



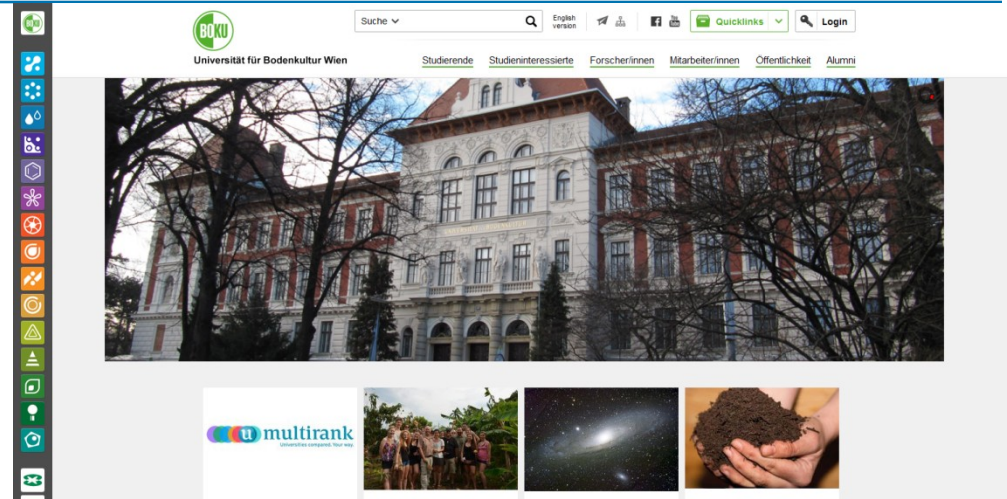
**Universität für Bodenkultur Wien**  
Department für Wasser-Atmosphäre-  
Umwelt

# QANTUS General Assembly

31.03. – 01.04.2015, Vienna

Willibald Loiskandl, Alexandra Strauss-Sieberth  
and Margarita Himmelbauer

# Content



🏰 **Qualification Framework in Austria**

🏰 **Environmental studies at BOKU/ Examples**

🏰 **Quality assurance**

# Qualification Framework in Austria



- > News
- > Events
- > Contact
- > Press Releases
- > Downloads
- > Newsletters

Deutsch  

Home | OeAD - Infos & Services | [Projects & Cooperations](#) | [Welcome to Austria](#) | [Go International](#)



## Quality & Transparency

- > Network - QALLL
- > National Coordination Point for NQF
- > ARQA-VET
- > Europass - Applying for Jobs in Europe
- > Euroguidance - Career Counselling throughout Europe
- > Bologna Service Point
- > ECVET Experts

## Coordination Point for the NQF in Austria



The coordination point for the NQF in Austria (NCP) is the central administration, coordination and information office for the National Qualifications Framework (NQF) in Austria.

The aim of the National Qualifications Framework is to create a translation tool between the different qualifications systems and their levels for all areas of education in Austria. The recording and classification of the qualifications into eight levels is oriented upon learning results and is based on the **Recommendation of**

**Nationalagentur  
Lebenslanges Lernen**  
National Agency for  
Lifelong Learning

**nks**  
Koordinierungsstelle  
für den NQR | Österreich

Ebendorferstraße 7  
1010 Wien  
T +43 1 534 08 - 0  
F +43 1 534 08 - 699  
E [nqr@oead.at](mailto:nqr@oead.at)

**Decision 2008 → EQF LLL**

and the European Qualifications Framework, improves the quality and transparency between the two systems and thus guarantees the successful implementation of the national qualifications framework in Austria.

The coordination point for the NQF, which has been established at the OeAD-GmbH / National Agency for Lifelong Learning, is supported by the European Commission and has been commissioned by the national authorities.

Link To the European Commission: [The European Qualifications Framework \(EQF\)](#)

[top](#) [Print this page](#)

# Qualification Framework in Austria



Nationalagentur  
Lebenslanges Lernen  
National Agency for  
Lifelong Learning

nks

Koordinierungsstelle  
für den NQR | Österreich

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The aim of the National Qualifications Framework is

→ to create a translation tool between the different qualifications systems and their levels for all areas of education in Austria.

# Qualification Framework in Austria



Nationalagentur  
Lebenslanges Lernen  
National Agency for  
Lifelong Learning

nks

Koordinierungsstelle  
für den NQR | Österreich

The recording and classification of the qualifications into eight levels is oriented upon learning results and is based on the Recommendation of the Parliament and of the Council of April 23rd, 2008 for the establishment of a common European reference framework, the European Qualifications Framework for Lifelong Learning (EQF).

# Qualification Framework in Austria



Nationalagentur  
Lebenslanges Lernen  
National Agency for  
Lifelong Learning

nks

Koordinierungsstelle  
für den NQR | Österreich

The NCP team assures

- the relationship between the national qualifications system and the European Qualifications Framework,
- improves the quality and transparency between the two systems
- and thus guarantees the successful implementation of the national qualifications framework in Austria.

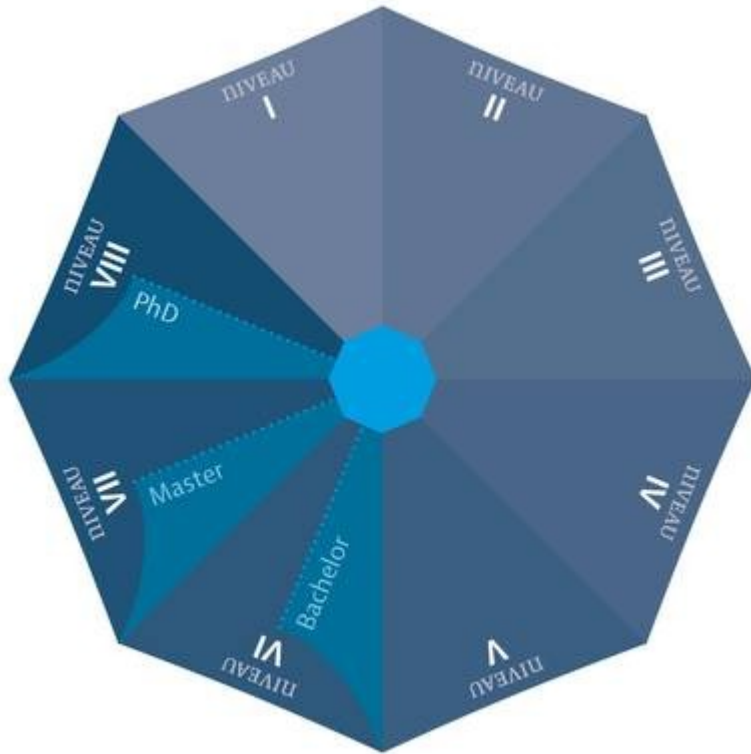
## Tasks of the Coordination Point

- Support of the development and implementation of the NQF in Austria
- Establishment of an internet-based NQF information system, including an NQF register
- Public relations, events and guidance
- Networking on the national and European level

The coordination point for the NQF, which has been established at the OeAD-GmbH / National Agency for Lifelong Learning, is supported by the European Commission and has been commissioned by the national authorities



## Qualification Framework in Austria

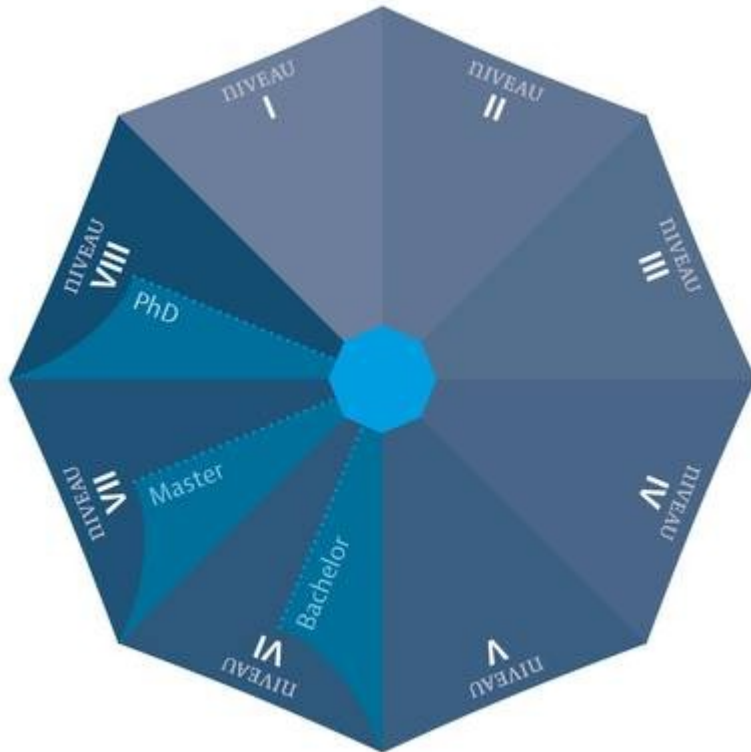


At the core of the European Qualifications Framework for Lifelong Learning (EQF) there are eight reference levels that comprise the entire spectrum of possible qualifications from basic education to the highest level of academic and vocational education and training and are characterised on the basis of learning outcomes.

