

1. BEZEICHNUNG DES ZEUGNISSES (DE)

**Abschlusszeugnis der Fachschule/Fachakademie
Staatlich geprüfter Techniker/Staatlich geprüfte Technikerin
in der Fachrichtung Biotechnik**

2. TRANSLATED TITLE OF THE CERTIFICATE (EN)

**Leaving certificate of trade and technical school/trade and technical academy
State-certified technical engineer
in the specialized field of biotechnology**

This translation has no legal status

3. PROFILE OF SKILLS AND COMPETENCES

- Solve technical and scientific problems on the basis of broad and integrated knowledge
- Implement new technologies independently in a market- and customer-oriented manner
- Make a sound analysis of and independently design operational procedures, work processes and general working conditions
- Use hardware in a way which is appropriate to the situation and confidently apply software for computer-aided technological process preparation and process performance
- Perform microscopic examinations of histological specimens
- Generate genetically modified organisms
- Use methods of cell culture technology and biotechnological processes
- Cultivate, enrich, differentiate and isolate microorganisms
- Carry out PCR, cloning, protein purification, and enzyme kinetics
- Confidently apply methods for project planning, project execution and project control
- Describe and design complex technical and organisational processes
- Assess technical innovations and sustainably structure interdisciplinary cooperation
- Initiate and implement suitable quality-assurance measures
- Soundly analyse and take into consideration the prevailing economic conditions in his or her own and the target country
- Possess detailed knowledge of national and international legal regulations which are of relevance for the successful completion of technical and operational tasks
- Complete management tasks at the middle-management level in a market- and customer-oriented way
- Use knowledge of foreign languages in a way which is adequate to the situation
- Act with foresight and responsibility when considering and making decisions
- Apply conflict management methods
- Appraise and lead people
- Understand group structures in detail, exert a positive influence on groups and manage groups in a positive manner
- Behave cooperatively and communicatively within the team and when dealing with customers
- Assume entrepreneurial and social responsibility
- Demonstrate ethical, economic and ecological awareness in the context of sustainable development

(*) Explanatory note

This document is designed to provide additional information about the specified certificate and has no 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 technical engineers work independently and/or as part of a team in technical fields of activity at companies in various branches.

5. OFFICIAL BASIS OF THE CERTIFICATE

Name and status of the body awarding the certificate Public or state-recognised vocational school	Name and status of the national/regional authority providing accreditation/recognition of the certificate Ministry of Education Baden-Wuerttemberg P.O.Box 10 34 42 70029 Stuttgart E-Mail: poststelle@km.kv.bwl.de
Level of the certificate (national or international) ISCED 2011: 655 DQR/EQF: 6	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.
Access to the next level of education/training General access to higher education (in accordance with the Higher Education Act of the federal state)	International agreements -
Legal basis Verordnung des Kultusministeriums über die Ausbildung und Prüfung an den zweijährigen Fachschulen für Technik und für Gestaltung (Technikerverordnung - TechnikerVO) vom 25. Juni 1999 (GBl. S. 331; K.u.U. S. 134) in der jeweils gültigen Fassung	

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 trade and technical school/trade and technical academy or
 2. following admission as a non-pupil by the education authority of the federal state.

Additional information

Entry requirements: completion of recognised and relevant vocational education and training pursuant to the Vocational Training Act/Crafts and Trades Regulation Code or in accordance with the regulations of the federal states and one year of relevant occupational activity
or
 completion of vocational school or of an equivalent level of education and relevant occupational activity of at least 5 years.

Duration of training: at least 2 years (minimum of 2,400 hours)

Educational aim: Trade and technical schools/trade and technical academies are institutions which provide continuing vocational training for the assumption of management tasks. Trade and technical schools/trade and technical academies offer a range of organisational forms of teaching (full-time or part-time basis) which lead to a post-secondary state vocational education and training qualification in accordance with federal state law.

For further information, please visit:

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