



**Lifelong Learning for Sustainable  
Development (SUSDEV)**



**University of Natural Resources and  
Life Sciences, Vienna**



# **Methodological workshop and meeting**

Coimbra, 27-29 June 2018

***Evaluation, Quality assurance  
and Quality management at BOKU***

Willibald Loiskandl, Margarita Himmelbauer and Thomas Guggenberger,  
Christina Paulus, Reinfried Mansberger, Alexandra Strauss-Sieberth

## **Major topics addressed**

Quality assurance and management at the BOKU university

Evaluation of staff, courses and programs

## BOKU Quality Board



### Established Working Groups:

- WG acquisition of external funds
- WG administration of studies
- WG quality assurance in education

## New University Law / Act 2002

### Autonomy

### Contract management

- § 14:** Universities have to design **an own Quality Assurance system**  
**Evaluations are a crucial component of Quality Assurance system**  
Evaluations have to follow international standards  
Evaluations as an ongoing exercise  
All scientific staff have 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

Core areas: education incl. continuous education,  
research & research management

Cross sectional areas: administration,  
staff management  
internationalisation and societal objectives

# Quality Management System at BOKU

## Objectives:

- support strategy implementation
- clarify competencies & responsibilities
- optimize core processes
- organisational development
- setting up a quality culture

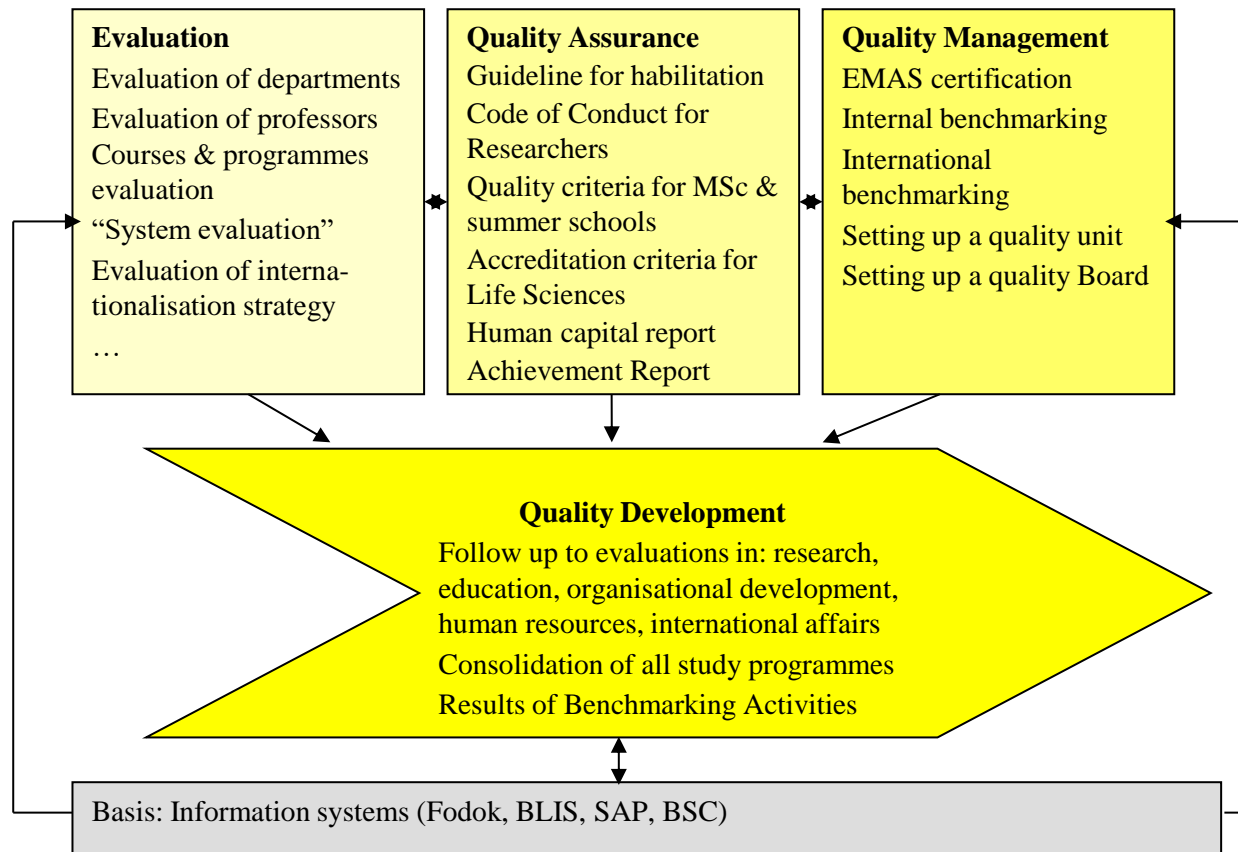
## Principles:

- follow international standards (ENQA, DeGEval)
- evaluations as an ongoing exercise
- participation of interest groups, esp. students
- review of quality assurance tools

# Quality Management System at BOKU

Framework:

University Act 2002, Human Capital Report, ENQA-Standards, DeGEval Standards



## Individual Evaluation of Professors

For the last 3 years only limited contracts for 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, self report written by the candidate (research data basis), discussion of peer reports, final recommendation to rector, presentation to rectorate and senate, contract negotiation

*Duration:* 8 months

*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)

## Evaluation of departments/ organisational units

### *Procedure:*

1. Updating of data basis
2. Initiation of evaluation (selection of peers, evaluation design)
3. Internal Evaluation (SWOT analysis, self report)
4. External Evaluation (peer review)
5. Final Report
6. Follow-up measures: contract between rectorate and department

2006: Evaluation of the Department of Biotechnology (periodically every 6 years)



## Structure of questionnaire:

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)

## Areas:

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

## Course evaluations

- Standardized students' questionnaires (start 2005)
- General questions and specific questions for each lecture type
- Students are asked twice per semester
- online version
- integration into BOKU information management system

## Course evaluations: Main dimensions

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

### *Additional specific items for:*

- seminars
- practical work
- excursions

### *Extract:*

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 (interdisciplinary).

There are very good scripts and other materials.

The use of e-learning 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

## Evaluation of field of studies “Bio Technology and Food Technology”

*Objective:* to design a new curriculum in reference to content, didactics and organisation

*Process:* Situation analysis, benchmarking, self report, curr.dev., peer review, implementation

### *Lessons learnt*

Importance of empirical data basis

Importance of external reconfirmation

Advantage of external firm to raise the data and carry out the evaluation

Chairman contributed largely to objectivity of the discussion

The suggestions of reviewers were broadly accepted

Motivation was risen among BOKU staff

Some follow up activities still to be implemented

## Quality Audit at the Centre of International Relations

*Objective:* Evaluation of the university's international strategy and its implementation in reference to teaching , research & services

*Process:* Self report – workshop – interviews – feedback – final report

*Lessons learnt:*

Integral focus of advantage (subjects, departments, service units etc. and their correlations)

Representatives at BOKU who are critical of internationalisation shall be more included

Existing network of experts was an advantage (IROICA)

Other partners also profited

Immediate follow up activities were elaborated (e.g. setting up of an internat. board)

## **Evaluation of the orientation period of 5 diploma studies**

To what extent does the orientation phase prepare the students for the studies and reduce the drop out rate?

