

1. BEZEICHNUNG DES ZEUGNISSES (DE)

**Abschlusszeugnis der Berufsfachschule
Staatlich geprüfter biologisch-technischer Assistent und
Staatlich geprüfte biologisch-technische Assistentin
einschließlich Fachhochschulreife**

2. TRANSLATED TITLE OF THE CERTIFICATE (EN)

**Leaving certificate of full-time vocational school
State-certified biological technician
including university of applied sciences entrance qualification**

This translation has no legal status

3. PROFILE OF SKILLS AND COMPETENCES

- Use technical biological, bio-chemical, chemical and physico-chemical knowledge to act autonomously in the resolution of occupationally specific tasks
- Use mathematical procedures to carry out chemical, physico-chemical and physical tasks
- Plan, implement and evaluate work processes on the basis of work instructions and using specialist literature
- Draw up test protocols including graphic representations; evaluate and document measurement results; document work results in accordance with the rules of specialist literature including using photographic methods
- Use occupationally related information technology
- Determine physical values of materials
- Plan, carry out and evaluate gravimetric and volumetric analyses including simple quantitative separations
- Plan, carry out and evaluate physico-chemical tasks
- Apply instrumental analytical work methods, in particular spectroscopic, chromatographic, electro-chemical and thermoanalytical procedures
- Use sampling and sampling preparation techniques in bio-chemical analysis and for biological tests
- Use microscopic techniques
- Carry out histological work on botanical and zoological objects
- Identify and preserve biological materials, produce permanent preparations
- Carry out physiological examinations of plants and animals
- Cultivate, isolate and identify microorganisms
- Prepare (dissect) animals, remove organs
- Handle cell and tissue cultures or isolated organs
- Carry out bio-technical procedures
- Use English-language documentation and communicate in English in an activity-related manner
- Accord due consideration to health and safety at work and to the rules of hygiene, handle personal protective equipment and safety and fire protection equipment
- Accord due consideration to correct conduct in the case of accidents, initiate first-aid measures
- Accord due consideration to environmental protection regulations, avoid damage to the environment, make efficient use of energy at work
- Use, manage and maintain work equipment and materials
- Label, store, handle and dispose of work materials
- Work cooperatively and communicatively within a team
- Take on an active role in helping to shape the work environment
- Formulate, realise and reflect on work objectives

(*) **Explanatory note**

This document is designed to provide additional information about the specified certificate and has no any legal status in itself. The format of the description is based on the following texts: Council Resolution 93/C 49/01 of 3 December 1992 on the transparency of qualifications; Council Resolution 96/C 224/04 of 15 July 1996 on the transparency of vocational training certificates and Recommendation 2001/613/EC of the European Parliament and the Council of 10 July 2001 on mobility within the Community for students, persons undergoing training, volunteers, teachers and trainers.

More information on transparency is available at: www.cedefop.eu.int/transparency

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4. RANGE OF OCCUPATIONS ACCESSIBLE TO THE HOLDER OF THE CERTIFICATE

State-certified biological technicians including university of applied sciences entrance qualification work as part of a team together with academically qualified biologists and other skilled workers in the fields of research, applications engineering and control of operations. They are employed in laboratories at industrial and commercial companies, institutes of higher education, major research institutes and government bodies. Their broad basic training in the field of biology also provides them with opportunities in neighbouring areas of work such as pharmacy, biotechnology, medicine and environmental protection.

5. OFFICIAL BASIS OF THE CERTIFICATE

<p>Name and status of the body awarding the certificate Public or state-recognised vocational school (Address see certificate).</p>	<p>Name and status of the national/regional authority providing accreditation/recognition of the certificate Highest education authority of the federal state (Ministry/Senate) Ministerium für Schule und Bildung des Landes Nordrhein-Westfalen Völklinger Str. 49 40221 Düsseldorf Fon: 0049 (0)211 5867 40 Fax: 0049 (0)211 5867 3220 E-Mail: poststelle@msb.nrw.de</p>
<p>Level of the certificate (national or international) ISCED 2011: 454 DQR/EQF: 4* * refers only to the level of vocational certificate</p>	<p>Grading scale/pass requirements 1 = excellent 2 = good 3 = average 4 = pass 5 = poor 6 = fail In order to pass the examination, an overall score of at least "pass" is required.</p>
<p>Access to the next level of education/training</p> <ul style="list-style-type: none"> • Access to advanced vocational training (specialist trade and technical school) • Access to higher education (in accordance with the Higher Education Act of the federal state) 	<p>International agreements Joint Franco-German Declaration on Comparability of Qualifications in Vocational Education and Training of 26 October 2004</p>
<p>Legal basis Ordinance on Vocational Schools of the respective federal state Verordnung über die Berufsfachschulen des jeweiligen Landes: Verordnung über die Ausbildung und Prüfung in den Bildungsgängen des Berufskollegs (Ausbildungs- und Prüfungsordnung Berufskolleg – APO-BK) vom 26. Mai 1999 in der jeweils gültigen Fassung (SGV. NRW. 223)</p>	

6. OFFICIALLY RECOGNISED WAYS OF ACQUIRING THE CERTIFICATE

State final examination:

1. following completion of training within the scope of the curriculum stipulated at a full-time vocational school or
2. following admission as a non-pupil by the education authority of the federal state.

Additional information

Entry requirements: intermediate secondary school leaving certificate or an educational qualification recognised as equivalent or entitlement to attend upper secondary school in accordance with the regulations of the respective federal state.

Duration of training: at least 3 years

Educational aim: Full-time vocational schools provide courses in initial vocational education and training. They impart employability skills which bring together professional competence, autonomy and social competence to form overall occupational competence. Methodological competence, communicative competence and learning competence are also intrinsic components of employability skills. Training leading to the qualification of state-certified biological technician including university of applied sciences entrance qualification is aligned towards occupational work processes and company business processes and imparts the skills needed to enter higher education. A practical placement may be integrated into training.

For further information, please visit:

www.kmk.org
www.berufenet.arbeitsagentur.de
www.europass-info.de