

1. TITLE OF THE CERTIFICATE (DE) ⁽¹⁾
**Lehrabschlussprüfungszeugnis Metalltechnik –
Hauptmodul Werkzeugbautechnik**
⁽¹⁾ in original language

2. TRANSLATED TITLE OF THE CERTIFICATE (EN) ⁽²⁾
**Certificate of Apprenticeship ‘Metal Technology Specialising
in Toolmaking Technology’ (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 toolmaking technology:

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,
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, welding, turning, milling, drilling, cutting, sawing, punching, polishing) with suitable tools, equipment, machines and computer-aided machine tools,
5. Carry out forming techniques (bending, pressing, straightening) and primary shaping techniques (simple additive processes) with suitable hand tools and machines,
6. Create programs for the operation of computer-aided machine tools and improve existing programs or adapt them to new requirements,
7. Manufacture components and assemblies in stamping, moulding or casting technology depending on the order using different manufacturing processes,
8. Assemble, adjust, commission and test tools and assemblies in stamping, moulding or casting technology, also using machine elements, and rectify any defects that have occurred,
9. Find and rectify mechanical defects on tools and assemblies in stamping, moulding or casting technology and make suggestions on how to avoid them in the future,
10. Maintain (service, inspect, repair, improve) tools and assemblies in stamping, moulding or casting technology and detect possible faults at an early stage,
11. Within the framework of quality management, carry out work such as function or defect checks and initiate corrective measures after consultation,
12. 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.

Professional profile special module automatization 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.

Professional profile 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.

Professional profile 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).

Professional profile 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 workshops and production halls of commercial and industrial enterprises, including the manufacture of tools used in commercial and industrial production processes (e.g. cutting, punching and slitting tools), the assembly of mechanical parts and components, and the maintenance and repair of these same tools.

⁽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	
Name and status of the body awarding the certificate Lehrlingsstelle der Wirtschaftskammer (Apprenticeship Office of the Economic Chamber; for the address, see certificate)	Name and status of the national/regional authority providing accreditation/recognition of the certificate Bundesministerium für Arbeit und Wirtschaft (Federal Ministry for Labour and Economy)
Level of the certificate (national or international) NQF/EQF 4 ISCED 35	Grading scale / Pass requirements Overall performance: Pass with Distinction Good Pass Pass Fail
Access to next level of education/training Access to the <i>Berufsreifeprüfung</i> (i.e. certificate providing university access for skilled workers) or a vocational college for people under employment. 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.	International agreements 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.
Legal basis 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 as of April 30, 2022 with exception of article 4 to 15. Article 4 to 15 will cease to have effect on December 31, 2023. 4. The apprenticeship 'metal technology' has been set up as a modular apprenticeship. Following the basic and main module there is the option to provide training in an additional main module or one of the special modules (automation technology; digital manufacturing technology; construction technology; process and project management). Apprentices can select the additional main module 'machining'. Information on the main module is provided in the Certificate of Apprenticeship.	

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 <i>Berufsausbildungsgesetz</i> (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 special module/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 10 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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