



# Certificate supplement

## 1. Legally protected titles of the qualification (in the original languages German, French, Italian)

Physiklaborantin/Physiklaborant mit eidgenössischem Fähigkeitszeugnis (EFZ)  
Laborantine/Laborantin en physique avec certificat fédéral de capacité (CFC)  
Laboratorista in fisica con attestato federale di capacità (AFC)

## 2. Translated title of the qualification

**Physics Laboratory Technician  
Federal Diploma of Vocational Education and Training**

## 3. Profile of skills and competences

Holders of this qualification:

- plan tests according to operational requirements and the order
- design and construct the appropriate experimental arrangements and check their functional capability
- carry out measurements and determine measurement uncertainties
- analyse physical properties
- assess results, document these in a comprehensible manner and present them in a suitable form
- read and write documents in English
- plan and work on projects either as part of a team or on their own
- maintain and service technical facilities and infrastructure.

Holders of this qualification carry out projects and orders in a systematic, cost-effective, environmentally friendly and independent fashion. They are also used to working in a team, are flexible and open to new ideas. They observe the principles of occupational health and safety and environmental protection.

## 4. Range of occupations accessible to the holder of the qualification

Holders of this qualification are competent, non-academic employees in educational and research centres, industry and trade.

They often carry out their tasks in cooperation with academically trained persons. They are characterised by their in-depth theoretical and practical knowledge, which enables them to put research and development ideas as well as technical testing problems into practice. Their expertise enables them to accelerate R&D and contribute to meaningful results. However, they also make a significant contribution to the maintenance and upkeep of facilities and infrastructures. Their in-depth knowledge makes them competent contacts for guest scientists, employees, project teams and customers.

## 5. Official basis of the qualification

### 5.1 Name and status of the body awarding the qualification (professional organisation)

Arbeitsgemeinschaft der Lehrmeister von Physiklaboranten (AGLPL)  
[www.physiklaborant.ch](http://www.physiklaborant.ch)

### 5.2 Name and status of the national authority responsible for issuing the qualification

State Secretariat for Education, Research and Innovation SERI, Einsteinstrasse 2, CH-3003 Bern  
[www.seri.admin.ch](http://www.seri.admin.ch)

### 5.3 Level of the qualification (national or international)

**National Qualifications Framework for the VPET system: Level 5**  
**European Qualifications Framework: Level 5**

#### 5.4 Grading scale/Pass requirements

6 = very good  
5 = good  
4 = satisfactory

3 = unsatisfactory  
2 = poor  
1 = unusable

Minimum passing grade: 4.

#### 5.5 Access to next level of education/training\* (optional)

Holders of this qualification may pursue tertiary-level professional education or (if the person also obtains the optional federal vocational baccalaureate) pursue a Bachelor's degree at a Swiss university of applied sciences. If they then take the University Aptitude Test (UAT), they may also pursue a Bachelor's degree

\* The decision regarding admission always rests with the admitting institution.

#### 5.6 International agreements (optional)

-

#### 5.7 Legal basis of the qualification

- SERI Ordinance of 4 February 2014 on Vocational Education and Training of Physics Laboratory Technicians (occupation no. 65328)
- Ordinance of 27 August 2014 on the National Qualifications Framework for Vocational and Professional Qualifications (SR 412.105.1)

### 6. Officially recognised ways of acquiring the qualification

Training for the Physics Laboratory Technician, Federal VET Diploma lasts 4 years. Training content is usually distributed across two different learning locations: classroom instruction at a vocational school and apprenticeship training at a host company. However, depending on the VET programme, learners will also attend branch courses at a branch training centre. Professional competences required for the given occupation are decided by the sponsor of the VET programme.

- Host companies provide learners with practical skills associated with the occupation. Learners usually work an average of 3.5 day(s) per week.
- Vocational schools provide classroom instruction in vocational subjects and subjects falling under the category of language, communication and society (LCS). Learners usually attend classes an average of 1.5 day(s) per week; total number of lessons: 2160.
- Branch training centres provide learners with additional skills that are intended to complement classroom instruction and apprenticeship training, total duration of branch courses: 33 days.

