

1. TITLE OF THE CERTIFICATE (DE)⁽¹⁾**Lehrabschlussprüfungszeugnis Prüftechnik –
Schwerpunkt Physik**⁽¹⁾ in original language**2. TRANSLATED TITLE OF THE CERTIFICATE (EN)⁽²⁾****Certificate of Apprenticeship ‘Testing Technology Specialising in
Physics’ (f/m)**⁽²⁾ This translation has no legal status.**3. PROFILE OF SKILLS AND COMPETENCES****Common professional areas of competence:****1. Test equipment and sample management**

The professional for testing technology prepares test equipment and samples on the basis of technical documents, such as standards and test descriptions. In doing so, he/she recognises in advance whether required information is missing and reports recognised errors to the responsible body. Depending on the test to be carried out, the professional selects test equipment and adjusts and calibrates it according to the specifications of the in-house test equipment management. He/she professionally documents and records information such as calibration results or maintenance intervals. If test values are outside the specifications of the test equipment, he/she initiates appropriate measures, such as maintenance or repairs. After tests have been carried out, the professional cleans and maintains the test equipment used.

Taking into account operational requirements, the professional for testing technology takes or accepts samples. He/she determines whether the respective sample meets specified requirements or whether new sampling must be carried out. To do this, he/she checks, for example, the condition, the quantity, the packaging and the labelling. When working with samples, he/she ensures that they are handled according to regulations, e.g. correct sample preparation, labels the samples so they can be tracked with identification codes and records them in the sample management system. In addition, the professional assigns samples that are not processed immediately or retained samples to a storage location.

2. Sample testing

The professional for testing technology carries out various tests on received or taken samples. For this purpose, he/she prepares the samples taking into account occupation-specific physical and chemical principles and carries out basic laboratory work, such as weighing, measuring volumes or preparing solutions. In doing so, he/she observes the requirements of data sheets and the measures and behaviour to be derived from them. The professional identifies taken samples by their designation and prepares them by physical methods or chemical methods, e.g. by filtering, crushing, distilling or solubilising with solvents. To carry out the tests, he/she prepares test equipment and test set-ups in accordance with the regulations and also develops, examines and tests special set-ups for special tests if required.

The professional for testing technology carries out all tests in such a way that uncertainties and external influences as well as other possible sources of error (e.g. reading errors, display errors, calibration errors) are avoided and, to this end, checks test processes with regard to deviations from the regulations. If there are doubts about test results, e.g. about their plausibility or in the case of fluctuations, he/she arranges for a follow-up sample in accordance with operational requirements.

3. Test evaluation and documentation

During test evaluation, the professional for testing technology checks received or measured data for plausibility, e.g. by comparison with previous results. If the obtained data is reliable, he/she applies the evaluation procedure appropriate to the respective test process and performs related subject-specific calculations. If necessary, the professional also applies basic statistical calculations, such as mean and variance calculations, and draws

conclusions about the quality of the test.

The professional for testing technology documents all essential work steps and results, such as sample preparation, calculations or any deviations from regulations.

He/she prepares the data, test results and calculations, creates test records and graphical evaluations (e.g. diagrams) and stores them in the in-house sample management system.

Furthermore, the professional argues and presents data and test results to superiors as well as internal and external customers.

Special-focused professional competence area: physics

The professional for testing technology specialising in physics carries out preparatory laboratory work for various physical tests, in particular with optical, electrical, mechanical, caloric or also acoustic, medical and dosimetric test methods.

Within the scope of his/her activities, the professional commissions test equipment, such as pressure measuring devices, oscilloscopes, microscopes and temperature elements for the testing of mechanical, electrical, optical and caloric variables, and runs test processes. If required, he/she also uses company-specific test equipment in acoustics, medical technology and radiation physics.

Interdisciplinary areas of competence:

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

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

Range of occupations:

Employment of professionals for testing technology specialising in physics in research and development laboratories, in industrial enterprises with their own laboratories, in control laboratories and testing institutes as well as at universities and universities of applied sciences, in particular for taking samples, preparing and testing different substances, materials and components with regard to their physical properties (e.g. density, hardness) using laboratory equipment and instruments.

⁽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</p> <p>ISCED 35</p>	<p>Grading scale / Pass requirements</p> <p>Overall performance:</p> <p>Pass with Distinction</p> <p>Good Pass</p> <p>Pass</p> <p>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>

Legal basis

1. Training Regulation for testing technology BGBl. II (Federal Law Gazette) No. 100/2022 (company-based training)
2. Curriculum framework (education at the vocational school for apprentices)

6. OFFICIALLY RECOGNISED WAYS OF ACQUIRING THE CERTIFICATE

1. Training in the framework of the given Training Regulation for testing 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: 3.5 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 3 of the Training Regulation, BGBl. II (Federal Law Gazette) No. 100/2022, 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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