SLOVENSKO
OGRODJE
KVALIFIKACIJ

Metalurški tehnik/metalurška tehnica

Selected qualifications

Diplomirani ekonomist (vs)/diplomirana ekonomistka (vs)	
Romski pomočnik/romska pomočnica	
Magister biotehnologije/magistrica biotehnologije	
Compare Selected	Clear

Name of qualification
Metalurški tehnik/metalurška tehnica

Translated title (no legal status)
Metallurgical Technician

Type of qualification
Srednja strokovna izobrazba

Category of qualification
Izobrazba

Type of education
Upper secondary technical education

Duration
4 years

Credits
240 credits

Admission requirements

Anyone who has successfully completed basic education or short upper secondary vocational education or equivalent education according to previous regulations can enroll in the educational programme.

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:

- study and use of technical and technological documentation, technical regulations and standards and technical plans for metallurgical processes;
- use of expertise, information technologies and software tools in solving real practical problems in the metallurgical profession;
- mathematical solution of technical problems in their professional field and production of analytical and graphic representations;
- use of professional terminology, data processing for obtaining information and management of technical and technological documentation;
- distinction between primary and secondary raw materials and production processes of metals and alloys;
- selection of appropriate raw materials and auxiliary materials on the basis of economic, technological and quality assurance system requirements;
- use of materials classification, material conditions and standards;
- participation in the preparation, selection and management of technological processes for the extraction of metals and alloys, plastic processing and heat treatment;
- monitoring, setting and recording technological parameters of metallurgical production processes and analysis and evaluation of results;
- planning the order of operations and monitoring the productivity and capacity of individual machines or devices;
- directing and, if necessary, correcting the metallurgical process or technological process;
- selection of sampling procedures, preparation of samples for metallographic examinations and performance of basic mechanical and technological tests of materials;
- assessment of rational use of energy, use of energy sources and waste management;
- assessment of the possibilities of development and use of unconventional energy sources and rational use of energy;
- assessment of the ecological justification of the use of individual machines, devices and systems;
- implementation and provision of measures for safety and health at work, environmental protection, fire safety and accident prevention;
- finding rational and professional solutions in carrying out activities in the work environment;
- critical judgment and economical, responsible and social behavior in the work environment;

Optional:

- selection of special heat treatment procedures and preparation of the technological path of the selected technological process.
- monitoring of basic technological parameters in the implementation of heat treatment and evaluation.
- implementation of the melt preparation process and selection of the foundry process.
- monitoring the technological path of cast iron preparation, casting technology and heat treatment of castings.
- optimization of technological procedures of individual phases of the work process and monitoring the efficiency of metallurgical processes.
- use of principles and methods for production scheduling, structured problem solving and error correction.
- identification of energy systems in metallurgy and search for technological solutions for efficient energy use in metallurgical processes.
- consideration of the criteria of sustainable development in the selection of energy and technological plants in metallurgy.

The certificate holder has also upgraded key professional knowledge and skills with key general knowledge in accordance with national standards.

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

Students who are positively assessed at the end of the school year from all general education subjects and professional modules of the year of the school implementation curriculum and have completed all activities of interest and all obligations of practical training with work or progress according to the decision of the program teachers can progress to the senior year.

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

The student must successfully (with positive grades) pass all general education subjects, compulsory professional modules, elective professional modules and the open part of the curriculum. In addition, he must also perform extracurricular activities, obligations in practical training with work and vocational matura.
The vocational matura includes a compulsory part (written and oral exam in Slovene and design in arranging) and an optional part (written and oral exam in a foreign language or mathematics and a product or service and defense).

Awarding body

Vocational and technical secondary schools and adult education institutions.

URL

https://paka3.mss.edus.si/registriweb/ProgramPodatki.aspx