By 2013 the entire Austrian qualifications system have been integrated into a classification scheme with eight levels.

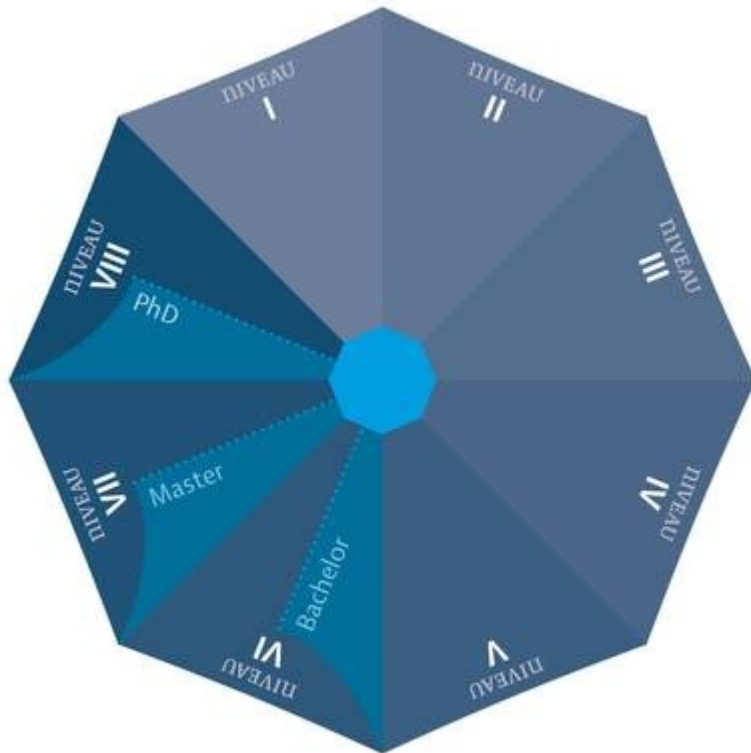


# Qualification Framework in Austria



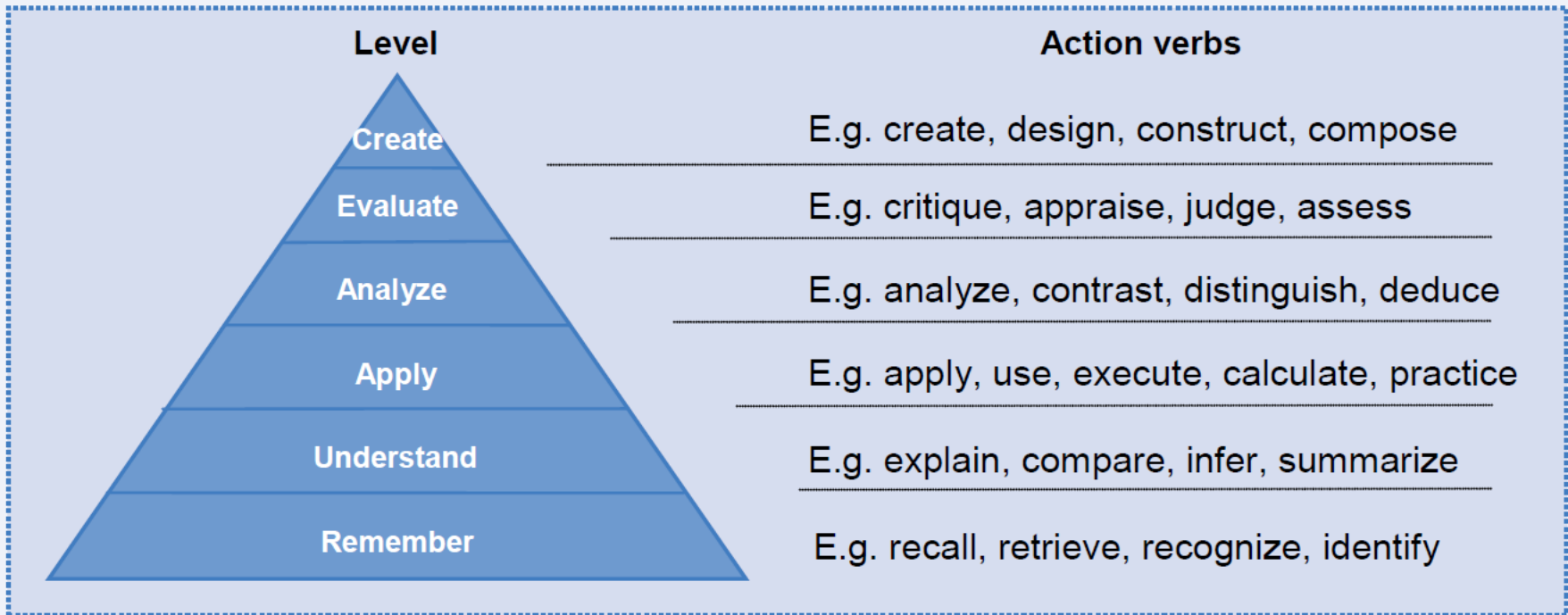
The NQF comprises eight levels with qualifications from all educational contexts assigned to Levels 1 to 5, also characterised by EQF descriptors (*competence, skills, knowledge*).

## Qualification Framework in Austria



At Levels 6 to 8, different sets of descriptors are applied. Whereas qualifications of the Bologna architecture acquired at higher education (HE) institutions (*i.e. bachelor, master and PhD*) are classified according to the Dublin descriptors (*Knowledge and Understanding, Application of Knowledge and Understanding, Ability to Make Judgements, Ability to Communicate and Learning Skills*), assignment of all the other qualifications builds on the EQF descriptors (*competence, skills, knowledge*), which have been formulated to complement the EQF descriptor, and ‘reference qualifications’.

# Qualification Framework in Austria



Graph 2 – Example for Bloom's Taxonomy after Anderson et al. 2001 (after Steen 2009)

Source: E-Learning: Didactical Recommendations and Quality Assurance An Overview

Euroleague for Life Sciences / Quality Assurance Support Team & eLearning Support Team Copyright 2012 by the Euroleague for Life Sciences <http://www.euroleague-study.org>

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## Learning outcome

Learning outcomes are statements that specify what learners will know or be able to do as a result of a **learning activity**. Outcomes are usually expressed as knowledge, skills, or competences.

Passive  $\leftrightarrow$  Active

Learning outcomes should flow from a needs assessment. The needs assessment should determine the gap between an existing condition and a desired condition. Learning outcomes are statements which described a desired condition – that is, the knowledge, skills, or competences needed to fulfil the need.