Realized by students' representation: external technical support, questionnaires, interviews, report, presentation

## **Graduates' questionnaires**

To achieve information from graduates to design an innovative curriculum which helps to reduce drop out and the high average study period

## 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

## Euro League of Life Sciences (ELLS) 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

### *Members:*

Experts from all member universities  
Student association  
ICA



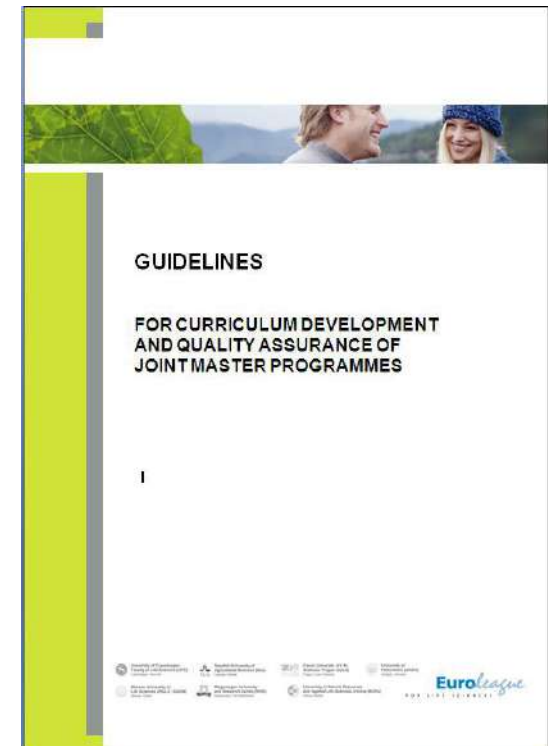
# Guidelines for curriculum development of joint Master programmes

*Basis:* EUA: QA in Joint Master Programmes

TUNING:

*Steps:*

- Need
- Degree profile and learning outcomes
- Programme structure and mobility
- Teaching, learning and assessment
- Admission
- Master thesis and degree
- Management and resources
- Quality assurance and evaluation



## Criteria: Learning, Teaching & Assessment

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.

## Evaluation of Summer Schools:

International Summer School  
on ecological aspects, environmental  
problems and management related to  
land use systems at different altitudes  
in the Black Forest region,  
Germany.



### European Field Excursions in Environmental Science 2005 – Environmental Studies in the Black Forest and in the Rhine Valley

The 2<sup>nd</sup> ELLS Summer University in Environmental Science is held 25 July – 13 August 2005 in South-West Germany.

The topic is the analysis of ecosystems across an altitude gradient from the upper Rhine valley at 200 m a.s.l. to the summit of the Black Forest at 1500 m a.s.l. and the understanding of man-made pressure onto these ecosystems.

#### Objectives

- to apply environmental science theory to problems observed in the field
- to get insight into different types of ecosystems
- to investigate environmental problems caused by 'ancient' activities such as ore mining or by 'modern' activities such as tourism
- to understand novel forest decline
- to learn new tools for collecting, analysing, modelling and interpretation of environmental data
- to combine different sources of knowledge for solving environmental problems
- to solve problems in a group of international students



The 3-week Summer University (6 ECTS) is in English, incl. videoconference, one-week individual study in home country, and two-week excursions in the state of Baden-Wuerttemberg.

- Pre-course videoconference 30 May 2005 for first contact and introduction
- Videoconference at 25 July introducing the 1-week home study in home country (25–29 July)
- 31 July–13 August: Lectures and field excursions in the Black Forest and the upper Rhine valley in South-west Germany. The Summer University venue is the 'Freizeit- und Bildungszentrum' in Altglashütten 40 km east of Freiburg at 990 m a.s.l.

The Summer University is for 10–30 students in the end of B.Sc. or beginning of M.Sc. **Application deadline is 1 March 2005** at the responsible contact person at your home ELLS University. The Summer University is sponsored by the Sokrates-Erasmus program of the European Commission and by ELLS.

Contact information: Prof. Dr. Andreas Fangmeier, Institute for Landscape and Plant Ecology (320), Ökologiezentrum 2, August-von-Hartmannstr. 3, 70593 Stuttgart, tel. +49 711 459 2189, email [afangm@uni-hohenheim.de](mailto:afangm@uni-hohenheim.de)

Further information: <http://www.euroleague-study.org/efes.html>

## ELLS Quality Label

### *Requirements:*

- Quality Checklist
- Mid course evaluation
- Final evaluation
- External Examiner system
- Implementation of required measures

### *Lessons learnt:*

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

## 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

Working groups:

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

## Resume

- Define quality
- Participatory approach
- Information, trust & communication
- Do things well and talk about them!
- Once finished – back to the start.

