PROJECT – “BOKU studies in the future"

Universität für Bodenkultur Wien
University of Natural Resources
and Applied Life Sciences, Vienna

BOKU model for curricula development / teaching

http://www.boku.ac.at/projekt.html

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Project goal

Universität für Bodenkultur Wien
University of Natural Resources
and Applied Life Sciences, Vienna

➡ Strategic development of study curricula for a time horizon 2010 – 2015

- Development of new curricula
- Improvement of existing curricula

Existing programmes:

9 Bachelor – Studies

24 Master – Studies

7 in English
6 joint programmes

Strategic approach

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Starting point:

- Evaluation of development potential for new curricula ➡ **Questionnaire**
- Analyses of internal und external factors of education environment

- Mission statement : BOKU advocates for research oriented education and learning *(The university takes part in generating the research topics which are reflected in education)*

Strategic approach, education environment

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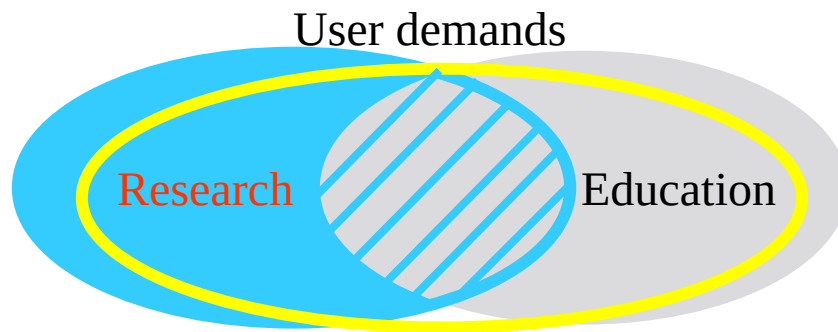
- Strategic orientation of BOKU (areas of competences)
- Assessment of existing study programmes
- Requests from society
- Scientific development
- Employment requirements



- Expectations
  - Graduates
  - Employers
- Market conformity
  - Research
  - Education

- Quality assessment
- Needs for improvement
- Adequate training facilities
- New means of teaching
- etc.

Strategic approach, education environment

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Challenges of university education

- Theory vs. practice orientation
- Education vs. training (Employability)
- Academic Quality vs. Employability
- Study as education experience vs. Employability
- Research- vs. education scopes
- Academic liberty vs. societal responsibilities
- Tradition vs. Innovation
- Nationality vs. Internationality
- Disciplinary vs. Interdisciplinary

Consequences – study programmes

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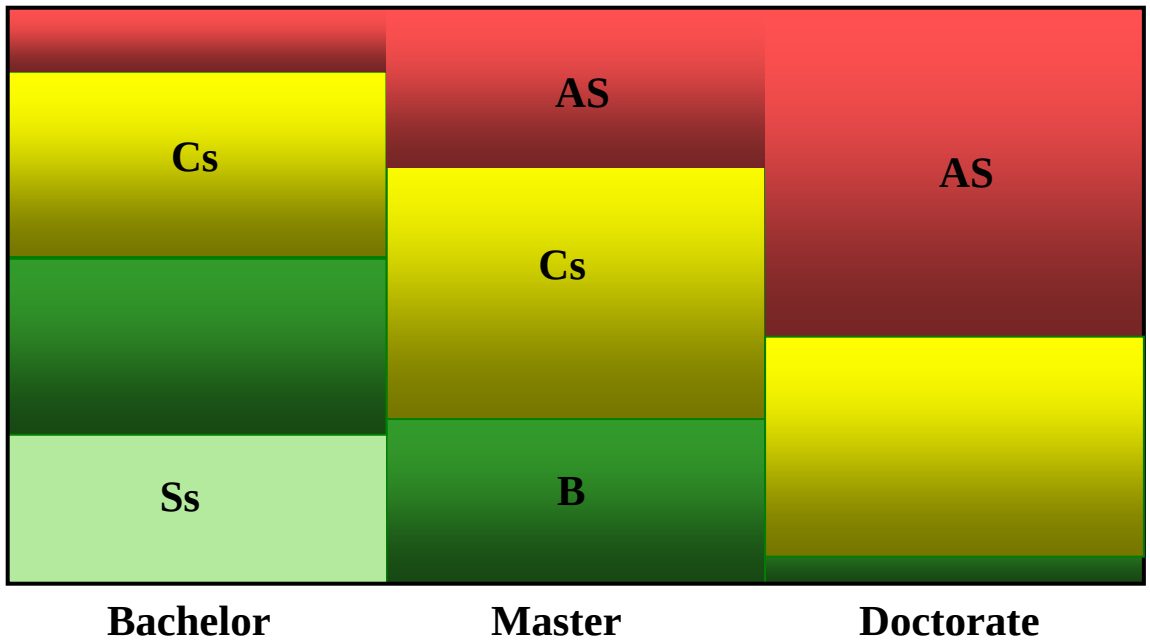

B = Basics
Ss =Soft skills
Cs = Curricula specific
As = Advanced specialisation

Preparatory works

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to obtain principles for strategic orientation of BOKU-Studies

based on content criterias

- Natural science
- Engineering science
- Socio-economic science

based on structural criterias

- Qualification profile
- Structure
- Type of lectures
- Compulsory and elective lectures
- etc.

