Model for creating a qualification profile at ETH Zurich

LET, February 2017

## Introduction

The qualification profile represents the academic goals which are to be achieved via the curriculum, the range of courses and the performance assessments of a particular degree programme. It also describes the competences which graduates will acquire by the end of the degree programme, divided into the following three categories: domain-specific knowledge and understanding; skills; and personal and social competences.

Qualification profiles are compiled by the department responsible for a degree programme in cooperation with its instructors and implemented in the respective range of courses. They form part of the Diploma Supplement provided to graduates and are also published as an appendix to the respective degree programme regulations (in German and English).

This model is intended as an aid to creating qualification profiles according to a system designed specifically for ETH.

## Contents

Requirements for qualification profiles 1

Qualification form, with key questions 2

Appendix: Overview of the depth and breadth of knowledge 3

## Requirements for qualification profiles

* A qualification profile should describe the competences to be acquired by students during a degree programme and the learning outcomes of that degree programme. It should comprise an introduction and the three categories “Domain-specific knowledge and understanding”, “Skills”, and “Personal and social competences”, each with ca. 4 competences.
* The [levels of competence in the taxonomy of Anderson & Krathwohl (2001)](https://www.ethz.ch/content/dam/ethz/main/eth-zurich/education/lehrentwicklung/files%20DE/Vorlage_LernzieleFormulierenDeEn.pdf) are recommended as an aid to formulating competences.
* The competences listed should describe not only content, but also the depth and breadth of knowledge (see Appendix).
* The qualification profile should set out the specific learning outcomes of a degree programme and its specialisations (majors, tracks).
* The qualification profile must be written in German. It will be translated into English by Academic Services.

## Qualification profile form, with key questions

|  |
| --- |
|  |

**Introduction**

***Key questions:***

What specialised academic profile have the graduates of this degree programme acquired? What professional activities and career paths are open to them after completing the programme? What is the context of the degree programme?

...................................

**Domain-specific knowledge and understanding**

***Key questions:***

What knowledge regarding phenomena, processes and structures is in place when the degree programme ends? What domain-specific core concepts have the students mastered?

Holders of a Bachelor’s/Master’s degree in ...

* ...................................

**Skills**

**a) Analytical skills**

***Key question:***

What skills have the graduates of this degree programme mastered in the areas of analysis, modelling and evaluation of phenomena, structures, processes, systems and problems in order to address domain-specific tasks?

Holders of a Bachelor’s/Master’s degree in ...

* ...................................

**b) Developmental skills**

***Key questions:***

What skills have graduates mastered in the areas of design and development of systems, processes and experiments in order to address domain-specific tasks? What skills do they possess in process, resource and organisational management?

Holders of a Bachelor’s/Master’s degree in ...

* ...................................

**Personal and social competences**

***Key questions:***

What type of professional behaviour has been instilled in the graduates of this degree programme? What communication skills are in place when the degree programme ends? What kind of techniques for reflecting on personal discipline and patterns of thought and action are in place?

Holders of a Bachelor’s/Master’s degree in ...

* ...................................

## Appendix: Overview of the depth and breadth of knowledge

|  |  |  |  |
| --- | --- | --- | --- |
| **Breadth of knowledge****Depth of knowledge** | **All areas of(e.g. physics)** | **Selected areas of****(e.g. specialisation tracks)** | **A specialised area within** |
| **Basic knowledge***Associated terms:*- Orientational knowledge- Overview knowledge | Context:Students have basic knowledge over a wide disciplinary area, acquired e.g. by attending an introductory courseExample formulation:*... have orientational knowledge in all areas of physics* | Context:Students have a foundation in a specific subject area, acquired e.g. by attending a specific service lecture (such as Chemistry for Physicists)Example formulation:*... have a foundation in inorganic chemistry* |  |
| **Consolidated knowledge***Associated terms:*- Deep knowledge- Advanced knowledge | Context:Students have in-depth knowledge over a wide disciplinary areaExample formulation:*... consolidated knowledge of many themes of general, experimental and theoretical physics* | Context:Students have in-depth knowledge in selected areas, acquired e.g. by attending a core courseExample formulation*:**... advanced knowledge of theoretical physics* | Context:Students have addressed a theme in detail, e.g. in the framework of a semester projectExample formulation: *... in-depth knowledge in a specialised area of theoretical physics* |
| **Specialist knowledge***Associated terms:*- Research front- Highly specialised knowledge- Special knowledge | Specialists in all areas of a discipline | Context:Students possess specialist knowledge in several areas, e.g. through attending several core courses and the associated electivesExample formulation*:**... highly specialised knowledge in several areas of theoretical physics* | Context:Students are specialists in a specialised area, acquired e.g. through writing a Master’s thesisExample formulation*:**... specialist knowledge in a selected specialist area of theoretical physics* |

Dark grey: typical combinations
Light grey: less frequent variations
White: rare variations