## Documents & *Links*:

- QA Group of ELLS: <http://www.euroleague-study.org/supportteams/quality/index.html>
- European University Association EUA: <http://www.eua.be/eua/index.jsp>
- Austrian Quality Assurance Agency AQA: <http://www.aqa.ac.at/>
- Accreditation guidelines for „Fachhochschulen“, in English:  
[http://www.fhr.ac.at/fhr\\_inhalt\\_en/00\\_documents/accreditation\\_guidelines.pdf](http://www.fhr.ac.at/fhr_inhalt_en/00_documents/accreditation_guidelines.pdf)
- Accreditation Law for Private Universities in Austria:  
<http://www.bmbwk.gv.at/universitaeten/recht/gesetze/uniakkg/uniakkg3332.xml>
- European Charta for Researchers:  
[http://europa.eu.int/eracareers/pdf/am509774CEE\\_EN\\_E4.pdf](http://europa.eu.int/eracareers/pdf/am509774CEE_EN_E4.pdf)

# LLL Course “Rural Land Management”: Introduction

2010: Request from *Land & Forest Enterprises Austria* to implement a LLL course  
„Land Management in Rural Areas“

Objectives of the extra occupational CPD study programme

- Delivery of understanding & practical competences in key areas of land management (administration and documentation; cultivation and use; validation; development)
- Delivery of up-to date expertise
- Sharing of knowledge and knowledge exchange
- Extension of professional network





# LLL Course “Rural Land Management”: Introduction

2 years

Extra-occupational programme

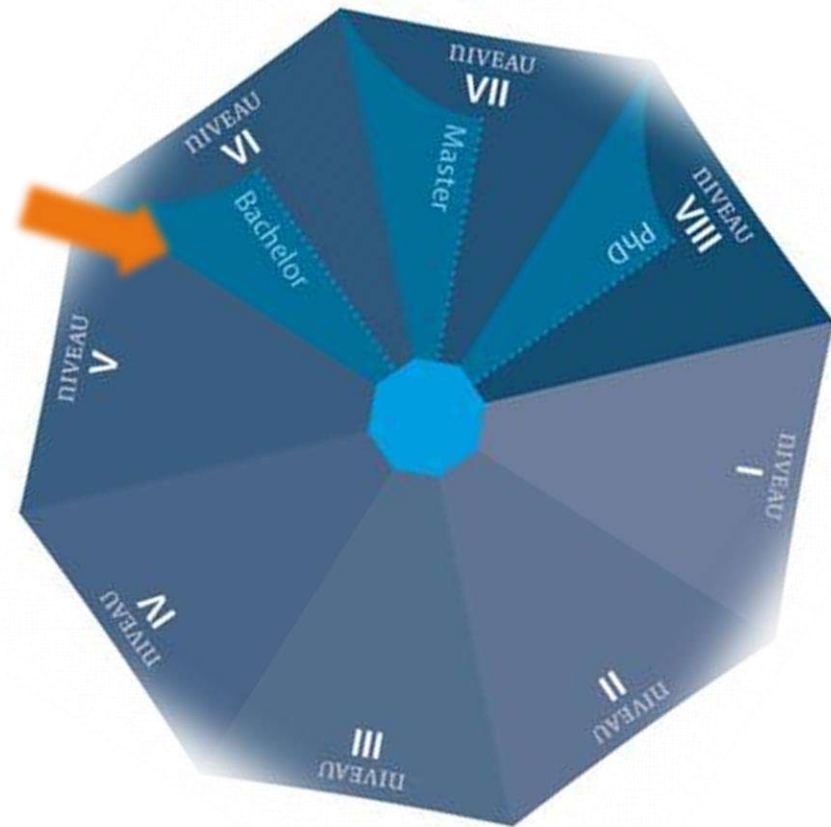
Bologna conform - **European Qualification Frame**  
**5-6**

