

**1. TITLE OF THE PROFESSION**

5 0732 06 16 Útépítő, vasútépítő és -fenntartó technikus

**2. TRANSLATED TITLE OF THE PROFESSION**Road and railway construction and maintenance technician  
(THIS TRANSLATION HAS NO LEGAL STATUS)**3. PROFILE OF SKILLS AND COMPETENCES**

- prepare, independently or under the supervision of an engineer, plans relating to the construction of transport infrastructure, and carry out technical tasks relating to the construction, operation and maintenance of road and rail infrastructure;
- gain an insight into the steps of construction planning and carry out subtasks relating to it;
- establish a link between the tasks of engineers and the tasks of skilled workers involved in execution;
- coordinate and organise certain work processes, and manage the experts under their supervision;
- draw up documentation relying on their technical specialised knowledge;
- use both traditional and state-of-the-art equipment and tools in their work;
- work in a disciplined and cooperative manner on the railway track, and think creatively and solve problems appropriately and effectively in the course of road construction and operation activities.

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

1313 Construction manager  
3117 Architecture and construction engineering technician  
3133 Surveying and GIS (Geographical Information Systems) technician  
3136 Draughtsperson  
3139 Other technician not elsewhere classified  
3213 Construction supervisor

**(\*) Explanatory notes:**

<sup>1</sup> In the original language. | <sup>2</sup> The translation of the designation is provided for information purposes only. | <sup>3</sup> Fill it out if necessary. The certificate supplement provides additional information on the qualification but have no legal value in itself. The format of the description is in conformity with Decision (EU) 2018/646 of the European Parliament and of the Council of 18 April 2018 on a common framework for the provision of better services for skills and qualifications (Europass) and repealing Decision No 2241/2004/EC.

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## 5. OFFICIAL BASIS OF THE CERTIFICATE

<p><b>Name and status of the authority issuing the certificate</b></p>	<p><b>Name and status of the national/regional authority providing accreditation/recognition of the certificate</b></p> <p>Ministry for Innovation and Technology</p>																																
<p><b>Level of the certificate (national or international)</b></p> <p><b>NQF level:</b> 5</p> <p><b>EQF level:</b> 5</p> <p><b>Digital Competence Framework level:</b> 5</p>	<p><b>Grading scale / Pass requirements</b></p> <p>Five -grade: 5 excellent 4 good 3 satisfactory 2 pass 1 fail</p> <p>The prerequisite of being eligible to sit for a sectoral basic examination is the successful completion of all the required training courses, or the recognised prior learning should incorporate the requirements of the sectoral basic examination. The prerequisite of being eligible to sit for a vocational examination is the successful completion of all the training courses and the uninterrupted professional practice required. In case the student is required to pass a sectoral basic examination, latter shall be recognised with the following weighting: The result of the basic sectoral examination will be computed into that of the vocational examination with the following weighting: Sectoral basic examination: 10%, Vocational examination: 90%</p>																																
<p><b>Certificate number:</b> CXK A</p> <p><b>Serial number:</b> 123456</p> <p><b>Certificate issue date:</b> 2023.12.07</p>	<p><b>Designation of the theoretical and practical subjects of the sectoral basic examination and the vocational examination and their grades according to a five-grade scale</b></p> <p><b>Sectoral basic examination :</b> The examination was passed based on recognised prior learning</p> <p><b>Vocational examination</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td colspan="2"><b>central interactive</b></td> </tr> <tr> <td>Road and railway construction and maintenance technician interactive examination</td> <td style="text-align: center;">5</td> </tr> <tr> <td>Basic plane and geometric constructions</td> <td style="text-align: center;">5</td> </tr> <tr> <td>Basics of earthwork drainage, road, railway and bridge construction</td> <td style="text-align: center;">5</td> </tr> <tr> <td>Properties and testing of soils and building materials</td> <td style="text-align: center;">5</td> </tr> <tr> <td>Resultant force, balancing, load diagrams, cross-sectional centre of gravity</td> <td style="text-align: center;">5</td> </tr> <tr> <td colspan="2"><b>project exercise</b></td> </tr> <tr> <td>Road and railway construction and maintenance technician project task</td> <td style="text-align: center;">5</td> </tr> <tr> <td>Examination part 1: Portfolio</td> <td style="text-align: center;">5</td> </tr> <tr> <td>Examination part 2: Geodetic survey of roads or railway tracks</td> <td style="text-align: center;">5</td> </tr> <tr> <td>Examination part 3: Roadway construction, operation and maintenance</td> <td style="text-align: center;">5</td> </tr> <tr> <td>Examination part 4: Railway track operation and maintenance</td> <td style="text-align: center;">5</td> </tr> <tr> <td>Examination part 5: Professional discussion</td> <td style="text-align: center;">5</td> </tr> <tr> <td colspan="2"> </td> </tr> <tr> <td>Result of the vocational examination in percentage</td> <td style="text-align: center;">100%</td> </tr> <tr> <td>Result of the vocational examination with grades</td> <td style="text-align: center;">5</td> </tr> </table>	<b>central interactive</b>		Road and railway construction and maintenance technician interactive examination	5	Basic plane and geometric constructions	5	Basics of earthwork drainage, road, railway and bridge construction	5	Properties and testing of soils and building materials	5	Resultant force, balancing, load diagrams, cross-sectional centre of gravity	5	<b>project exercise</b>		Road and railway construction and maintenance technician project task	5	Examination part 1: Portfolio	5	Examination part 2: Geodetic survey of roads or railway tracks	5	Examination part 3: Roadway construction, operation and maintenance	5	Examination part 4: Railway track operation and maintenance	5	Examination part 5: Professional discussion	5			Result of the vocational examination in percentage	100%	Result of the vocational examination with grades	5
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**Legal basis**

Government Decree 12/2020 (II. 7.) on the Implementation of the Vocational Education and Training Act,  
Act LXXX of 2019 on Vocational Education and Training.