The qualification procedure and final examination includes the following:

- Practical project covering 36–120 hours
- (Written and/or verbal) testing of knowledge gained from vocational instruction covering 5 hours
- LCS
- Partial examination covering 8 hours at the end of the 2nd year of training

The calculation of the overall grade takes into account the grades obtained for individual areas of competence and the grades obtained from classroom instruction at the vocational school.

Other equivalent qualification procedures are possible.

### 7. Additional information

-

#### Issued by:

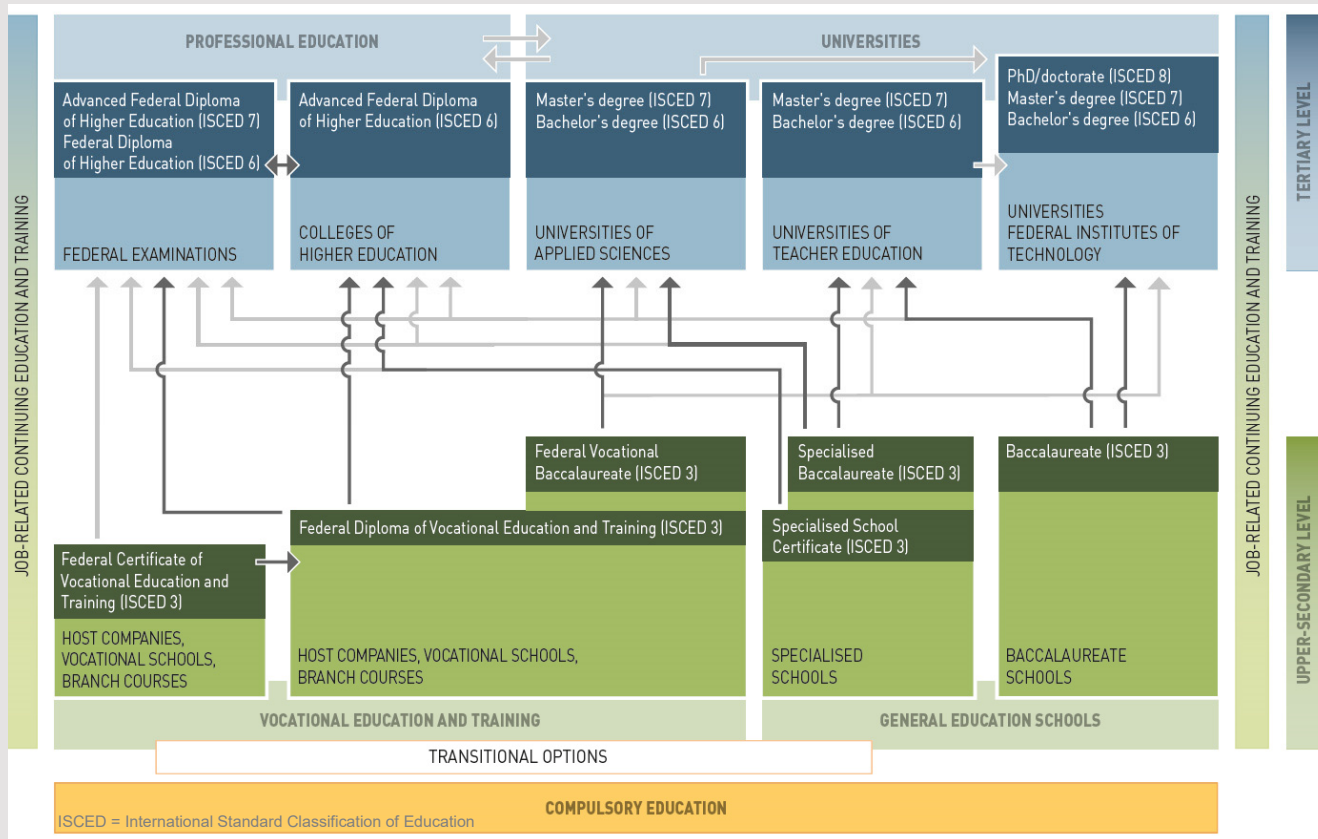
National reference point: State Secretariat for Education, Research and Innovation SERI, [www.seri.admin.ch](http://www.seri.admin.ch)