~ 60 ECTS

Blended learning concept  
(**35% physical presence**)

Maximum of 25 students

Cost-covering



## STAGES OF CURRICULUM DEVELOPMENT

Outline target groups

Describe activity fields & tasks of target groups

Identify learning outcomes

Specify structure of course

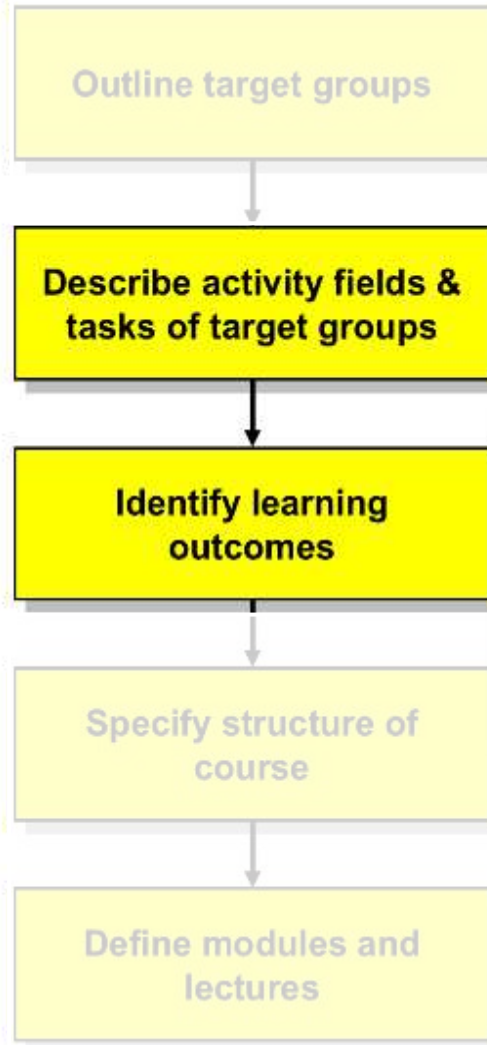
Define modules and lectures

## Target Groups:

- Owners and managers of land;
- Managers and experts in private companies and/or public institutions dealing with land;
- Consultancies (legal, financial, taxation) for land



## STAGES OF CURRICULUM DEVELOPMENT



Development of content and didactical concept by experts from:

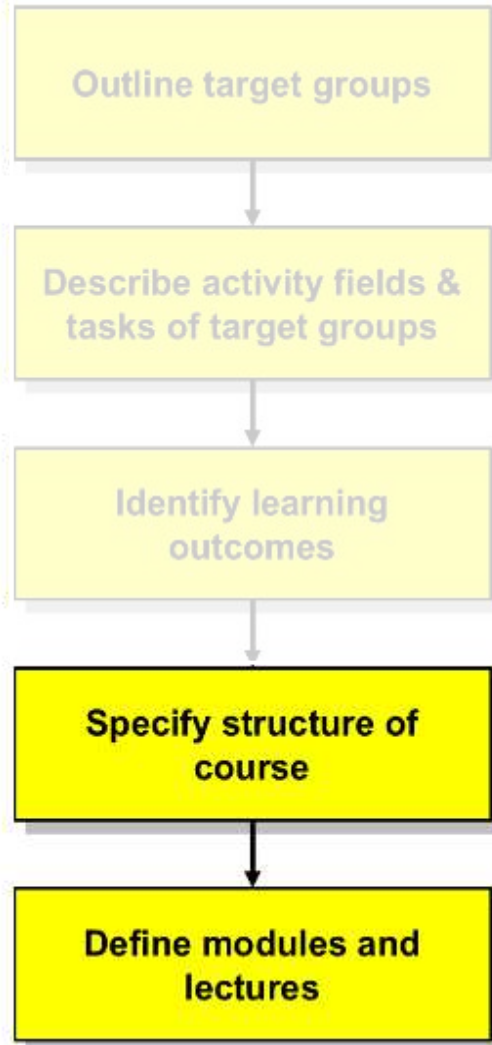
- research & teaching
- public and private practice

