

**1. TITLE OF THE CERTIFICATE (HU)**

52 5422 01 ELEKTROTECHNIKAI TECHNIKUS

2. TRANSLATED TITLE OF THE CERTIFICATE (EN)ELECTRICAL ENGINEERING TECHNICIAN
(THIS TRANSLATION HAS NO LEGAL STATUS)**3. PROFILE OF SKILLS AND COMPETENCES****A typical holder of the certificate is able to:**

- perform professional tasks relevant to the field of electrical engineering;
- work as electrician, electrical engineer, engine winder, mechanic of household equipment, mechanic of elevators etc., after having obtained the necessary professional experience;
- perform tasks for co-designers, editors, investment and foremen;
- perform tasks for electricians, energy experts and foremen with additional professional examinations and appropriate local knowledge;
- prepare and apply technical drawings;
- interpret electrical drawings, based on theoretical operation drawings, prepare and use mounting drawings,
- prepare measurement records;
- measure electrical basic quantities in a one- and three-phase voltage system;
- perform measurements related to review of electrical networks and equipment for standardisation and protection against electric shocks;
- review and check management technology and protection devices related to electrical networks and equipment;
- perform the measurement of the most important operative characteristics of transformers, asynchronous and synchronous machines and DC machines;
- apply electrical wiring technologies and circuits of communal buildings;
- install main consumer equipment;
- perform connection to the electricity provider network, establish measurement points;
- apply industrial electrical engineering technologies;
- select mounting technologies and devices taking into account the relevant standards;
- perform tasks related to mounting, bundling and connection on low-voltage overhead and cable networks;
- know the structures, connections and main parameters of one- and three-phase transformers;
- start engines, change rev and rotation direction, brake;
- operate DC drives in a regulated manner;
- operate auxiliary electrical equipment for synchronous generators;
- know the structure of electricity systems and electricity distribution systems;
- build and operate heavy current connection devices;
- recognise possibilities for network voltage regulation, perform regulatory tasks;
- calculate the lockdown power and performance of simple networks;
- know the methods for lockdown limitation;
- measure the size of low-voltage supply, distribution and circuit line;
- know the protection of electrical networks, automatics for operation and breakdowns;
- know the protection of main electrical equipment (transformator and generator), automatics for operation and breakdowns;
- know the structure and operation of, install and operate industrial and household electrical heating and cooling equipment;
- plan, build electromechanic control devices, check their operation;
- build, install and operate engine controls (engine protector, starter, rotation direction switch, rev switch)
- install and operate computer, microprocessor and PLC-driven industrial processes;
- make heavy current connection and control drawings;
- if personal aptitude allows for it, manage independent entrepreneurs and partnerships, perform tasks related to technical administration and commerce.

4. RANGE OF OCCUPATIONS ACCESSIBLE TO THE HOLDER OF THE CERTIFICATE

3118 Electrical (power current) engineering technician

(*) Explanatory notes:

This document is designed to provide additional information about the specified certificate and does not serve as a legal certificate of vocational qualification. The format of the description is based on the following documents:

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 on transparency is available at: <http://europass.cedefop.europa.eu/>