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## Learning outcome

Learning outcomes provide direction in the **planning of a learning activity**. They help to:

**Focus on learner's behaviour that is to be changed**

**Serve as guidelines for content, instruction, and evaluation**

**Identify specifically what should be learned**

**Convey to learners exactly what is to be accomplished**

*More definitions:*

*“An educational need is something individuals should learn for their own good, for the good of their organization or profession, **and** for the good of society.”*

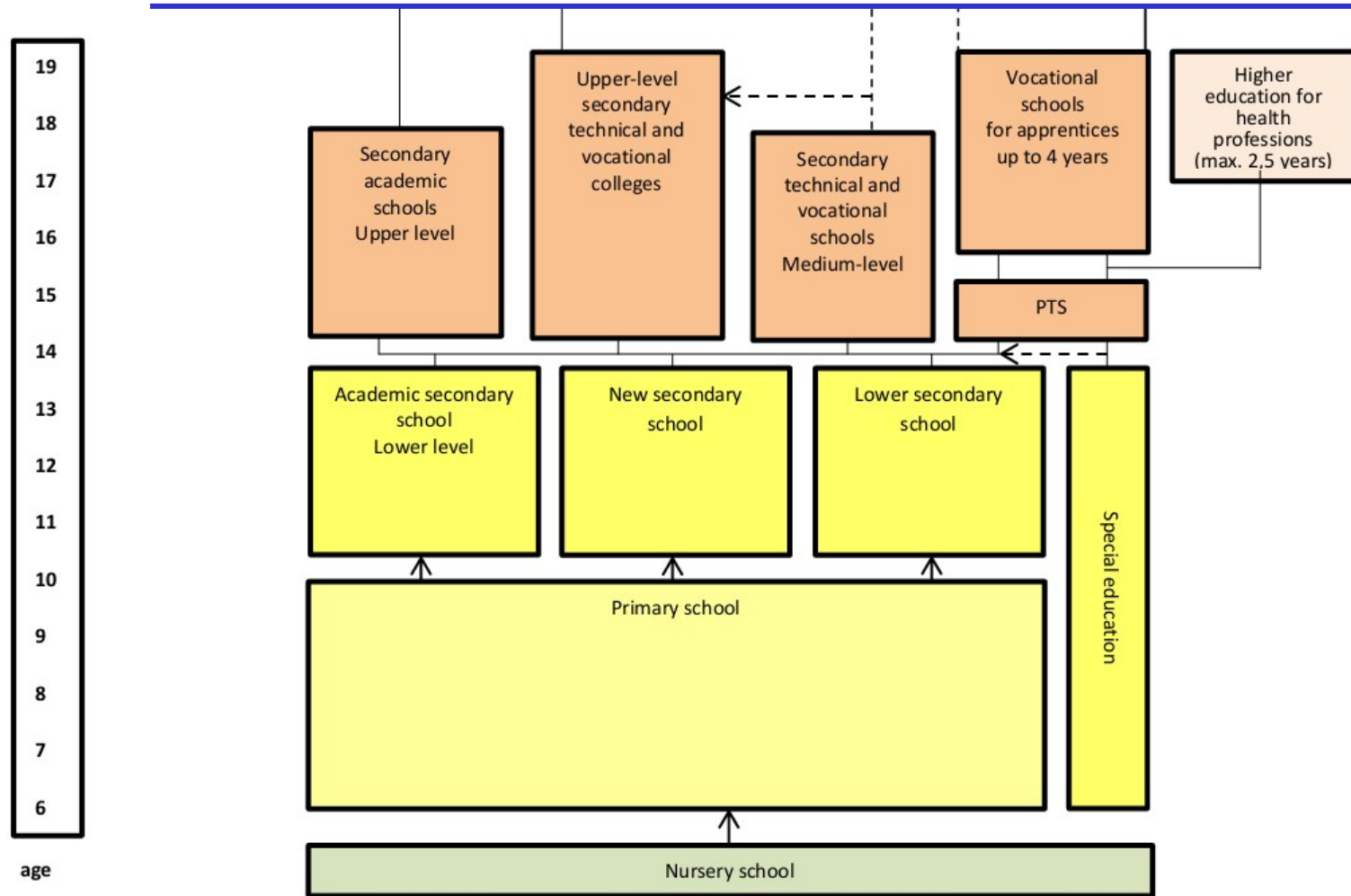
*(Knowles, 1970)*

*A need represents a gap between an individual's current level and some desired level of knowledge, skills, or attitudes.*





# Qualification Framework in Austria



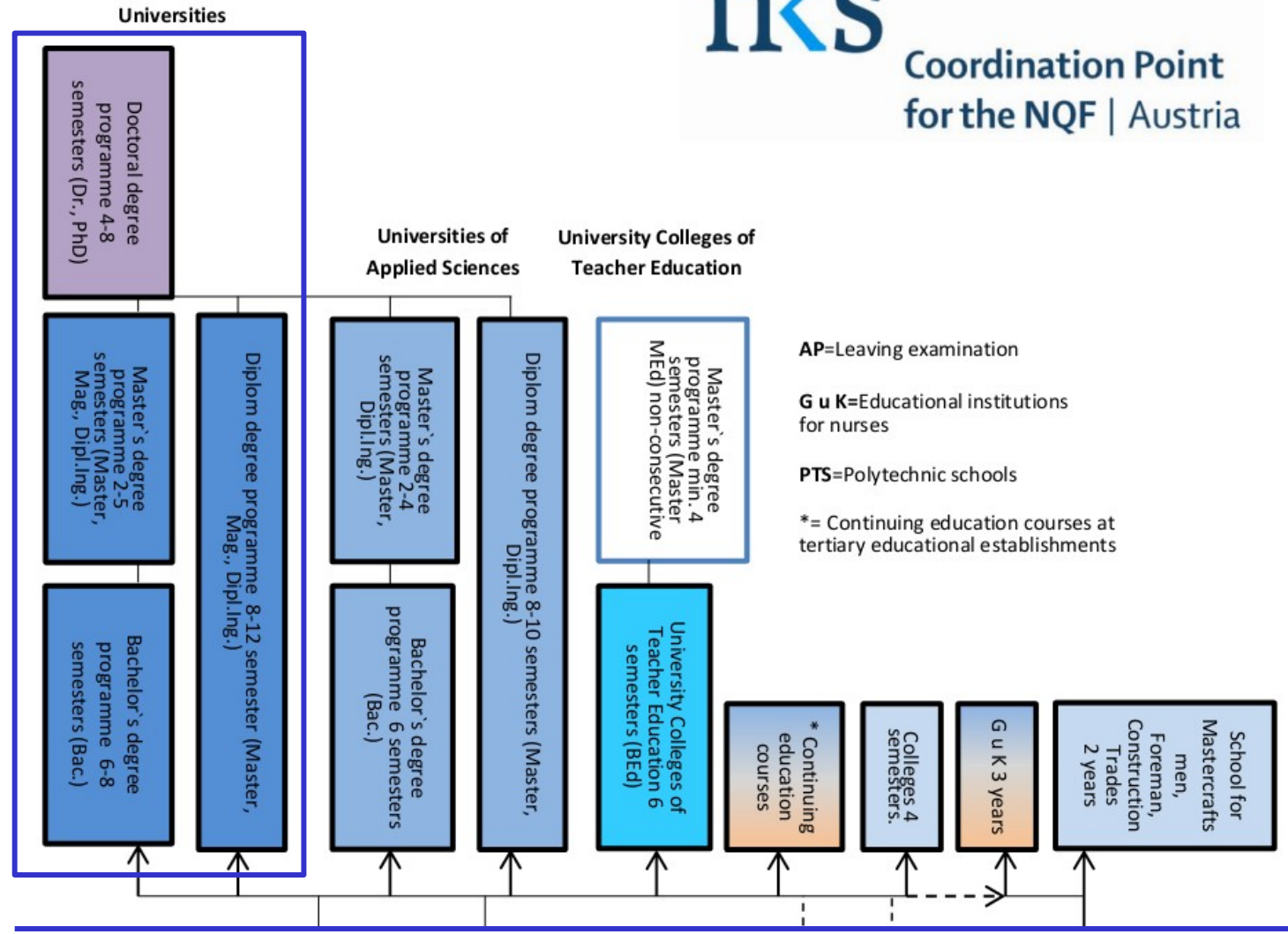
Sources: BMUKK, BMWF, IBW.

The above figure was prepared by the Austrian NCP within the context of this report and based on the above sources.

# Qualification Framework in Austria



## The Austrian Education System



Sources: BMUKK, BMWF, IBW.

The above figure was prepared by the Austrian NCP within the context of this report and based on the above sources.

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## Qualification Framework in Austria

### Development of NQF Austria

- 2007 research institutions carried out “extended studies”.
- since 2008 several pilot projects have been carried out in the following sectors: “building”, “tourism”, “health”, electrical and in the commercial and administrative field.
- after the consultation process in 2008 and the analysis of numerous comments in 2009 by a group of experts a decision about the first few principles of the NQF in Austria could be taken on the basis of NQF position paper by a speech in front of the Ministerial Council in November 2009.