1 Verwalten / Dokumentieren (engl. Land Administration)

### Potentielle Tätigkeitsfelder / Aufgaben

- Entwicklung eines Rechnungswesen inkl. Kostenrechnung und Controlling
- Aufbau und Führung eines Geografischen Information Systems (GIS)
- Verfassen von fachspezifischen Anträgen und Meldungen
- Beantragung von Förderungen
- Durchführung von Öffentlichkeitsarbeit (z.B. Entwicklung einer Homepage, Verfassen von Pressemitteilungen, Erstellen eines Folders)
- **Teilung**
- **Organis** Betriebliche Öffentlichkeitsarbeit
  - Betriebliche Ziele und Grundsätze formulieren und kommunizieren können
  - Berichte (Monats-, Quartals- Jahresberichte) gestalten bzw. erstellen können
  - Leistungen für die Gesellschaft identifizieren und kommunizieren können
  - Auf Angriffe (spez. solche in Medien) adäquat reagieren können
  - Unglücks- und Schadensfälle an die Öffentlichkeit kommunizieren können
  - Die wichtigsten Akteure im betrieblichen Umfeld identifizieren und adressieren können
  - Ein konsistentes PR-Konzept in den Grundzügen entwerfen können
  - Den Prozess einer Leitbild- oder Logoentwicklung managen können

