europass

CERTIFICATE SUPPLEMENT (*)

Austria

1. TITLE OF THE CERTIFICATE (DE) (1)

Lehrabschlussprüfungszeugnis Labortechnik – Chemie

(1) in original language

2. TRANSLATED TITLE OF THE CERTIFICATE (EN) (2)

Certificate of Apprenticeship "Laboratory Engineering specialising in Chemistry" (f/m)

(2) This translation has no legal status.

3. PROFILE OF SKILLS AND COMPETENCES

Specialist areas of competence:

Basic module
• Basic chemistry
• Test equipment and sample management
• Laboratory basics

Main module Chemistry
a. The specialist in laboratory engineering – main module chemistry carries out chemical and physical-chemical analyses and experiments with inorganic and organic substances such as plastics, metals, acids and bases. He/she works in the analytical or synthetic field. In the analytical field, he/she deals with the determination of ingredients, properties and characteristics, and obtaining samples. In the synthetic field, he/she works on the development and manufacturing of new chemical substances and products.

b. Using laboratory equipment and computer-controlled laboratory devices, he/she examines various samples for their chemical composition and physical properties such as pH value and density. The specialist uses various chemical analysis procedures and methods. He/she creates test sketches, prepares the samples and sets up the necessary laboratory equipment and devices. He/she cleans, separates and concentrates various substances, e.g. by distillation, extraction and evaporation, and analyses these prepared samples using various analytical methods such as volumetry, gravimetry, spectroscopy and chromatography. In the synthetic field, the specialist carries out preparatory work using the appropriate synthesis equipment. The specialist then evaluates the chemical data and work results that have been recorded, logs and documents his/her findings, and produces statistical and graphical evaluations. After the analyses and syntheses, he/she cleans the laboratory equipment and devices used and ensures that chemicals are stored or disposed accordingly.

c. The specialist reads and applies analysis and synthesis regulations and safety data sheets. In all his/her work, he/she ensures that all quality, safety and environmental standards are met.

Training in the following special module can be attended in addition to the basic and main module, with the aim of acquiring more in-depth know-how and specialisation.

Special module paints and varnishes
a. The specialist in laboratory engineering with the special module paints and varnishes carries out chemical, physical-chemical and physical analyses and experiments on paints, varnishes and coatings. He/she works primarily on the development and manufacturing of new products or on improving existing formulations. His/her work is particularly important in the context of quality management and quality assurance for industrially manufactured paints and varnishes.

b. Using laboratory equipment and computer-controlled laboratory devices, he/she examines paints and varnishes for specific properties such as colour tone, colour intensity, colour index, flow curves, grain fineness, pigment distribution, grain size distribution, drying, etc. In doing so, he/she uses various chemical, physical-chemical and physical analysis procedures and methods. He/she creates test sketches, prepares material samples and sets up the necessary laboratory equipment and devices. In addition, he/she prepares substrates for coatings and coating systems and applies them using various methods. After drying and hardening, he/she also assesses and tests them for various parameters. The specialist then evaluates the data and work results that have been recorded, logs and documents his/her findings, and produces statistical and graphical evaluations. After completing the work, he/she cleans the laboratory equipment, devices and containers used and ensures that paints and varnishes are stored or disposed of

properly.

c. The specialist reads and applies work regulations and safety data sheets. In all his/her work, he/she ensures that all quality, safety and environmental standards are met.

Interdisciplinary areas of competence:
• Working in an operational and professional environment
• Quality oriented, safe and sustainable work
• Digital work

4. RANGE OF OCCUPATIONS ACCESSIBLE TO THE HOLDER OF THE CERTIFICATE [3]

Range of occupations:
Employment in research, production, development and control laboratories of industrial companies in various sectors, institutes and companies in the environmental sector, or research and development laboratories

[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) 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).
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	**Name and status of the national/regional authority providing accreditation/recognition of the certificate**
Lehrlingsstelle der Wirtschaftskammer (Apprenticeship Office of the Economic Chamber; for the address, see certificate)	Bundesministerium für Wirtschaft, Energie und Tourismus (Federal Ministry for Economy, Energy and Tourism)
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 *Berufsreifeprüfung* (i.e. certificate providing university access for skilled workers) or a vocational college for people under employment. Access to relevant courses at a university of applied science (*Fachhochschule*: 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 Economy, Energy and Tourism.

Legal basis
1. Training Regulation for Laboratory Engineering BGBl. II (Federal Law Gazette) No. 140/2025 (company-based training)
2. Curriculum framework (education at the vocational school for apprentices)
3. The present apprenticeship trade replaces the apprenticeship trade Laboratory Engineering (Training and Examination Regulation BGBl. II (Federal Law Gazette) No. 118/2015 as amended by BGBl. II (Federal Law Gazette) No. 127/2016), which expired as of 30 of June 2025.
4. The apprenticeship Laboratory Engineering has been set up as a modular apprenticeship. Following the basic and main module, there exists the option to provide training in an additional main or special module. Apprentices can select the additional main module "Biochemistry and Biotechnology". Information about the modules 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 Laboratory Engineering 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 module and main module: 3.5 years; basic module, main module and special module: 4 years; basic module and two main modules: 4 years

Enterprise-based training: Enterprise-based training comprises $^{4}/_{5}$ 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. 140/2025, 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 $^{1}/_{5}$ 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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