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## Qualification Framework in Austria

### Development of NQF Austria

•in 2010 criteria and procedures for the classification of qualifications were developed. These are now undergoing a first testing procedure through the simulation phase. The simulation phase pursues the following aims:

- Testing of the criteria elaborated for the classification of qualifications in the NQF and of the procedure for the classification of qualifications (Draft Handbook K1)
- Development of an evaluated and tested basis for future classifications of qualifications of all corridors.
- “Testing” of the critical moments in the procedure

---

## Qualification Framework in Austria

### Development of NQF Austria

- in 2011 the National Coordination Point started extended public relations activities. On one hand with a road show through Austria and the beginning of the seminar series “Fit for NQF”, and on the other hand with individual counselling. The aim is to look into various aspects of the NQF/EQF and the learning result orientation and related topics and tools for selected target groups.
- in 2012, too, there will be several events focusing on specific target groups. Another project for this year is the completion of an Austrian EQF classification report, which will provide an overview of the current developments.

# Environmental studies - Bachelor, Master, PhD & LLL Programmes at BOKU

## Bachelor Programmes

Duration: 6 semesters

ECTS: 180

Academic Degree: Bachelor of Science (BSc.)

Language: German

## Master Programmes

Duration: 4 semesters

ECTS: 120

Academic Degree: Master of Science (MSc.)

Language: English and German

## PhD Programmes

Duration: 6 semesters

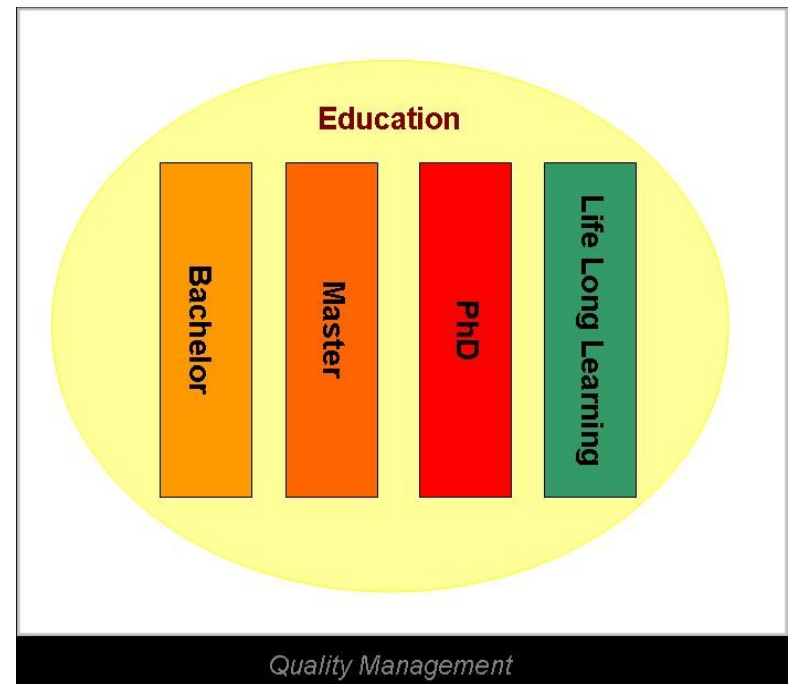
ECTS: 180

Academic Degree: PhD

Language: English and German

## LLL Programmes

Language: English and German



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# Environmental studies - Bachelor, Master and PhD programmes at BOKU

## 8 Bachelor programs

<http://www.boku.ac.at/en/studienangebot>

## 4 English master programs

<http://www.boku.ac.at/en/studienangebot/englischsprachige-masterstudien>

## 15 German master programs

<http://www.boku.ac.at/en/studienangebot/deutschsprachige-masterstudien>

## 11 International master programs

<http://www.boku.ac.at/en/studienangebot/internationale-masterstudien>

## 4 Doctoral programs

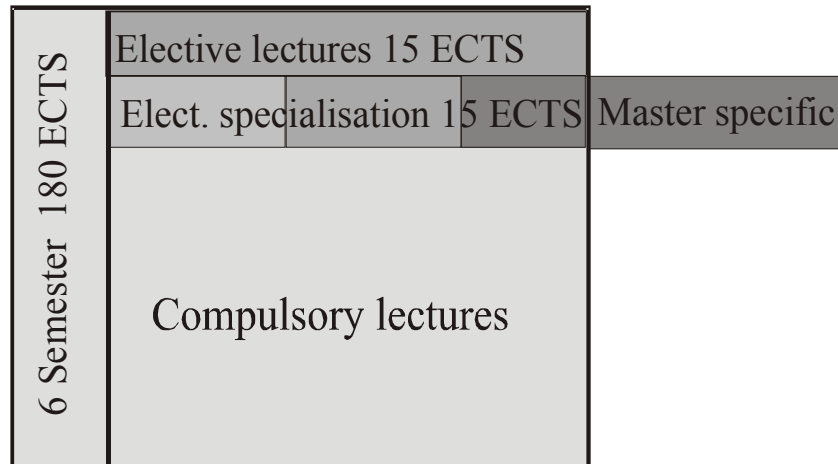
<http://www.boku.ac.at/en/studienangebot/doktoratsstudien>



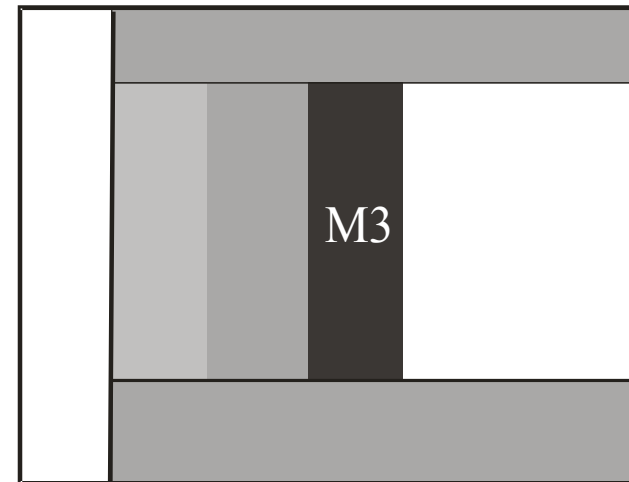
# Environmental studies – Bachelor and Master programmes at BOKU

## Modularised curriculum concept

### Bachelor



### Master



Module: closed, formal structured learning process (Bologna declaration)

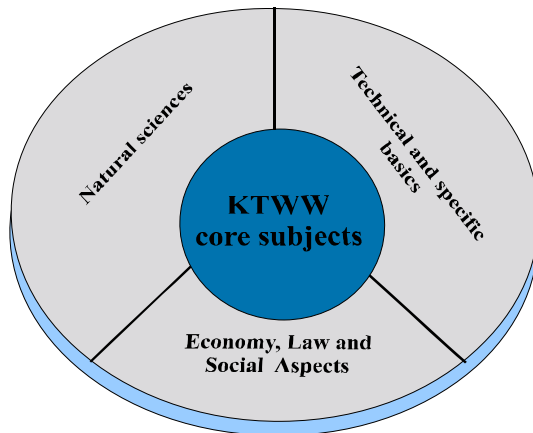
- thematic defined learning and teaching
- with defined, coherent learning outcomes
- defined workload of students (ECTS-Credits)
- unambiguous and transparent grading criterias

# Environmental studies - Bachelor and Master programmes at BOKU related to the IHLW

- Environmental Engineering
- Environmental Engineering (KTWW in German)
- Water Management and Environmental Engineering (in Engl.)
- NARMEE (in Engl.)
- International Course in Environmental Management and Ecological Engineering – ENVEURO (in Engl.)

