europass

CERTIFICATE SUPPLEMENT (*)

Austria

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

Lehrabschlussprüfungszeugnis Klimagärtnerin/Klimagärtner

(1) in original language

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

Certificate of Apprenticeship “Urban greening” (f/m)

(2) This translation has no legal status.

3. PROFILE OF SKILLS AND COMPETENCES

Specialist areas of competence:

Garden design/gardening basics
All activities of the specialist in urban greening are based on the ecological relationships between an urban climate change-adapted environment and its influence on the temperature and water balance of a settlement area as well as the related legal provisions, guidelines and standards concerning the greening of buildings and green spaces in settlement areas. For all work to be carried out, the specialist takes into account the properties of different materials with regard to heat storage, their effects in interaction with buildings and the urban heat island effect and, when using different materials, takes into account their respective utilisation, processing and treatment options. The specialist in urban greening prepares various hand tools, hand-held machines and machines for the work to be carried out based on the order, uses them and maintains them after use. To be able to carry out measurements on the construction site, he/she selects various analogue and digital measuring devices, carries out measurements on areas or buildings or transfers measurements from planned specifications into reality and avoids handling errors in the process. He/she uses measurement results to carry out job-specific calculations such as volume calculations for material requirements. All work is based on technical documents, sketches and technical drawings, from which he/she gathers all the necessary information and takes it into account in his/her work. He/she also creates sketches and simple technical drawings, taking into account standard specifications and location factors. The plants required for the greening of buildings and for green spaces in settlement areas are stored, protected and cared for appropriately in the company and on the construction site by the specialist based on the botanical principles, the special requirements of the plants and the particular requirements of the locations as well as the abiotic damaging factors. He/she builds up and installs vegetation layers of different compositions and different applications in accordance with quality requirements, also using recycled materials. Building sites in settlement areas are set up and secured by the specialist, who also takes further safety measures and ensures that the plant population, the vegetation layer, tree crowns and roots are protected or damage to the crown area is avoided. He/she also provides support with the installation, maintenance and dismantling of the necessary climbing aids. For upcoming planting work, he/she first determines the condition of the soil or the vegetation layer and then improves it by, for example, enriching nutrient-poor soils or loosening the soil. In order to strengthen trees to be planted in settlement areas, the specialist prepares the root area by creating harmonised layers.

Building greening, surfaces, walls and water balance
The specialist in urban greening carries out all the following work in order to achieve effects such as shading, temperature and noise reduction, rainwater storage, increased durability of the building fabric in private and public settlement areas through the greening of buildings. He/she ensures that specialists clarify whether the structural requirements necessary for vertical greening with soil-bound, trough-bound and wall-bound systems are met. Before starting work, he/she checks the available planning information with regard to site conditions and feasibility. To select a suitable system, the specialist takes into account the various options for vertical greening with soil- and trough-bound as well as wall-bound systems, their specific care, irrigation and nutrient supply systems as well as the system components and work steps required for installation. After clarifying all the requirements, the specialist installs soil-, trough- and wall-bound vertical greening, installing climbing aids and various vegetation supports made of different materials with appropriate fastening systems to suit the respective system. He/she then installs the respective vegetation layers and irrigation systems (including nutrient supply systems), taking into account the special location of the vertical greening. He/she then optimises the functionality and coordination of the various system components of the vertical greening in a trial operation. Taking into account the technical possibilities and requirements, the specialist installs extensive and intensive roof greening. When installing extensive roof greening, which is not suitable for permanent use by people, he/she pays attention to its structure, uses the appropriate work equipment and works according to the necessary work steps. He/she also installs intensive roof greening, which is usually multifunctional and accessible and includes terraces, seating and walking areas, taking into account the specific structure, the respective work equipment and the necessary work steps. The specialist also installs the irrigation system required for intensive roof greening. In order to avoid the negative consequences of surfaces that

are not very water-permeable, the specialist replaces them and installs the necessary structures and surfaces that are capable of infiltration. He/she also carries out horticultural stonework to design gardens with various natural or near-natural materials and horticultural woodwork.

In order to restore the natural water balance in settlement areas, the specialist creates various ecological water areas such as ponds or waterways. The specialist plans irrigation systems that are optimally adapted to the availability of water and the needs of the plants, also taking into account the basic requirements for water in terms of water hygiene and water hardness. He/she then installs automatic irrigation systems with all the necessary components, connects them to existing water circuits, puts them into operation and adjusts them while complying with the required work steps. In order to be able to operate these systems with terminal devices such as tablets or smartphones, he/she installs appropriate sensors, cables and control systems. For sustainability reasons, the specialist also installs rainwater and greywater systems (rainwater and greywater management) and connects these to irrigation systems. He/she also installs fog systems, connects them to existing water circuits, puts them into operation and adjusts them.

Work on green spaces, building greening and facilities in settlement areas

The specialist in urban greening selects suitable plants, taking into account the respective location, biodiversity and the areas to be planted (green spaces, soil-, trough- and wall-bound vertical greening, extensive and intensive roof greening), plants them and carries out growth, development and maintenance care activities. He/she remodels existing green spaces in settlement areas in a near-natural way, e.g. by replacing ornamental lawns with extensive common lawns. The specialist recognises and assesses stress, relevant diseases and pests as well as a lack of nutrients and proposes countermeasures, taking into account ecological requirements as well as plant protection and fertiliser regulations. He/she then applies plant protection products, pesticides and fertilisers in accordance with the safety data sheets and instructions for use and using the necessary personal protective equipment. The specialist cares for plants in green spaces in settlement areas, taking into account special ecological conditions and observing the necessary safety measures. Furthermore, he/she carries out all care measures to be performed on all types of vertical greening as well as extensive and intensive roof greening, taking into account the respective special features. In addition, the specialist maintains existing paved areas or walls and maintains existing water areas in a near-natural state in settlement areas. In addition to plant care measures, the specialist also carries out maintenance work on irrigation and drainage systems and their components. He/she systematically searches for faults, defects and malfunctions in these systems, localises them and rectifies them. The specialist adjusts programmes for controlling irrigation systems, taking into account an optimum water supply over the course of the season.

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 including in small, medium-sized and large horticultural businesses as well as in federal gardens, cities and municipalities

[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 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 *Berufsreifeprüfung* (i.e. certificate providing university access for skilled workers) or a vocational college for people under employment. Access to relevant courses at a *Fachhochschule* (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 Labour and Economy).

Legal basis

1. Training Regulation for Urban Greening BGBl. II (Federal Law Gazette) No. 188/2024 (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 Urban Greening 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 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. 188/2024, 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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