

1. TITLE OF THE CERTIFICATE AND OF THE EDUCATION PROGRAMME (SL) <sup>(1)</sup>

**Spričevalo o poklicni maturi po izobraževalnem programu:**

**STROJNI TEHNIK**

(ID: 769041)

<sup>(1)</sup> In native language.

2. TRANSLATED TITLE OF THE CERTIFICATE AND OF THE EDUCATION PROGRAMME (EN) <sup>(1)</sup>

**School-leaving certificate:**

**MECHANICAL ENGINEERING TECHNICIAN**

(ID: 769041)

<sup>(1)</sup> This translation has no legal status.

3. ACQUIRED KNOWLEDGE, SKILLS AND PROFESSIONAL COMPETENCES

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 technical 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:

- perform parameter and spatial modelling of products, assemble units and elaborate technical documentation;
- select working processes, programme NC machines by setting and correcting processing parameters;
- construct tools and aids, assemble, dismantle, test and maintain tools;
- plan technology processes and draw up basic technology documentation for production by taking into consideration its ergonomic impact;
- analyse the operation of control functions, determine automation type in production and assess the impact of robotics;
- identify and select energy appliances and machines as well as maintain and optimize energy systems;
- plan construction installation elements of heating, cooling and ventilation;
- 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.

4. RANGE OF OCCUPATIONS ACCESSIBLE TO HOLDER OF THE CERTIFICATE

The holder of the certificate can find employment at:

- all industrial, craft and repair activities, trade or non-commercial activities;
- areas pertaining to construction, sizing and manufacture of machine parts of tools and appliances;
- areas pertaining to production and maintenance of machine parts and equipment;
- areas pertaining to process parameter measurement and control, use and distribution of energy and energy sources.

<sup>(1)</sup> Explanatory note

This document is designed to provide additional information about the specified certificate and does not have any legal status in itself. The format of the description is based on the following texts: Council Resolution 93/C 49/01 of 3 December 1992 on the transparency of qualifications, Council Resolution 96/C 224/04 of 15 July 1996 on the transparency of vocational training certificates, and Recommendation 2001/613/EC of the European Parliament and of the Council of 10 July 2001 on mobility within the Community for students, persons undergoing training, volunteers, teachers and trainers.

More information available at: <http://europass.cedefop.eu.int>

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5. OFFICIAL BASIS OF THE CERTIFICATE	
<b>Name and status of the body awarding the certificate</b>  The institution is accredited with the Ministry of Education, Science and Sport.	<b>Name and status of the national/regional authority providing accreditation/recognition of the certificate</b>  Ministry of Education, Science and Sport Masarykova 16 SI-1000 Ljubljana <a href="http://www.mss.gov.si/">http://www.mss.gov.si/</a>
<b>Level of the certificate (national or international)</b>  Technical secondary education European classification ISCED 3 National classification <sup>1</sup> KLASIUS-SRV: 15001 KLAISUS-P: 5210	<b>Grading scale</b>  5 – excellent 4 – very good 3 – good 2 – sufficient
<b>Access to next level of education/training</b>  Education programme completed with the Vocational Matura exam enables enrolment to higher vocational and professional study programmes. Passing an additional General Matura exam is required to enrol to one of the university study programmes, which allow this possibility.	<b>International agreements</b>  The Republic of Slovenia has concluded agreements on the recognition of education with individual countries. The relevant information is available at ENIC/NARIC - the National Academic Recognition Information Centre.
<b>Legal basis</b>  Organisation and Financing of Education Act (Uradni list RS, no. 16/07 and 36/08) Vocational and Technical Education Act (Uradni list RS, no. 79/06)	
6. OFFICIALLY RECOGNISED WAYS OF ACQUIRING THE CERTIFICATE	
Time of the education	4 years
Number of credits <sup>2</sup>	240 credits
General education	100 credits
Professional education	75 credits
Practical education at the employer	14 credits
Extracurricular activities	14 credits
Open curriculum <sup>3</sup>	33 credits
Vocational matura	4 credits
<b>Entry requirements</b> The programme can be attended by anyone who has completed the programme of primary education or lower vocational education or equivalent education in line with previous regulations.	
<b>Additional information</b> <ul style="list-style-type: none"> <li>- <a href="http://www.mss.gov.si/">Ministry of Education, Science and Sport (http://www.mss.gov.si/)</a>: Education programme and description of education and schooling in Slovenia</li> <li>- <a href="http://www.nrpslo.org">National Reference Point for Vocational Qualifications - NRP (http://www.nrpslo.org)</a></li> <li>- <a href="http://www.europass.si">National Europass Centre (www.europass.si)</a></li> </ul>	

<sup>1</sup> Classification system in education and training – KLASIUS (Official Journal of the Republic of Slovenia, No. 46/06) comprises two sub-systems: Classification of activity types/education and training results (KLASIUS-SRV) and Classification of activity areas/education and training results (KLASIUS-P).

<sup>2</sup> One credit equals 25 hours of candidate's work.

<sup>3</sup> Goals of the open curriculum are defined by schools in cooperation with companies on a local/regional level.

## 7. A DETAILED DESCRIPTION OF EDUCATION

### GENERAL EDUCATION:

1. Slovene (24 credits)
2. Mathematics (19 credits)
3. Foreign language 1 (20 credits)
4. Art (3 credits)
5. History (5 credits)
6. Geography or Sociology or Psychology (3 credits)
7. Physics (6 credits)
8. Chemistry (3 credits)
9. Physical education (14 credits)

### PROFESSIONAL EDUCATION:

#### Mandatory Modules (43 credits)

1. Technical communication (7 credits)
2. Construction planning (6 credits)
3. Business administration and organization (3 credits)
4. Efficient energy use (6 credits)
5. Material properties, primary design and modification (3 credits)
6. Operation of control and electronic components (7 credits)
7. Materials processing (6 credits)
8. Joining of materials and thermal treatment (5 credits)

#### Optional Modules (32 credits)

9. Spatial modelling and documentation preparation (8 credits)
10. Computer based technologies (8 credits)
11. Mass production tools and appliances (8 credits)
12. Planning production processes in mechanical engineering (8 credits)
13. Automation and robotics (8 credits)
14. Energy systems (8 credits)
15. Housing installations planning (8 credits)
16. Energy generation and distribution (8 credits)

### OPEN CURRICULUM (33 credits):

The open curriculum is determined by the school in cooperation with companies on the local level.

### PRACTICAL EDUCATION:

1. Practical training in school
2. Practical training through work placement at the employer

### EXTRACURRICULAR ACTIVITIES (14 credits):

Extracurricular activities involve compulsory activities, programme-related content and electives.

### VOCATIONAL MATURA:

Mandatory part:

- written and oral exam of Slovenian language
- written and oral exam in Mechanical engineering.

Optional part:

- written and oral exam in a Foreign language or Mathematics
- presenting and defending a project or service (4 credits):

### OTHER NOTES:

# STRUCTURE OF THE EDUCATION SYSTEM IN THE REPUBLIC OF SLOVENIA