} Bachelor Programme

} Master Programme



## 3 Pillars of Education

Identity and Characteristic of BOKU-Studies

Bachelor:

à 25% Natural Sciences, Technique,  
Socioeconomic

Master:

à 15% Natural Sciences, Technique,  
Socioeconomic

### Legal Framework

LLL: 2020 - Strategy for Life Long Learning Austria

- 4 Basic Principles
- 5 Strategic Guidelines
- 8 Key Competences

#### *Publishers*

- Ministry of Education, Arts and Culture
- Ministry of Science and Technology
- Ministry of Labour and Social Affairs
- Ministry of Economy, Family and Youth

## Environmental studies - LLL Austria

### 4 Basic Principles

- Gender and Diversity
- Equal Chances and Social Mobility
- Quality and Sustainability
- Performance and Innovation

### 5 Strategic Guidelines

- Life Phase orientation
- Apprentice is the centre
- Life Long Guidance
- Competence orientation
- Participation support

### 8 Key Competences

- Competence in mother tongue
- Competence in foreign languages
- Competence in Mathematics and Natural Sciences
- Competence with Computer
- Learning Competence
- Competence in interpersonal, intercultural and social interaction
- Enterprise Competence
- Cultural Competence

### **BOKU Implementation Procedure**

- Departments suggest LLL-Activity
- Senate develops Quality Assurance
- Office of Rector approves LLL-Activity

### **BOKU Implementation Guidelines**

- **Self-financing**
- Provision of professional and work-related extra qualifications
- Relevant to society
- Belonging to one of four categories (*cf. next slide*)

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## Environmental studies - LLL programmes at BOKU

### Category I:

- 90 ECTS
- Finally certified:  
Master of ...  
(e.g. Business Administration)

### Category II:

- 60 ECTS
- Academically certified ...  
(e.g. Academic Estate Manager)

### Category III:

- < 60 ECTS
- Summer Schools, Seminars
- **With** course assessment

### Category IV:

- < 60 ECTS
- Summer Schools, Seminars
- With certificate of attendance
- **Without** course assessment

---

## Environmental studies - LLL programmes at BOKU


### Category I: (3 Courses)

- MBA in Sustainable Development and Management
- MBA in Environmental Management
- MEng NanoBiosciences & NanoMedicine

### Category II: (3 Courses)

- **Academic hunter**
- Academic Course: Media naturae
- ULG Ländliches Liegenschaftsmanagement

### Category III:

- Summer schools – Euroleague – EU  e-learning

### Category IV:

- Univ.-Kurs Bleichen in der Papierrestaurierung

Source: <http://www.boku.ac.at/17542.html>



# Environmental studies - Summer Schools

## Intensive Programmes and Summer Schools 2015

### Spend a different summer - study ELLS where!

- Earn academic credits in breath taking natural environments!
- Combine theoretical input with practical field work!
- Get to know other students in your field from all over the world!

Link [http://www.euroleague-study.org/109923#jfmulticontent\\_c232519-2](http://www.euroleague-study.org/109923#jfmulticontent_c232519-2)

The screenshot shows a website page with a dark green header containing navigation links: About us, Study ELLSwhere, Student Conference, Network, Awards, News, Intranet, and Contact. Below the header, the page title is "Intensive Programmes and Summer Schools 2015" and the subtitle is "Spend a different summer - study ELLSwhere!". A list of bullet points describes the benefits: earning academic credits, combining theory with practical field work, meeting students from around the world, and enjoying social activities. The page is organized into sections: "Summer Schools 2015", "General information", and "For coordinators". The "General information" section contains three paragraphs: "Application for Summer Schools" (explaining the application process), "Financial support" (mentioning scholarships), and "Recognition" (discussing mutual recognition between universities). The footer includes a search bar, social media icons for Twitter and Facebook, and contact information for ELLS COORDINATION, including the name Pia Schultz, phone number +46 (0)72 503 5054, and email address ells@slu.se. A "Last Update: 2015-03-25 | Feedback" link is also present.

# Master Programme



## Water Management and Environmental Engineering (WMEE)

**Compulsory  
Subjects**

**Σ 30 ECTS**

Basic Subjects  
Σ12 ECTS

Complementary Subjects  
Σ12 ECTS

Engineering  
Project  
Σ6 ECTS

**Master's thesis  
Σ 30 ECTS**

**Master Seminar  
Σ 2 ECTS**

**Sectoral  
Subjects**

**Σ 46 ECTS**

1. Sanitary  
Engineering

2. Rural Water  
Management

3. Hydrology and  
Water  
Management

4. Hydraulic Engineering  
and  
River Basin  
Management

5. Aquatic Ecology  
and  
Wetland  
Management

6. Water Management  
in Developing  
Countries

7. Waste  
Management

8. Economy and Law

9. Mountain Hazard  
Processes

10. Mitigation  
Measures  
for Mountain Hazards

11. Risk  
Management

Choose **5 Sectoral Subjects (blocks)** and take à 6 ECTS of the **obligatory courses**: Σ 30 ECTS

+ **elective specialisation subjects** out of your chosen blocks: Σ 16 ECTS

+ Σ 12 ECTS free electives

Master – Water Management and Environmental Engineering → 3 Blocks out of **1, 2, 3** and **4**

Master – Mountain Risk Engineering → Choose blocks **9, 10** and **11**

**Sectoral Subjects (blocks)**

1. Sanitary Engineering

2. Rural Water Management

3. Hydrology and Water Management

4. Hydraulic Engineering and River Basin Management

5. Aquatic Ecology and Wetland Management

6. Water Management in Developing Countries

7. Waste Management

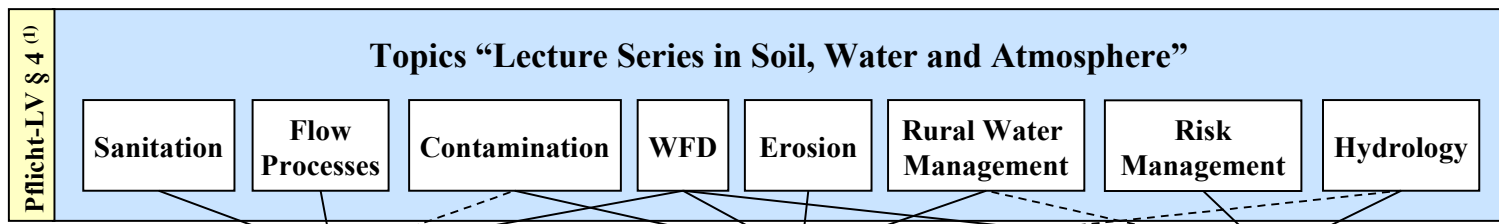
8. Economy and Law

9. Mountain Hazard Processes

10. Mitigation Measures for Mountain Hazards

11. Risk Management

# Master Programme Water Management and Environmental Engineering (WMEE)



	<b>SIG (H811)</b>	<b>IHLW (H815)</b>	<b>IWHW (H816)</b>				
<b>Wahl-LV §5 (2)</b>	<b>Pflicht (2a)</b>	Case Studies in Sanitary Engineering	Water Supply and Wastewater Treatment	Rural Water Management (advanced)	Soil Conservation and Soil Protection	Hydrological Processes and modelling	Water Resources Planning and Management
	<b>Wahl (2b)</b>	On Site Solutions for Water Supply and Sanitation	Modelling in Sanitary Engineering (Sewer, Treatment Plant + Receiver)	Simulation in Vadose Zone Environment	Physical and Selected Chemical Methods of Soil Analysis	Integrated Flood Risk Management	Application of GIS in Hydrology and Water Management
		Industrial Water Management	Water Resources Management in Developing Co-operation	Soil erosion models and their application	Soil water management	Environmental Risk Analysis & Management	Possible Impacts of Climate Change on Water Resources
		... excerpts					



<b>Targets</b>	Sewer System	Water Quality	Soil Water Management	Soil Water Protection	Water Balance Components	Process Understanding
	<i>understanding and implementation</i>					

**Annotation:** <sup>1</sup> *Pflicht-LV § 4 (compulsory courses): Σ30 ECTS*  
<sup>2</sup> *Wahl-LV §5 (elective courses): Σ 46 ECTS*  
<sup>2a</sup> *Pflicht (compulsory courses): Σ30 ECTS → 5 out of 11 sectoral subjects; each Σ6 ECTS*  
<sup>2b</sup> *Wahl-LV (elective courses): Σ16 ECTS*

# Lectures at the Institute of Hydraulics and Rural Water Management

Bachelor KTWW	Comp.	815.100 Hydraulics and Hydromechanics	815.101 Soil Physics	815.102 Rural Water Management
	Electives	815.012 Supplementary Visual Aids on Soil Physics	815.013 Supplementary Visual Aids on Rural Water Management	815.111 Rural Water Management Field Trip

Master WMEE	Comp.	815.340 Lecture Series in Soil, Water and Atmosphere			
	Modul IHLW	815.342 Rural Water Management (advanced)	815.321 Soil Conservation and Soil Protection		
	Electives	815.319 Irrigation Design	815.320 Soil Water Management	815.311 Simulation in Vadose Zone Environment	815.313 Physical and Selected Chemical Methods of Soil Analysis



# Lecture Series in Soil, Water and Atmosphere VO 815.340

Thomas Ertl

H811 Institute of Sanitary Engineering and Water  
Pollution Control

Willibald Loiskandl

H815 Institute of Hydraulics and Rural Water  
Management

Hubert Holzmann

H816 Institute of Water Management, Hydrology  
and Hydraulic Engineering

## Lecturers

**Priv.-Doz. DI Dr. Thomas Ertl**

**Email:** thomas.ertl@boku.ac.at

**Office hours:** Please ask for an appointment per e-mail

**Ao.Univ.-Prof. DI Dr. Hubert Holzmann**

**Email:** hubert.holzmann@boku.ac.at

**Office hours:** Tuesday and Thursday 10:00-12:00

**Univ.-Prof. DI Dr. Willibald Loiskandl**

**Email:** willibald.loiskandl@boku.ac.at

**Office hours:** Monday 15:30-17:00

## Lecture Room

MUG3-SR13 (alternatively HS XXI)

**Time:** Friday 14:00 – 16:30h

## Registration of Participants

All participating students have to register to the BOKU-Online system. Herewith all required personal information is available to the lecturer.