This certificate supplement draws its legal basis in Article 4 paragraph 1 of the Ordinance of 27 August 2014 on the National Qualifications Framework for Vocational and Professional Qualifications (NQF-VPQ-O, SR 412.105.1). This certificate supplement follows the model recommended by the European Parliament and Council (Decision No. 2241/2004/EC). The purpose of the certificate supplement is to provide sufficient data to improve the international transparency and fair professional recognition of qualifications (diplomas, certificates etc.). It describes the nature, level, context, content and type of training and education pursued and successfully completed by the individual named on the original qualification to which this supplement is

appended. The certificate supplement is free from value judgements, equivalence statements or recommendations on recognition.

## 8. Information on the national education system



### Swiss education system

There are two main pathways within the Swiss education system, both spanning upper-secondary and tertiary level: vocational/professional, on the one hand, and general education/university, on the other. While it is possible to switch between these two pathways at any time and at any level, though in some cases, additional requirements must be met. Generally speaking, the Swiss education system is highly permeable.

### Upper-secondary level vocational education and training (VET)

Vocational education and training (VET) prepares young people to carry out a given occupational activity. In training, emphasis is placed on establishing systematic correlations between theory and practice. Learners acquire professional competences that enable them to execute work-related tasks and activities in a goal-oriented manner, at their own initiative and with a sufficient level of flexibility. Swiss VET programmes include language, communication and society (LCS) subjects, which provide young people with basic skills needed to orient themselves both in their personal lives and within society as well as to overcome personal and professional challenges.

Swiss dual-track VET programmes spread training content over three different learning locations: the vocational school, the host company and the branch training centre. Learners who obtain their vocational qualification are fully employable.

The Federal VET Diploma is the main school-leaving qualification for entry into tertiary level professional education. When combined with the optional Federal Vocational Baccalaureate, holders may enrol in tertiary-level higher education at any Swiss university of applied sciences.

### Progression to tertiary-level professional education

The professional education sector includes preparatory courses for federal professional examinations as well as enrolment in federally recognised professional education programmes. Preparatory courses combine classroom instruction with the candidate's own work experience, thereby reflecting at tertiary level the same theory-practice approach to learning found in Swiss dual-track VET programmes. They also build from the competences gained from previous vocational education and training. And, like Swiss dual-track VET programmes, they focus on the acquisition of competences and are geared to the needs of the labour market. There are two federal professional examinations, the 'Professional Examination (PE)', awarding the Federal Diploma of Higher Education and the 'Higher Professional Examination (HPE)', awarding the Advanced Federal Diploma of Higher Education. Preparatory courses for the PE provide candidates with in-depth technical knowledge and skills and enable them to specialise. Preparatory courses for HPE build on the knowledge and skills gained from the PE. Professionals who pass the HPE are recognised as top-notch experts in their branch and may work in a managerial capacity in companies. Federally recognised professional education programmes at colleges of higher education prepare candidates for challenging technical and managerial tasks that tend to be broader in scope than what is covered in federal professional examinations. Colleges of Higher Education award Advanced Federal Diplomas of Higher Education.

### Progression to universities via Federal Vocational Baccalaureate (FVB)

The preparatory course for the Federal Vocational Baccalaureate (FVB) examination complements the vocational training received for the Federal VET Diploma. The corresponding examination covers general education subjects and learners who pass the FVB examination may directly enrol in a Swiss university of applied sciences (UAS). If they wish, holders of the FVB may then attend a subsequent preparatory course for the University Aptitude Test (UAT). This latter examination serves as a bridge between the FVB and enrolment in Swiss tier-one universities, which include cantonal universities and Switzerland's two federal institutes of technology (the ETH in Zurich and the EPFL in Lausanne).

Additional information on certificate supplements can be found here: [www.supplementprof.ch](http://www.supplementprof.ch)