status (natural parks, national parks, wetlands).

## **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 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**

Students can advance to the 2. year if they have successfully completed the requirements of the modules, courses and practical education (including practical classes, seminar papers, projects, exams, etc.) of the 1. year and thus obtained a minimum of 45 ECTS. Students need to complete the requirements of the practical classes and courses in full.

Students can repeat a year if they have completed the requirements and practical courses of that year in the amount of at least 20 ECTS and the requirements of practical courses in full.

The committee at the higher vocational college shall approve the repetition based on the student's written application.

## **Transitions**

First-cycle study programmes (SQF, level 7)

## **Condition for obtaining certificate**

Diplomas are issued to students when they have completed all compulsory modules/subjects for a total of 72 credits (Communication (20 credits), Basics of Natural Science (11 credits) Environmental Supply Systems (29 credits), Legislation and Economics (12 credits)), elective modules totalling 38 credits (Spatial Planning and Public Services (18 credits), Utilities Infrastructure (20 credits), Industrial Pollution (18 credits), Protection of the Environment in the Manufacturing Sector (20 credits)), a freely elective subject (5 credits) and a bachelor's thesis (5 credits).

# **Awarding body**

Higher vocational colleges

URL

https://paka3.mss.edus.si/registriweb/ProgramPodatki.aspx?ProgramId=7146