Please make the registration even if you have already registered by email!

## **Materials and Information**

### **Course Materials on the Internet**

<http://www.boku.ac.at/iwhw/LVA816335/>

### **International Glossary of Hydrology (from UNESCO)**

<http://webworld.unesco.org/water/ihp/db/glossary/glu/aglu.htm>

### **Glossary of Soil Science Terms (from SSS of America)**

<https://www.soils.org/publications/soils-glossary/>



## Schedule and Content

Date	Lecturer	Content
<b>Basic level</b>		
16.11.2012	Holzmann	Introduction
		Water Balance and Scale Issues
		Processes
		Monitoring and Observation of water balance components
	Loiskandl	Interaction Soil / Vegetation / Atmosphere – Introduction
	Ertl	Water quality and index class
23.11.2012	Loiskandl	Soil (Genesis, Type, Properties)
		Soil-Water-Movement
30.11.2012	Holzmann	Runoff Formation
		Rainfall Excess, Methods
07.12.2012	Holzmann	Runoff Processes (Drought, Flood)
		Model Overview
		Legislation
13.12.2012	Loiskandl	Soil-Water-Plant Interaction
		Soil Erosion by Water
Date	Lecturer	Content
<b>Advanced level</b>		
14.12.2012	Loiskandl	Legislation and Soil Water Management
		Case Studies from Thailand, Iran and East Africa
11.01.2013	Holzmann	Application of Rainfall Runoff Models (Forecast, Risk Management)
		Spatial Analysis, GIS
18.01.2013	Ertl	Urban Water and Solute Flow Processes
25.01.2013	Ertl	Urban Drainage
		Sanitary Engineering
		Case Studies and Indication

- The grading for the lecture is based on a written examination
- Dates and locations will be announced in BOKUonline

### **Aim of the lecture**

Providing an overview of the relevant processes of the water cycle in the surface and subsurface environment and its interaction with atmosphere, plants and soils.

The course introduces methods of meteorological, hydrological and soil physical measurements and refers to computational methods for the modelling of water transport. Also soil functions and soil processes are addressed. Water quality and quality impact will be considered with respect to surface and subsurface water bodies.

The objective of the course is to provide a basic knowledge for follow up courses.

### **Outcome**

With respect to the Bologna Study Principles the outcome of the particular courses has to be defined.

These outcomes will explicitly be addressed for the specific course units.

## Guest Lecturer (GL) at the IHLW and other Lectures with IHWL-Participation

Master	GL	<b>815.308</b> Selected Topics of Hydraulics and Rural Water Management	<b>815.310</b> Fluid Mechanics and Groundwaterflow	<b>815.001</b> Workshop on Spatial and Temporal Statistics in Soil Physics
	IHLW	<b>911.302</b> Filtering function of the soil – solute transport in an experiment and computer simulation	<b>912.122</b> Agricultural sciences for developing countries	<b>810.301</b> Structural exercises
	<b>169.302</b> Applied Development Research I	<b>169.303</b> Applied Development Research II		

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## Corner Stones

### Bolgona Process

#### Berlin Conference 2003

“As for Quality Assurance, Ministers stressed that consistent with the principle of institutional autonomy, **the primary responsibility for quality assurance in higher education lies with each institution itself.**”

#### Bergen Conference 2005

**Approval of ENQA Standards and Guidelines for the Quality Assurance of the European Higher Education Area**

#### London Conference 2007

**Setting up European Register (EQAR) for Quality Assurance Agencies**

#### Leuven/Louvain 2009

**National qualification frameworks based on learning outcomes and workload**

#### Bucharest Conference 2012

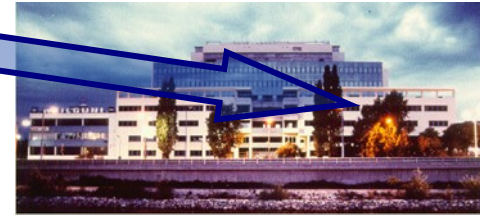
**EQAR-registered agencies allowed to perform their activities across EHEA**

# Contact

University of Natural Resources and Life Sciences, Vienna  
Department of Water, Atmosphere and Environment  
Institute of Hydraulics and Rural Water Management

Universität für Bodenkultur Wien (BOKU)  
Department für Wasser-Atmosphäre-Umwelt  
Institut für Hydraulik und landeskulturelle Wasserwirtschaft

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Tel.: +43 1 47654 5488, Fax: +43 1 47654 5499  
willibald.loiskandl @boku.ac.at





Following slides are prepared by Thomas Guggenberger

## New University Act 2002

→ **Autonomy**

→ **Contract management**

**§ 14:** Universities have to design **their own Quality Management System**  
**Evaluations are a crucial component of Quality Management System**  
Evaluations have to follow international standards  
Evaluations as an ongoing exercise  
All scientific staff has to be evaluated every 5 years  
Results of evaluations have to be considered

---



## Quality Assurance Act for Higher Education 2012

- Quality Audits for public universities every 7 years
  - 4 standards:            quality strategy,  
                                 assure achievement of goals,  
                                 monitoring and information systems,  
                                 systematic incorporation of interest groups
  - 5 areas: education incl. continuous education,  
                                 research & research management,  
                                 administration,  
                                 staff management,  
                                 internationalisation and societal objectives
-

# BOKU Quality Management System



Universität für Bodenkultur Wien

## Objectives:

- support achievement of strategic aims
- set up a quality culture
- document and optimize core processes (PDCA cycles, cover interfaces),
- organisational development

## Principles:

- participation of internal and external interest groups
  - integration of centralized and decentralized quality assurance measures
  - further development of QA tools and evaluations processes
  - follow international standards (ENQA, DeGEval)
  - communication and dialogue
-



