
Archived

Metalurg/metalurginja

Selected qualifications

Pletar/pletarka ✖

Name of qualification Metalurg/metalurginja

Translated title (no legal status) Metallurgist

Type of qualification Srednja poklicna izobrazba

Category of qualification Izobrazba

Type of education Upper secondary vocational education

Duration 3 years

Credits 180 credits

Admission requirements

- Elementary school education or
- lower vocational education, or
- equivalent education under previous regulations.

ISCED field Field
Tehnika, proizvodne tehnologije in gradbeništvo

ISCED subfield

subfield metalurgija, strojništvo in kovinarstvo

Qualification level

SQF 4
EQF 4

Learning outcomes

Certificate holders will be able to:

- heat treatment, deep hardening and surface hardening, forming and casting of metals and alloys with regard to product requirements and technological documentation;
- operate, supervise and prepare machines, devices, tools and instruments for metallurgical and machining processes;
- carry out preventive maintenance of furnaces, plants and tools and participate in repairs and maintenance of melting equipment;
- identify and eliminate causes of faults and disruptions in metallurgical and metalworking processes;
- complete the required work records, working and technological documentation and documents on the state of furnaces and metal melting plants;
- use measurement and control machines, devices, tools and appliances and supervise the implementation of material testing processes;
- inspect and prepare transport/handling devices and auxiliary devices;
- prepare, read and understand simple technical documentation;
- implement protective measures for safe work and actively protect own health;
- show a positive attitude towards measures to reduce pollution, improve protection of the environment and promote the rational use of energy and materials;
- use modern information technology and user software in their vocational field (word processor and spreadsheets, email, control software for machines, diagnostic devices, monitoring of production/work);
- demonstrate understanding of the roles of entrepreneurship, costs management and calculations;

(elective)

- select, manage and supervise the appropriate metallurgical process for the forming of metals and alloys with regard to product and documentation requirements;
- manage and supervise the process of melting and casting ferrous and non-ferrous metals and alloys, prepare melt for casting, manufacture casting moulds and cores and keep the appropriate technological documentation;
- select the appropriate heat treatment with regard to product and documentation requirements and supervise the heat treatment process;
- manage and supervise the process of casting metals (pressure casting, sand casting, ingot mould casting, continuous casting, centrifugal casting, etc.);
- manage and supervise the process of melting metals (introducing the charge, melting, alloying, refining the melt, degassing, desulphurisation, removal of slag/dross, adjustment);
- demonstrate mastery of the techniques and processes of metal forging and the pressing and handling of forged products;
- demonstrate mastery of the techniques and processes of rolling and the handling of rolled products.

Certificate holders supplement their key vocational knowledge and abilities with key general knowledge 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 a higher year if at the end of the academic year they achieve a positive score in all general education subjects and technical modules for the year as 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. For students with individual learning agreements, passing an intermediate test is a condition for progression from the second year to the third year.

Transitions

Secondary technical, vocational or vocational-technical education; master craftsman/foreman/shop manager examination (SQF level 5)

Condition for obtaining certificate

Students must successfully (i.e. with passing grades) complete all general education subjects, compulsory vocational modules and elective vocational modules and the open part of the curriculum. They must also complete all extracurricular activities, practical on-the-job training and pass a school-leaving examination.

The school-leaving examination comprises a written and oral examination in Slovene, a service and an oral presentation.

Awarding body

Vocational and technical secondary schools and adult education institutions.

URL

<https://paka3.mss.edus.si/registriweb/ProgramPodatki.aspx?ProgramId=5782>
