Certificate Supplement (*)

Germany

1. Bezeichnung des Zeugnisses (DE)

Abschlusszeugnis der Berufsfachschule
Staatlich geprüfter physikalisch-technischer Assistent/
Staatlich geprüfte physikalisch-technische Assistentin
einschließlich Fachhochschulreife

2. Translated title of the certificate (EN)

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

This translation has no legal status

3. Profile of skills and competences

- Process metallic and organic materials and produce mechanical workpieces
- Select, deploy and operate measuring devices from the field of electronic measurement technology
- Prepare and interpret technical drawings in conformity with standards
- Develop test requirements on the basis of physical and technical considerations
- Select, deploy and adapt suitable sensors
- Construct, test and optimise physical and technical experimental setups in accordance with stipulated requirements
- Determine physical material constants
- Record movement processes and dynamic sequences
- Handle and use optical devices
- Conduct tests in the areas of oscillations, waves and acoustics
- Comply with radiation protection regulations when dealing with radioactive materials
- Carry out basic mechanical and thermal operations
- Carry out and evaluate chemical verification procedures and physicochemical analysis procedures
- Set up and operate computer-controlled measurement recording systems
- Programme microcontroller systems for deployment in process automation and in measurement and control engineering technology
- Evaluate and document work processes and work and test results
- Prepare work and operating instructions
- Use operating and test instructions, use standard software for word processing, spreadsheets and presentations
- Create simple programmes in a higher programming language for the recording, processing and evaluation of measurements
- Evaluate measurement results on the basis of descriptive and inference statistics
- Gauge systematic and coincidental errors in test series
- 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 and take on an active role in helping to shape the working 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

© European Communities 2002

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

State- certified physical technicians including university of applied sciences entrance qualification work as part of a team together with academically qualified physicists and other skilled workers and are especially employed in development and control departments within industry and in research laboratories at institutes of higher education and scientific institutes. Their broad basic training in the field of physics and their knowledge of measurement technology also provide them with opportunities in neighbouring areas of work such as electrotechnology, chemistry, biology, environmental protection or medical technology.

5. OFFICIAL BASIS OF THE CERTIFICATE

Name and status of the body awarding the certificate Public or state-recognised vocational school (Address see certificate).	**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 Weiterbildung des Landes Nordrhein-Westfalen Völklinger Str. 49 40221 Düsseldorf Fon: 0049 (0)211 5867 40 Fax: 0049 (0)211 5867 3220 E-Mail: poststelle@msw.nrw.de
Level of the certificate (national or international) ISCED 1997: 4A DQR/EQF: 4* ** refers only to the level of vocational certificate.*	**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 • 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)	**International agreements** Joint Franco-German Declaration on Comparability of Qualifications in Vocational Education and Training of 26 October 2004

Legal basis

Ordinance on Vocational Schools of the respective federal state

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)

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 physical 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