

# diplomirani inženir strojništva (VS)/diplomirana inženirka strojništva (VS)

# **Selected qualifications**

Name of qualification

diplomirani inženir strojništva (VS)/diplomirana inženirka strojništva (VS)

Translated title (no legal status)

Bachelor of Applied Science in Mechanical Engineering

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** 

- school-leaving examination under any four-year secondary school programme or,
- matura or,
- vocational matura.

**ISCED** field

Field

Tehnika, proizvodne tehnologije in gradbeništvo

**ISCED** subfield

subfield metalurgija, strojništvo in kovinarstvo

**Qualification level** 

SQF 7 EQF 6 First level

# **Learning outcomes**

The qualification holder will be able to:

#### General competences:

- ability to understand a complex technical problem, analyse it and find analogies with related problems,
- ability to synthesize, evaluate solutions and solve implementation problems,
- developing the ability to think critically and self-critically,
- creativity and innovation,
- ability to work independently within the acquired knowledge,
- ability to manage a technological unit / department or project,
- communication and teamwork, including in an international environment,
- knowledge and use of modern ICT technologies,
- ability to apply theoretical knowledge in practice,
- ability to obtain information and knowledge from electronic, printed and other sources and their selection,
- understanding the need for continuous upgrading of knowledge,
- taking into account safety, economic and ecological principles in their work,
- commitment to professional ethics and adherence to the engineering code.

#### Subject-specific competences:

- theoretical basis in terms of mathematical presentation and solving practical problems, understanding the physical basics and knowledge of materials for planning modern production engineering,
- ability to plan, prepare and manage production with the help of modern production technologies,
- ability to use modern computer and information technology and quality assurance in production processes,
- acquisition of specific competences in toolmaking and design or production logistics by directing the student to an individual study module,
- knowledge of basic measuring instruments and measuring methods for control of measured quantities,
- knowledge of basic environmental, safety, energy and economic constraints and problems,
- mastery of independent project work in the field of study,
- ability to independently perform engineering and professional organizational work and solve independently well-planned tasks in the field of study.

#### **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**

Conditions for progression to the second year:

Students will be able to progress to second year if they collect 42 first-year credit points. Students will be required to pass the following exams:

- Engineering Mathematics,
- · Modern manufacturing technologies,
- Digital product development.

Conditions for progression to the third year:

Students will be able to progress to the third year if they completes all the obligations of the first year and collect at least 36 credit points of the second year. Students will be required to pass the following second year exams:

- · Production planning and management,
- Computer aided production,
- Modern mechatronic systems in production.

A student who shows above-average study results will be able to progress faster. The decision is made by the senate of the higher education institution on the basis of the candidate's request and the opinion of the Commission for Study Matters. The decision also determines the method of faster progress.

#### **Transitions**

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

## **Condition for obtaining certificate**

The study will be completed by those who will pass all the obligations prescribed by the study programme (exams in all compulsory subjects, selected elective subjects, practical / project training and diploma work) - and thus collect at least 180 ECTS.

# **Awarding body**

College of Industrial Engineering, Celje

URL

https://vspi.si/studijski-program/