SLOVENSKO
OGRODJE
KVALIFIKACIJ

Strojni tehnik/strojna tehnica

Selected qualifications

Podkovski kovač/podkovska kovačica

Name of qualification	Strojni tehnik/strojna tehnica
Translated title (no legal status)	Mechanical engineering technician
Type of qualification	Srednja strokovna izobrazba
Category of qualification	Izobrazba
Type of education	Upper vocational-technical education
Duration	2 years
Credits	120 credits

Admission requirements

The programme can be attended by anyone who has completed the programme of secondary vocational education and acquired one of the following titles:
• car mechanic, car tinsmith, car mechatronic, vehicle body repairer, car painter, tinsmith-roofer, precision mechanic, installer of machine installations, construction mechanic, metal construction maker, toolmaker, machine mechanic, metal shaper, metal shaper - toolmaker, watchmaker, goldsmith, industrial mechanic, electrician/energetic engineer, electrician/electronic engineer, electrician, construction machinery operator and agricultural mechanic, miner, geo-operator miner or
• has obtained equivalent education in line with previous regulations.

ISCED field

Field
Tehnika, proizvodne tehnologije in gradbeništvo

ISCED subfield

subfield metalurgija, strojništvo in kovinarstvo

Qualification level

SQF 5
EQF 4

Learning outcomes

The holder of the certificate is qualified to:

- use expertise, IT and software tools in the resolution of real practical problems in the discipline;
- size and shape machine parts, select standard machine elements and construct assemblies;
- mathematically solve technical problems in the field and elaborate analytical and graphic charts;
- employ technical terminology, process data in order to obtain information and keep technical and technology documentation;
- examine and make use of technical and technology documentation, technical regulations and standards as well as tehnical plans and manufacturer’s instructions;
- perform measurement and control procedures, use measurement and control machines, appliances, tools and aids;
- plan the steps from idea to the production of goods or supply of services;
- cooperate in projection and construction of new products and proposals leading to the improvements of the already existing products;
- select the technology procedure for processing, transformation or blending of products in the light of the materials and the purpose of use;
- select and use materials, tools and working instruments for processing and procedures in various fields of mechanical engineering;
- assess the rational use of energy, use of energy sources and waste management;
- assess development potential and the use of non-conventional energy sources and rational use of energy;
- evaluate eco-eligibility for the use of individual machines, appliances and systems;
- carry out and guarantee measures pertaining to health and safety at work, environment protection, fire safety and accident prevention;

- seek rational and professional solutions when conducting activities in the working environment;
- think entrepreneurially, judge critically and act responsibly and socially in the working environment;

Optional:

Spatial modelling and documentation preparation

- perform parameter and spatial modelling of products, assemble units and elaborate technical documentation;

Computer based technologies

- select working processes, programme NC machines by setting and correcting processing parameters;

Mass production tools and appliances

- construct tools and aids, assemble, dismantle, test and maintain tools;

Planning production processes in mechanical engineering

- plan technology processes and draw up basic technology documentation for production by taking into consideration its ergonomic impact;

Automation and robotics

- analyse the operation of control functions, determine automation type in production and assess the impact of robotics;

Energy systems

- identify and select energy appliances and machines as well as maintain and optimize energy systems;

Housing installations planning

- plan construction installation elements of heating, cooling and ventilation;

Energy generation and distribution

- monitor and control technology processes of heat generation and distribution.

In addition, the holder of the certificate also upgraded his/her key professional skills and competences with key general knowledge and skills in line with national standards.

Assessment and completion

Students' vocational abilities and skills and the fulfilment of conditions to obtain credits in accordance with the relevant education programme are established through verification and assessment. Assessment of students also takes into account non-formally acquired knowledge, which must be adequately demonstrated. Students are assessed using grades from 5 (excellent) to 1 (inadequate).

Progression

Students may progress to the next year if at the end of the academic year they achieve a passing grade in all general education subjects and relevant vocational modules set out in the school's operational curriculum, and have completed all extracurricular activities and practical on-the-job training, or progress on the basis of a programme faculty decision.

Transitions

Matura/vocational course, higher vocational education (SQF level 6), professional higher education (SQF level 7) and academic higher education (SQF level 7)

Condition for obtaining certificate

Students must successfully (i.e. with passing grades) complete all general education subjects, compulsory vocational modules, elective vocational modules and the open part of the curriculum. They must also complete extracurricular activities and work placement requirements and pass the vocational matura examination. The vocational matura comprises a compulsory section (written and oral examinations in Slovene and mechanical engineering) and an elective section (written and oral examination in a foreign language or mathematics and a product/service with oral presentation).

Awarding body

Vocational and technical secondary schools and adult education institutions.

URL

https://paka3.mss.edus.si/registriweb/ProgramPodatki.aspx?ProgramId=6442