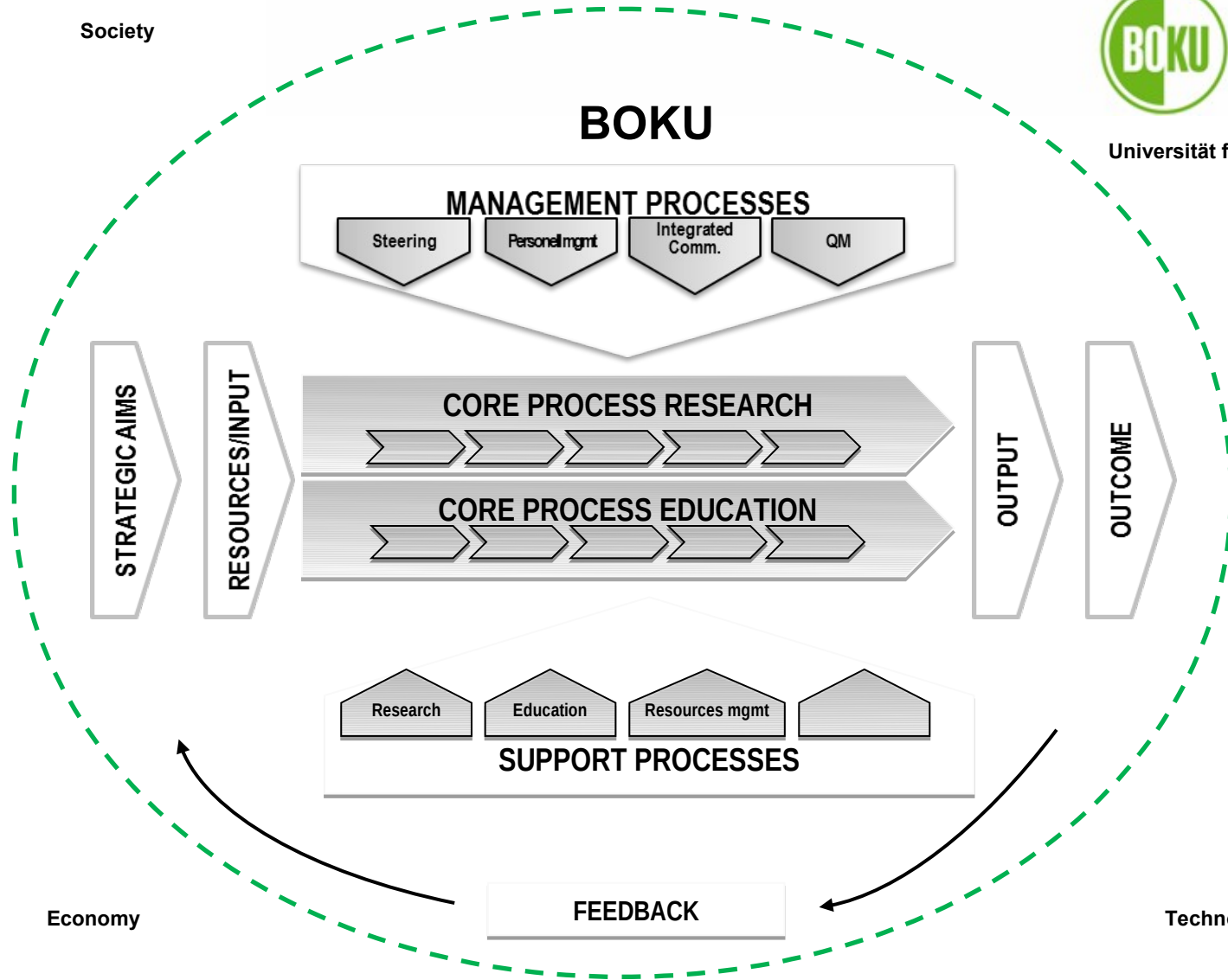
Society



Nature/Ecology

# BOKU

Universität für Bodenkultur Wien



# BOKU Quality Management System



Universität für Bodenkultur Wien

## Activities:

### **Evaluations**

Departments, professorships, courses, degree programmes, strategies

### **Development of criteria & guidelines**

Guidelines for development and implementation of new curricula,  
Guidelines for Joint ELLS Master Programmes, habilitation criteria

### **Process quality management & elaboration of a Quality Handbook**

Study organisation, management of externally funded projects

### **Graduate survey with INCHER Kassel & graduate tracking**

### **Reporting and monitoring:**

Human capital report, achievement report, sustainability report

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## Evaluation of Departments at BOKU

### Specific objectives:

- **assess** the overall performance profile
  - increase the **efficiency and effectiveness** of the department
  - promote **profile and organizational development**
  - highlight developmental **perspectives**, problem solutions and potentials
-



## Evaluation Process

1. Updating of data basis
2. Evaluation contract
3. Selection of peers
4. Internal Evaluation: SWOT analysis, self evaluation report
5. External Evaluation: Peer review
6. Final Report
7. Meeting with head of peers
8. Performance contract between rectorate and department

Duration: 8-10 months

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## Areas of the Evaluation:

1. Department and organisational development
2. Staff management
3. Research
4. Teaching, learning and continuing education
5. Societal aims
6. Financial resources & infrastructure

summative

Evaluation

formative



**Assessment (past 5 years)**



**Strategic and operational plan**

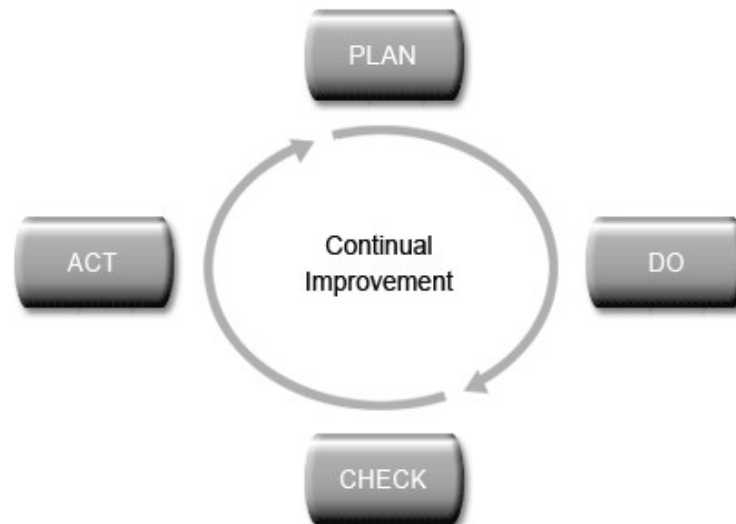
## Core idea of Self-Assessment-Report:

**What are you trying to do?** Relation to strategic plans of department

**How are you trying to do it?** Description of current activities

**How do you know it works?** Evaluation of current activities

**How do you change in order to improve?** Objectives and measures





## Individual Evaluation of Professors

Limited contracts for most professors at BOKU (3-7 years)

**Objective:** To check to which extend professors fulfilled their contracts & to set the basis for future contracts

**Process:**                    Setting up of an internal evaluation board,  
   selection of 2 international peers,  
   data retrieval,  
   self report ,  
   discussion of evaluation of peers and students,  
   final report incl. recommendations,  
   presentation to rectorate,  
   contract negotiation.

**Duration:** 8 months



## Individual Evaluation of Professors

### Lessons learnt:

Initial situation has to be defined before professor takes up his/her job

Objectives have to be defined more precisely

Consequences have to be defined before realisation of evaluation

Longer observation periods necessary

Evaluation procedure needs continuous refinement (e.g. **student participation**)





## Education: New Concept for Course Evaluations

- Standardized questionnaire
  - Open questions
  - **OR: round table discussions**
-

## Course Evaluations: Main dimensions:

- teacher
- course
- framework
- students
- success of the course

Additional specific items for:

- seminars
- practical work
- excursions

Teacher informs about learning outcomes.

Teacher informs about assessment criteria.

I am well supported.

I receive sufficient feedback.

The relevance of the topics is pointed out.

There is a link with practical applications.

There is a link to other fields (interdisciplinarity).

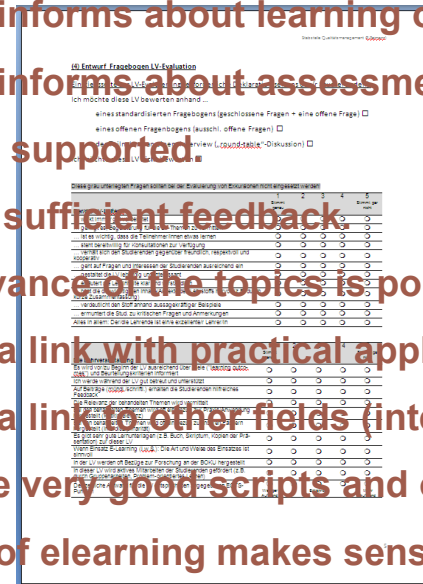
There are very good scripts and other materials.

The use of elearning makes sense.

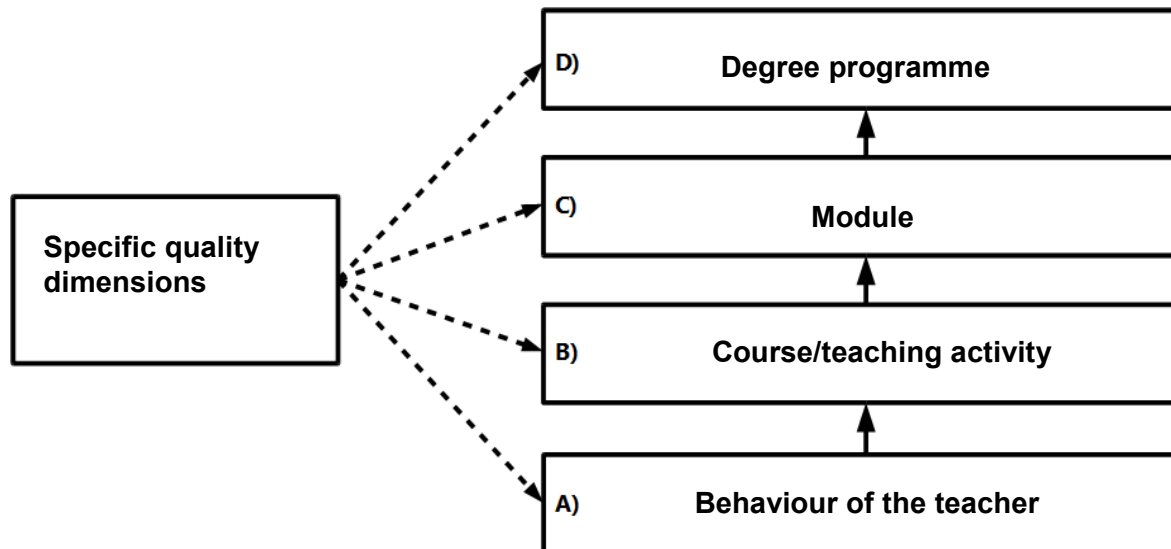
There are links to research at BOKU.

