

1. TITLE OF THE CERTIFICATE (DE) ⁽¹⁾**Lehrabschlussprüfungszeugnis Metalltechnik –
Hauptmodul Zerspanungstechnik**⁽¹⁾ in original language**2. TRANSLATED TITLE OF THE CERTIFICATE (EN) ⁽²⁾****Certificate of Apprenticeship 'Metal Technology Specialising in Machining' (f/m)**⁽²⁾ This translation has no legal status.**3. PROFILE OF SKILLS AND COMPETENCES****Interdisciplinary areas of competence:**

1. Working in an operational and professional environment
2. Quality oriented, safe and sustainable work
3. Digital work

Specialist areas of competence:

4. Test technology and material technology
5. Manufacturing technology and mechanical engineering
6. Automation and manufacturing management

Professional profile main module machining:

The professional is able to

1. Read technical documents, sketches, drawings suitable for manufacturing or 3D models, extract required information from them, identify and describe any defects and produce sketches and drawings suitable for manufacturing or 3D models taking into account standard specifications and also plan and design different products or individual parts,
2. Select and use testing and measuring equipment depending on the order, check the plausibility of the obtained results and identify any sources of error,
3. Use personal protective equipment and determine the safety of hand tools, hand-guided machines and machinery through visual inspections,
4. Carry out joining and separating techniques (screwing, gluing, pressing, turning, milling, drilling, cutting, sawing, polishing) with suitable tools, equipment, machines and computer-aided machine tools,
5. Carry out primary shaping techniques (simple additive processes) with suitable machines,
6. Create programs for the operation of computer-aided machine tools and improve existing programs or adapt them to new requirements,
7. Produce complex components as well as components with high production quantities depending on the order using different manufacturing processes, prevent production errors before they occur and rectify errors that have occurred in accordance with legal and operational requirements,
8. Within the framework of quality management, carry out work such as function and defect checks and initiate corrective measures after consultation,
9. Take into account the relevant regulations and legal provisions for all work.

Training courses in one of the following special modules can be provided in addition to the basic and main module, with the aim of offering more in-depth know-how and specialisation.

Special module automation technology:

The professional is able to

1. Select, assemble, install and maintain (service, inspect, repair and improve) sensors and actuators,
2. Assemble, install and maintain (service, inspect, repair and improve) electro-hydraulic or electro-pneumatic systems on the basis of plans,
3. Parameterise and program programmable logic controllers,
4. Set up, configure, commission, test and maintain (service, inspect, repair and improve) automated systems,
5. Save and load programs to control robots or cobots and create simple programs,
6. Perform simple positioning, lifting or gripping tasks with robots or cobots.

Special module digital manufacturing technology:

The professional is able to

1. Find his/her way around the software system landscape in the digital manufacturing environment and select and use appropriate software or other digital applications,
2. Run machining simulations for the entire flow of a final program (e.g. using post-processor output),
3. Save and load programs to control robots or cobots and create simple programs,
4. Perform simple positioning or gripping tasks with robots or cobots.

Special module construction technology:

The professional is able to

1. Draw and design parts, assemblies, devices, machines, systems or components using different in-house design software (CAD) or other digital tools or create simulations,
2. Develop, present and compare solution variants under functional criteria,
3. Create accompanying technical documents (e.g. parts lists, documentation, test plans) using word processing or spreadsheet programs,
4. Carry out design-related technical calculations (e.g. strength, torque, friction, acting loads) using suitable software or simulations,
5. Use design-related business management programs,
6. Present work results (e.g. solution variants) using presentation aids (presentation programs).

Special module process and project management:

The professional is able to

1. Participate in the implementation of production management (e.g. production planning, quantity planning, scheduling and capacity planning, production control, production data acquisition, production data evaluation),
2. Evaluate manufacturing processes with regard to their advantages and disadvantages and select them by means of production trials,
3. Suggest the possibilities of using more advanced automation technology with a view to increasing efficiency,
4. Draw up project plans for projects or sub-projects assigned to him/her (e.g. in the case of production trials, production problems, new investments) based on the specifications of the project management,
5. Chair meetings and present work results using presentation aids (presentation programs).

4. RANGE OF OCCUPATIONS ACCESSIBLE TO THE HOLDER OF THE CERTIFICATE ⁽³⁾

Range of occupations:

Employment in industrial and commercial enterprises, e.g. in the planning, production, machining, maintenance and repair of metal and plastic components (e.g. axles, shafts, bearings, gears) using chipping or machining processes (such as drilling, turning, milling, sawing, etc.).