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SAMPLE

5. OFFICIAL BASIS OF THE CERTIFICATE

<p>Name and status of the institute issuing the certificate</p>	<p>Name and status of the national/regional authority providing accreditation/recognition of the certificate</p> <p>In the case of vocational qualifications belonging to the competence of the Ministry of Education (ME), a vocational qualification-related independent professional committee commissioned by the ME</p>																								
<p>Level of the certificate (national or international)</p> <p>Level of vocational qualification according to the National Qualification Register: 52 Intermediate vocational qualification entitling the holder to fill positions requiring physical or intellectual work, which is based on the input competence determined in the vocational and examination requirements, on preliminary vocational qualification or on the baccalaureate.</p> <p>ISCED97 code: 4CV</p>	<p>Grading scale / Pass requirements</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">Five -grade:</td> <td style="width: 10%; text-align: center;">5</td> <td style="width: 75%;">excellent</td> </tr> <tr> <td></td> <td style="text-align: center;">4</td> <td>good</td> </tr> <tr> <td></td> <td style="text-align: center;">3</td> <td>satisfactory</td> </tr> <tr> <td></td> <td style="text-align: center;">2</td> <td>pass</td> </tr> <tr> <td></td> <td style="text-align: center;">1</td> <td>fail</td> </tr> </table> <p>Vocational qualification examination after the completion of vocational training</p> <p>Parts of the examination: - Vocational theory - Vocational practice</p> <p>A successful vocational qualification examination requires a pass grade both in vocational theory and practice.</p>	Five -grade:	5	excellent		4	good		3	satisfactory		2	pass		1	fail									
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<p>Certificate number: PT K</p> <p>Serial number: 123456</p> <p>Certificate issue date: 2023.09.14</p>	<p>Description of vocational theoretical and practical subjects and their grades according to the five-grade scale</p> <p>1. Grades of vocational theoretical examination subjects</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td colspan="2">Topics/subjects of written examination</td> </tr> <tr> <td style="width: 80%;">Electrical Engineering</td> <td style="width: 20%; text-align: center;">5</td> </tr> <tr> <td>Power Currents</td> <td style="text-align: center;">5</td> </tr> <tr> <td>Grade of Written Examination</td> <td style="text-align: center;">5</td> </tr> <tr> <td colspan="2">Topics/subjects of oral examination</td> </tr> <tr> <td>Electrical Engineering</td> <td style="text-align: center;">5</td> </tr> <tr> <td>Power Currents</td> <td style="text-align: center;">5</td> </tr> <tr> <td>Grade of Vocational Theory</td> <td style="text-align: center;">5</td> </tr> </table> <p>2. Assessment of vocational practical preparedness</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td colspan="2">Subjects of practical examination</td> </tr> <tr> <td>Workshop Practice</td> <td style="text-align: center;">5</td> </tr> <tr> <td>Electrical Measurements</td> <td style="text-align: center;">5</td> </tr> <tr> <td>Grade of Vocational Practice</td> <td style="text-align: center;">5</td> </tr> </table>	Topics/subjects of written examination		Electrical Engineering	5	Power Currents	5	Grade of Written Examination	5	Topics/subjects of oral examination		Electrical Engineering	5	Power Currents	5	Grade of Vocational Theory	5	Subjects of practical examination		Workshop Practice	5	Electrical Measurements	5	Grade of Vocational Practice	5
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<p>Other information concerning the vocational training process</p>																									
<p>Legal basis</p> <p>Act LXXVI of 1993 on vocational training, Decree 27/2001 (VII. 27.) OM of the Minister of Education on the amendment of Decree 7/1993 (XII. 30.) MüM of the Minister of Labour on the National Qualifications Register, Decree 26/2001 (VII. 27.) OM of the Minister of Education on the general rules and rules of procedure of vocational examinations, Decree no. 50/1999. (IX.10.) GM of the Minister of Economic Affairs on the amendment of Decree no. 5/1997. (III.5.) IKIM of the Minister of Industry, Trade and Tourism on qualifications required for performing specific industrial, commercial and tourism related activities, Decree 20/1996. (III.28.) of the Minister of Industry and Trade (IKM) on vocational and examination requirements of Electrotechnical technician, Central programme approved by the Minister of Labour (MüM) under approval number 4148/97. III.23.</p>																									

6. OFFICIALLY RECOGNISED WAYS OF ACQUIRING THE CERTIFICATE

Description of vocational education and training received	Percentage of total programme %	Duration (hours/weeks/months/years)
School-/training centre-based	Theory: 70 % Practice: 30 %	
Workplace-based		
Accredited prior learning		
Total duration of the education/training leading to the certificate		2 years

Entry requirements:

- Secondary school leaving examination

Further information:

MANDATORY VOCATIONAL THEORETICAL SUBJECTS

Occupational safety and environmental protection	100 hours
Basic studies in economics	100 hours
Study of materials	100 hours
Technical Drawing	100 hours
Electrical Engineering	100 hours
Electronics	100 hours
Applied Computer Technology 1	100 hours
Mathematics for Technical Purposes	100 hours
Knowledge of Related Mechanical Engineering Issues	100 hours
Quality Assurance	100 hours
Automation	100 hours
Electric Works	100 hours
Electrical machines	100 hours
Filled in by the exam organiser.	

MANDATORY VOCATIONAL PRACTICAL SUBJECTS

Basic Practical Training	100 hours
Practice in Electronics	100 hours
Workshop Practice	100 hours
Technical Measurements	100 hours
Filled in by the exam organiser.	

Further information (including the description of the national grading method):

The basis of the grading system is a list of vocational and examination requirements compiled in accordance with uniform criteria and structure, issued in the form of legal regulation that includes the following:

- identification number and description of the vocational qualification as specified in OKJ and the relevant FEOR number,
- school and vocational prequalification required for the start of the training, aptitude and vocational competence requirements and prescribed practice,
- the most typical occupation or activity accessible to the holder of the vocational qualification certificate, the short job description, and the list of related vocational qualifications,
- the duration of the training required for the vocational qualification; maximum number of hours; the ratio of theoretical and practical training; the number of vocational training classes in the vocational training school; the duration of initial training period; the possibility of organising a grade examination assessing the efficiency of practical training,
- occupational requirements of vocational qualification,
- requirements pertaining to vocational examination.

The vocational and examination requirements will be classified by the occupational group committees of the National Qualification Register (OKJ) and by the National Council for Vocational Training, and subsequently they will be issued in the form of legal regulations.

Vocational and examination requirements are available at: <http://www.nive.hu>

This certificate supplement was prepared on the basis of the instruction for filling in the Certificate Supplement published on the homepages of the National Reference Point and the National Europass Centre.

National Reference Point – NSZFH – <http://nrk.nive.hu>

Head of Examination Organiser:

Issue date: 2023.09.14

SEAL