Active participation of students is fostered.

The workload corresponds with the ECTS points.



# Evaluation of Teaching and Learning





## A) Behaviour of the Teacher:

### **A good teacher...**

*cares about* and has an *effect on student learning*;

*knows the subject area*;

clearly states the *objectives* of the course;

is *well prepared* for each class session;

*explains* the course material clearly and effectively;

is *enthusiastic* about teaching the subject and makes the course stimulating;

*summarizes* or emphasizes major points in the lecture;

is readily *available for consultation* with students;

encourages *students to ask questions* and express their ideas or opinions;

clearly explains *how students will be evaluated* in the course;

gives exams or assigns papers which reflect the *important aspects* of the course;

relates the subject matter to *other academic disciplines* or real world problems;

provides opportunities for *students to assess their progress* in the course;

develops and maintains an atmosphere of *mutual respect*.



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## Euro League of Life Sciences (ELLS)

- The Royal Veterinary and Agricultural University (KVL), Copenhagen, DK
- University of Hohenheim (UHOH), Stuttgart, Germany
- Swedish University of Agricultural Sciences (SLU), Uppsala, Sweden
- University of Natural Resources and Life Sciences (BOKU), Vienna, Austria
- Wageningen University and Research Centre (WUR), Wageningen, NL
- Agricultural University Prague (CUA)
- Agricultural University Warsaw (SGGW)

### **Objectives:**

- Joint teaching and learning, esp. joint study programmes
  - Student and lecturer mobility
  - **Quality assurance**
-



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# Euro League of Life Sciences: QA Support Group

## Objectives:

- To carry out an exchange of information between the ELLS universities in the area of quality assurance, evaluation, benchmarking and quality development with special emphasis on teaching and learning
- To improve and further develop the quality of courses and international Master programmes
- To improve evaluation procedures and follow up processes

Members: Experts from all member universities

Student association

ICA

**Euro**league

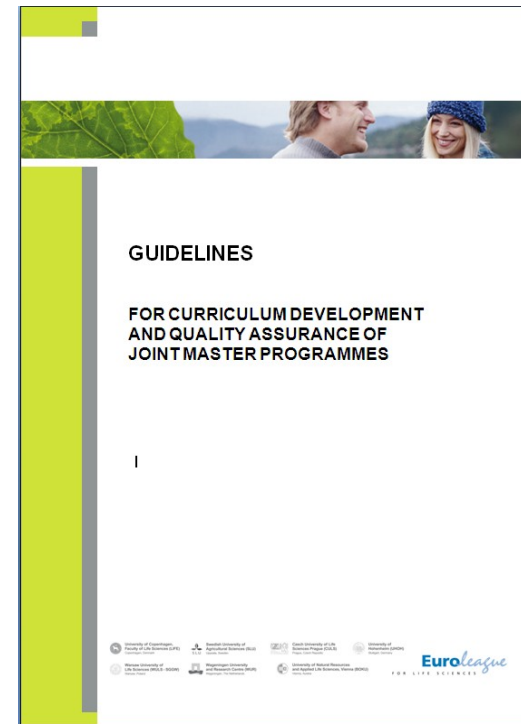
F O R L I F E S C I E N C E S

# Guidelines for Curriculum Development of Joint Master programmes



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1. Need
2. Degree profile
3. Programme structure and mobility
4. Learning, teaching and assessment
5. Admission
6. Master thesis and degree
7. Management and resources
8. Quality assurance



# Criteria: Learning, Teaching & Assessment



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- I. Teaching and learning activities must be designed to achieve the intended learning outcomes, consider the student group and the context of the programme.
  - The focus is on student centred learning approaches,
  - Teaching and learning activities are innovative,
  - The added value of the joint programme must be effective,
  - The international dimensions of these activities must be addressed.



# Guidelines: Thesis Evaluation Form



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Guidelines Curriculum Development for JDini Master

## 4.8 Thesis Evaluation Form

Name: \_\_\_\_\_ Title of Thesis: \_\_\_\_\_

University: \_\_\_\_\_

Starting Date: \_\_\_\_\_ Finishing Date: \_\_\_\_\_ Number of pages: \_\_\_\_\_

Evaluation Criteria	Comments	Grade points/ Grade s
<b>Problem definition</b> <ul style="list-style-type: none"> <li>▪ relevant</li> <li>▪ clearly phrased</li> <li>▪ testable</li> </ul>		
<b>Research design</b> <ul style="list-style-type: none"> <li>▪ theoretical framework</li> <li>▪ research methods</li> </ul>		
<b>Execution</b> <ul style="list-style-type: none"> <li>▪ scholarly level</li> <li>▪ level of innovation</li> </ul>		
<b>Research results</b> <ul style="list-style-type: none"> <li>▪ description</li> <li>▪ analysis</li> </ul>		
<b>Analysis, Interpretation, conclusions</b> <ul style="list-style-type: none"> <li>▪ clear</li> <li>▪ defensible</li> </ul>		
<b>Justification of the source and literature used</b>		
<b>Clearly phrased reporting</b>		
<b>Structure of the thesis</b>		
<b>Further comments</b>		
<b>Grade?</b>		

Date, Name and signature of the examiner

\_\_\_\_\_

31  
 ?Criteria developed by the University of Utrecht [www.uu.nl](http://www.uu.nl) and modified by the Burdeague  
 ?Grades according to national grading systems or adoption of the ECTS-System



## Lessons learnt

1. Different approaches at ELLS institutions – “one“ QA system
2. Main focus: Implementation of Bologna
3. Higher level of commitment through joint MSc.
4. Student participation valuable



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## 2. QM network of Austrian universities

~ 50 members from all 22 Austrian universities:

QM,  
controlling,  
curriculum development,  
didactics,  
research documentation...

3 meetings per year

Homepage with an internal discussion forum



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## QM network of Austrian universities

Working groups:

- surveys on graduates
- evaluation of scientists
- peer counselling
- analysis of students' progression
- setting up a QMS
- preparation of a quality audit



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## Documents & links:

- QA Group of ELLS: [www.euroleague-study.org/supportteams/quality/index.html](http://www.euroleague-study.org/supportteams/quality/index.html)
- European University Association EUA: [www.euy.be/eua.index.isp](http://www.euy.be/eua.index.isp)
- Network QM of Austrian universities: [www.qm-netzwerk.at/Home/das\\_netzwerk/](http://www.qm-netzwerk.at/Home/das_netzwerk/)
- Quality Management at BOKU: [www.boku.ac.at/qm.html](http://www.boku.ac.at/qm.html)



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**Thank you for your attention!**

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www.boku.ac.at/qm.html





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[http://www.lebenslanges-lernen.at/fileadmin/l111/dateien/lebenslanges\\_lernen\\_pdf\\_word\\_xls/nqr/EQR-Zuordnungsbericht/Anhang\\_3\\_Positionspapier\\_NQR\\_200910.pdf](http://www.lebenslanges-lernen.at/fileadmin/l111/dateien/lebenslanges_lernen_pdf_word_xls/nqr/EQR-Zuordnungsbericht/Anhang_3_Positionspapier_NQR_200910.pdf)

[http://www.lebenslanges-lernen.at/fileadmin/l111/dateien/lebenslanges\\_lernen\\_pdf\\_word\\_xls/nqr/EQR-Zuordnungsbericht/Annex\\_4\\_Manual\\_for\\_Including\\_Formal\\_Qualifications\\_in\\_NQF.pdf](http://www.lebenslanges-lernen.at/fileadmin/l111/dateien/lebenslanges_lernen_pdf_word_xls/nqr/EQR-Zuordnungsbericht/Annex_4_Manual_for_Including_Formal_Qualifications_in_NQF.pdf)

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