⁽³⁾ if applicable

(*) Explanatory note

This document has been developed with a view to providing additional information on individual certificates; it has no legal effect in its own right. These explanatory notes refer to the Decision (EU) no. 2018/646 of the European parliament and the Council of 2 May 2018 on a common framework for the provision of better services for skills and qualifications (Europass).

More information on Europass is available at: <http://europass.cedefop.europa.eu> or www.europass.at

5. OFFICIAL BASIS OF THE CERTIFICATE

<p>Name and status of the body awarding the certificate</p> <p>Lehrlingsstelle der Wirtschaftskammer</p> <p>(Apprenticeship Office of the Economic Chamber; for the address, see certificate)</p>	<p>Name and status of the national/regional authority providing accreditation/recognition of the certificate</p> <p>Bundesministerium für Arbeit und Wirtschaft</p> <p>(Federal Ministry for Labour and Economy)</p>
<p>Level of the certificate (national or international)</p> <p>NQF/EQF 4 ISCED 35</p>	<p>Grading scale / Pass requirements</p> <p>Overall performance: Pass with Distinction Good Pass Pass Fail</p>
<p>Access to next level of education/training</p> <p>Access to the <i>Berufsreifeprüfung</i> (i.e. certificate providing university access for skilled workers) or a vocational college for people under employment.</p> <p>Access to relevant courses at a <i>Fachhochschule</i> (i.e. university level study programme of at least three years' duration with vocational-technical orientation); additional examinations must be taken if the educational objective of the respective course requires it.</p>	<p>International agreements</p> <p>Between Germany, Hungary, South Tyrol and Austria, international agreements on the mutual automatic recognition of apprenticeship-leave examinations and other vocational qualifications have been concluded. Information on equivalent apprenticeship occupations can be obtained from the Federal Ministry for Digital and Economic Affairs.</p>
<p>Legal basis</p> <ol style="list-style-type: none"> 1. Training Regulation for metal technology BGBl. II (Federal Law Gazette) No. 97/2022 (company-based training) 2. Curriculum framework (education at the vocational school for apprentices) 3. The present apprenticeship trade replaces the apprenticeship trade metal technology (Training and Examination Regulation BGBl. II (Federal Law Gazette) No. 148/2011 as amended by BGBl. II (Federal Law Gazette) No. 149/2018), which expired with the exception of article 4 to 15 as of April 30, 2022. Article 4 to 15 will cease with the effect on December 31, 2023. 	

6. OFFICIALLY RECOGNISED WAYS OF ACQUIRING THE CERTIFICATE

1. Training in the framework of the given Training Regulation for metal technology and of the curriculum of the vocational school for apprentices. Admission to the final apprenticeship examination upon completion of the apprenticeship period specified for the apprenticeship trade concerned. The final apprenticeship examination aims to establish whether the apprentice has acquired the skills and competences required for the respective apprenticeship trade and is able to carry out the activities particular to the learned trade herself/himself in an appropriate manner.
2. Admission to the final apprenticeship examination in accordance with Article 23 (5) of the *Berufsausbildungsgesetz* (Vocational Training Act). An applicant for an examination is entitled to sit the final apprenticeship examination without completing a formal apprenticeship training if she/he has reached 18 years of age and is able to prove acquisition of the required skills and competences by means of a relevant practical or an on-the-job training activity of appropriate length, by attending relevant courses etc.

Additional information:

Entry requirements: successful completion of 9 years of compulsory schooling.

Duration of training: basic and main module: 3.5 years; basic, main and additional main module: 4 years

Enterprise-based training: Enterprise-based training comprises $\frac{4}{5}$ of the entire duration of the training and focuses on the provision of job-specific skills and competences according to Article 12 of the Training Regulation, BGBl. II (Federal Law Gazette) No. 97/2022, enabling the apprentice to exercise qualified activities as defined by the profile of skills and competences specified above (cf. job profile).

Education at vocational school: School-based education comprises $\frac{1}{5}$ of the entire duration of the training. The vocational school for apprentices has the tasks of imparting to apprentices the basic theoretical knowledge, of supplementing their enterprise-based training and of widening their general education in the framework of subject-oriented part-time instruction.

More information (including a description of the national qualification system) is available at:
www.zeugnisinfo.at and www.edusystem.at

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