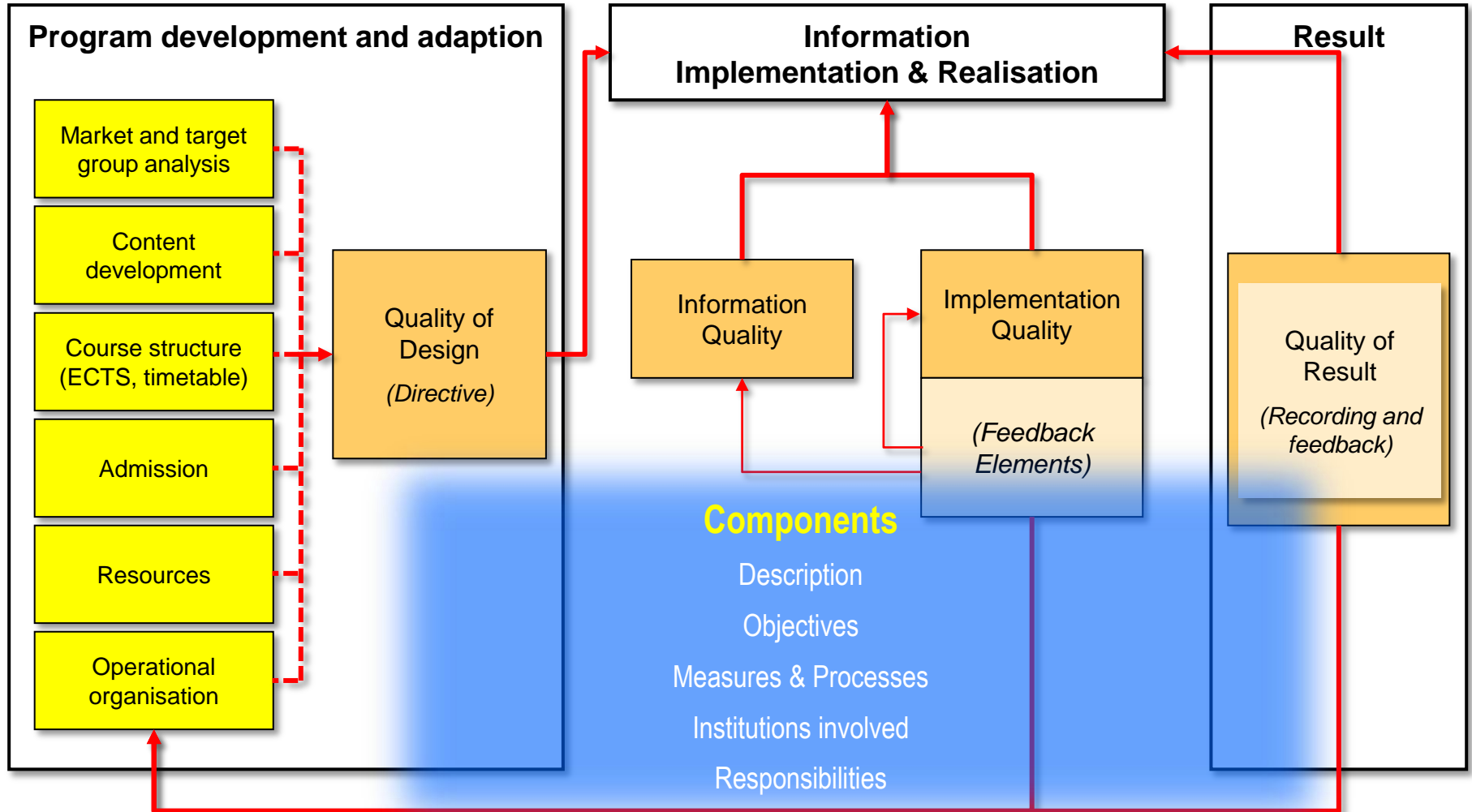
## STAGES OF CURRICULUM DEVELOPMENT



## Course structure:

- 9 modules (a' 5 ECTS)
- Interdisciplinary Project (3 ECTS)
- Excursion (2 ECTS)
- Thesis (10 ECTS)

MODUL Vermarktung und Kommunikation	5 ECTS
Vermarktung land- & forstwirtschaftl. Produkte und Dienstleistungen	1
Betriebliche Öffentlichkeitsarbeit	1
Projektmanagement	1
Verhandlungsführung	2
MODUL Vermessung und Landinformation	4 ECTS
Vermessung und Fernerkundung	2
GIS und Geodatenbanken	2
MODUL Bodenmarkt und Bodenpolitik	5 ECTS
Bodenpolitik und Bodenschutz	2
Immobilienmarkt und Grundverkehr	2



# QAS – Quality of Implementation & Realisation

## Clearly defined responsibilities

- Academic (course-, module-, and lecture-level)
- Administration



- Selection of teachers
  - Long-time experience
  - 50 % of teachers with habilitation
- Selection of participants
  - Formal requirements (education)
  - Motivation letter
  - Standardized Interviews
- Examination regulations
  - Defined in curriculum

# Example 2: QAS – Quality of Result

## Participants Survey

- Teachers
  - Teaching materials
  - Lecture rooms
- (Questionnaires, personal discussion, visits)

## Statistics

- Participation rate in courses
- Drop-out rate
- Extend of qualified teachers

## Review of Graduate

- .... ??? (one year after finalising the programme)



In EU in general and in Austria in particular, Life Long Learning (LLL) is an important issue

No extra money for LLL activities

On academic level (up to ERF 5) universities have to take leadership for LLL programs

Good experience to develop a study program from the scratch

Development of LLL study programs is very time consuming

Study Course Land Management in Rural Areas is a success story at BOKU







## Contact

**University of Natural Resources and Life Sciences, BOKU Vienna**  
<http://www.boku.ac.at/>

**BOKU Team** Alexandra Strauss-Sieberth, Centre of Education: E-Learning und Didactic  
Christina Paulus, Centre of Education: LLL and Continuing Education  
Margarita L. Himmelbauer, Inst. of Hydraulics and Rural Water Management  
Reinfried Mansberger, Inst. of Surveying, Remote Sensing & Land Information  
Willibald Loiskandl, CDR, Team leader

**Thank you for your attention**