

# Diplomirani inženir bionike (vs)/diplomirana inženirka bionike (vs)

# **Selected qualifications**

Name of qualification

Diplomirani inženir bionike (vs)/diplomirana inženirka bionike (vs)

Translated title (no legal status)

Bachelor of Applied Science in bionics

Type of qualification

Diploma prve stopnje (VS)

**Category of qualification** 

Izobrazba

Type of education

Professional bachelor's education

**Duration** 

3 years

**Credits** 

180 credits

**Admission requirements** 

- Matura or
- vocational matura; or
- school-leaving examination (prior to 1 June 1995) under any four-year secondary school programme.

#### **ISCED** field

Field

Tehnika, proizvodne tehnologije in gradbeništvo

#### **ISCED** subfield

subfield lesarska, papirniška, plastična, steklarska in podobna tehnologija

## **Qualification level**

SQF 7 EQF 6 First level

## **Learning outcomes**

The qualification holder will be able to:

(general competences)

- act in a moral and ethical manner i.e. show honesty, accuracy and conscientiousness at work,
- plan and organise their own work and the work of others,
- ensure the quality and efficiency of work in the working environment in accordance with the standards and rules of the profession,
- use modern information and communications technology,
- demonstrate understanding of professional and ethical responsibility,
- demonstrate awareness of the importance of continuing and lifelong education and impart knowledge,
- ensures the rational use of energy, materials and time,
- protect health and the environment and take responsibility for own safety and the safety of others,
- develop entrepreneurial characteristics, skills and behaviour,
- participate in the development of the profession and take the initiative to introduce new developments into the profession,
- use a foreign language to keep abreast of new developments in the profession and communicate with experts from other countries,

#### (subject-specific competences)

- use computerised bionic processing tools in work procedures and processes,
- make decisions on professional and business matters and address problems in the field of bionics,
- prepare implementation plans for bionic systems,
- participate in the preparation and running of bionics projects,
- participate in the planning, updating, supervision and optimisation of bionic and technical processes,
- identify and analyse existing bionic processes and incorporate new findings,
- incorporate renewable and alternative energy sources into bionic processes,
- keep abreast of information on bionic processes,
- use interdisciplinary knowledge of biology and engineering to resolve concrete challenges in the environment,
- seek models and solutions for engineering problems in nature,
- use modern bionic materials,
- resolve engineering problems through the implementation of nanotechnologies,
- pay due attention to ecology, sustainable development and biodegradability,
- improve the ergonomics of workplaces and working conditions,
- · handle raw materials and waste materials appropriately,

• ensure efficient energy consumption.

### **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**

In order to progress to the second year, students must have completed all course units prescribed by the study programme, for a total of at least 45 ECTS credits.

In order to progress to the third year, students must have completed all first-year course units and second-year course units totalling at least 45 ECTS credits.

#### **Transitions**

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

## **Condition for obtaining certificate**

To complete their studies, students must complete all course units prescribed by the study programme.

# **Awarding body**

Visoka Šola na Ptuju (independent higher education institution)

URL

http://vsp.scptuj.si/