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## 6. OFFICIALLY RECOGNISED WAYS OF ACQUIRING THE CERTIFICATE SUPPLEMENT

Description of the sectoral basic training and the theoretical and practical vocational training	Distribution of the total number of hours of the programme																																																																				
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<p><b>Entry requirements:</b></p> <ul style="list-style-type: none"> <li>- Educational prerequisite: primary education</li> <li>- Occupational health aptitude test: required</li> </ul> <p><b>Further information:</b></p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">VOCATIONAL PRACTICAL SUBJECT</th> <th style="text-align: right;">HOURS</th> </tr> </thead> <tbody> <tr><td>Basics of construction work</td><td style="text-align: right;">12 hour</td></tr> <tr><td>Basics of construction drawings</td><td style="text-align: right;">12 hour</td></tr> <tr><td>Basics of professional information technology</td><td style="text-align: right;">12 hour</td></tr> <tr><td>Soil mechanics</td><td style="text-align: right;">12 hour</td></tr> <tr><td>Construction materials</td><td style="text-align: right;">12 hour</td></tr> <tr><td>Geodesy</td><td style="text-align: right;">12 hour</td></tr> <tr><td>Construction management</td><td style="text-align: right;">12 hour</td></tr> <tr><td>Reinforced concrete structures</td><td style="text-align: right;">12 hour</td></tr> <tr><td>Road construction and maintenance</td><td style="text-align: right;">12 hour</td></tr> <tr><td>Railway construction and maintenance</td><td style="text-align: right;">12 hour</td></tr> <tr><td>Specialist foreign language</td><td style="text-align: right;">12 hour</td></tr> <tr><td colspan="2"> </td></tr> <tr> <th style="text-align: left;">VOCATIONAL THEORETICAL SUBJECT</th> <th style="text-align: right;">HOURS</th> </tr> <tr><td>Vocational knowledge</td><td style="text-align: right;">12 hour</td></tr> <tr><td>Vocational foreign language knowledge</td><td style="text-align: right;">12 hour</td></tr> <tr><td>Basics of the construction industry</td><td style="text-align: right;">12 hour</td></tr> <tr><td>Labour safety and environmental protection</td><td style="text-align: right;">12 hour</td></tr> <tr><td>Descriptive geometry</td><td style="text-align: right;">12 hour</td></tr> <tr><td>Basics of construction</td><td style="text-align: right;">12 hour</td></tr> <tr><td>Fundamentals of traffic engineering</td><td style="text-align: right;">12 hour</td></tr> <tr><td>Soil mechanics</td><td style="text-align: right;">12 hour</td></tr> <tr><td>Construction materials</td><td style="text-align: right;">12 hour</td></tr> <tr><td>Professional information technology</td><td style="text-align: right;">12 hour</td></tr> <tr><td>Geodesy</td><td style="text-align: right;">12 hour</td></tr> <tr><td>Construction management</td><td style="text-align: right;">12 hour</td></tr> <tr><td>Statics</td><td style="text-align: right;">12 hour</td></tr> <tr><td>Strength of materials</td><td style="text-align: right;">12 hour</td></tr> <tr><td>Reinforced concrete structures</td><td style="text-align: right;">12 hour</td></tr> <tr><td>Road construction and maintenance</td><td style="text-align: right;">12 hour</td></tr> <tr><td>Railway construction and maintenance</td><td style="text-align: right;">12 hour</td></tr> <tr><td>Specialist foreign language</td><td style="text-align: right;">12 hour</td></tr> <tr><td>Continuous field practice</td><td style="text-align: right;">160 hour</td></tr> <tr><td>Altogether</td><td style="text-align: right;">508 hour</td></tr> </tbody> </table> <p>Link to the Training and Outcome Requirements and the Programme Plans: <a href="https://ikk.hu">https://ikk.hu</a>  The present diploma supplement was elaborated in compliance with Government Decree 12/2020 (II. 7.) on the implementation of the Act on Vocational Education and Training.</p> <p><b>National Reference Point: National Office of Vocational Education and Training and Adult Learning: <a href="https://nrk.nive.hu">https://nrk.nive.hu</a></b></p>		VOCATIONAL PRACTICAL SUBJECT	HOURS	Basics of construction work	12 hour	Basics of construction drawings	12 hour	Basics of professional information technology	12 hour	Soil mechanics	12 hour	Construction materials	12 hour	Geodesy	12 hour	Construction management	12 hour	Reinforced concrete structures	12 hour	Road construction and maintenance	12 hour	Railway construction and maintenance	12 hour	Specialist foreign language	12 hour			VOCATIONAL THEORETICAL SUBJECT	HOURS	Vocational knowledge	12 hour	Vocational foreign language knowledge	12 hour	Basics of the construction industry	12 hour	Labour safety and environmental protection	12 hour	Descriptive geometry	12 hour	Basics of construction	12 hour	Fundamentals of traffic engineering	12 hour	Soil mechanics	12 hour	Construction materials	12 hour	Professional information technology	12 hour	Geodesy	12 hour	Construction management	12 hour	Statics	12 hour	Strength of materials	12 hour	Reinforced concrete structures	12 hour	Road construction and maintenance	12 hour	Railway construction and maintenance	12 hour	Specialist foreign language	12 hour	Continuous field practice	160 hour	Altogether	508 hour
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Head of Examination Organiser:  
Issue date: 2023.12.07

**SEAL**

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