Guidelines for concept of BOKU-Studies – working groups

- Study goals and content
- Structure and model
- Degrees
- Mobility
- Internationalisation
- Teaching- und learning methods

Time table

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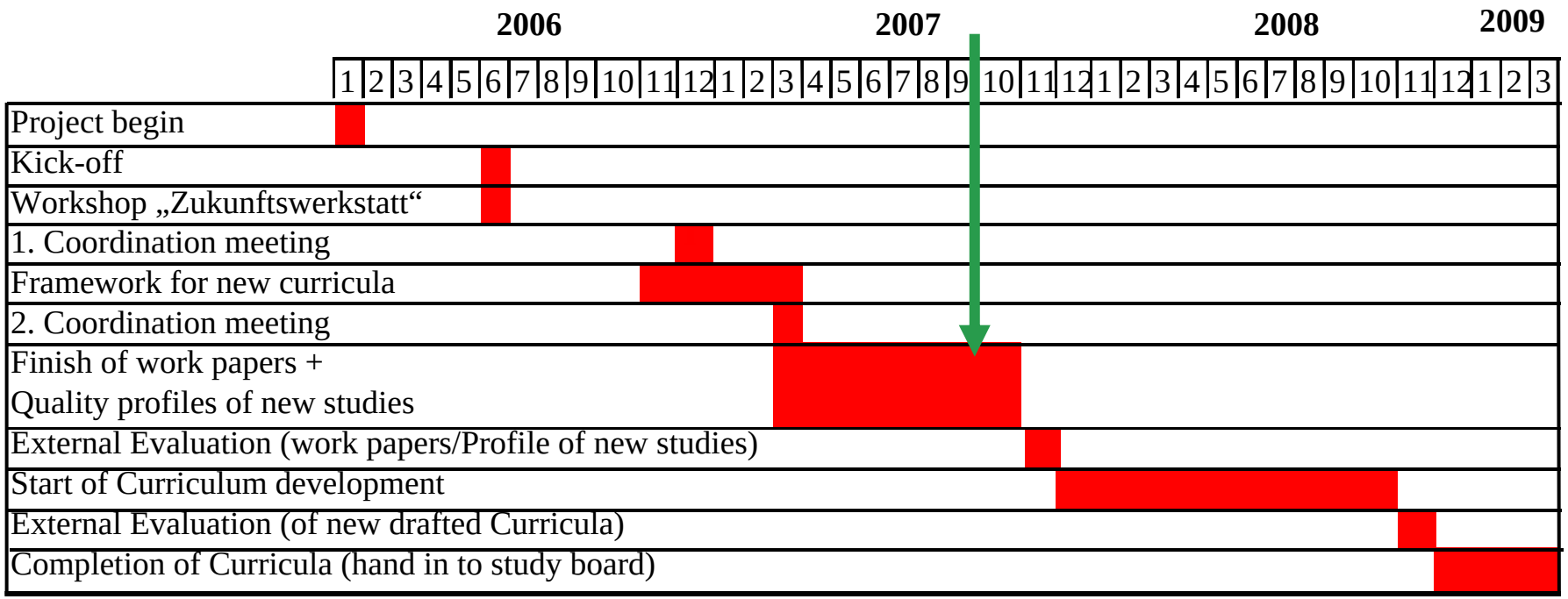

Agreed - principles

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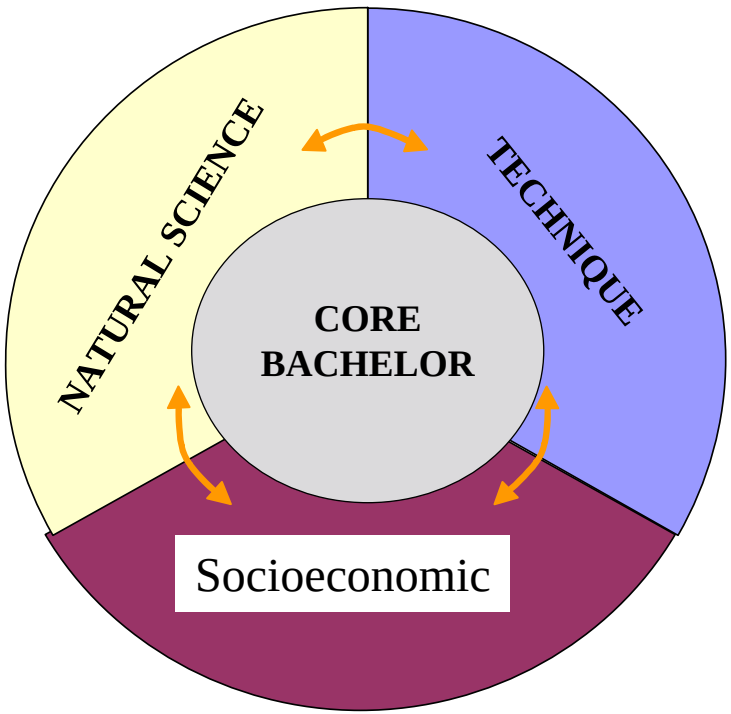
3-column model: Identity und Characteristic of BOKU-Studies



Bachelor:
à 25% NASc, Technique, Socioeconomic

Master:
à 15% NASc, Technique, Socioeconomic

Agreed - principles

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Bachelor programme

- Science- and general basic oriented
- Conception oriented on BOKU-Master studies
- Job oriented and empowered

High flexibility (mobility)

continuation from one bachelor to different master

Modularisation

Creation of bigger lecture units

Degrees

Master: According to orientation: Master (Magister) or Dipl. Ing

Modularisation

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Module:

closed, formal structured learning process (according to Bologna declaration)

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

BOKU – First steps to modularisation

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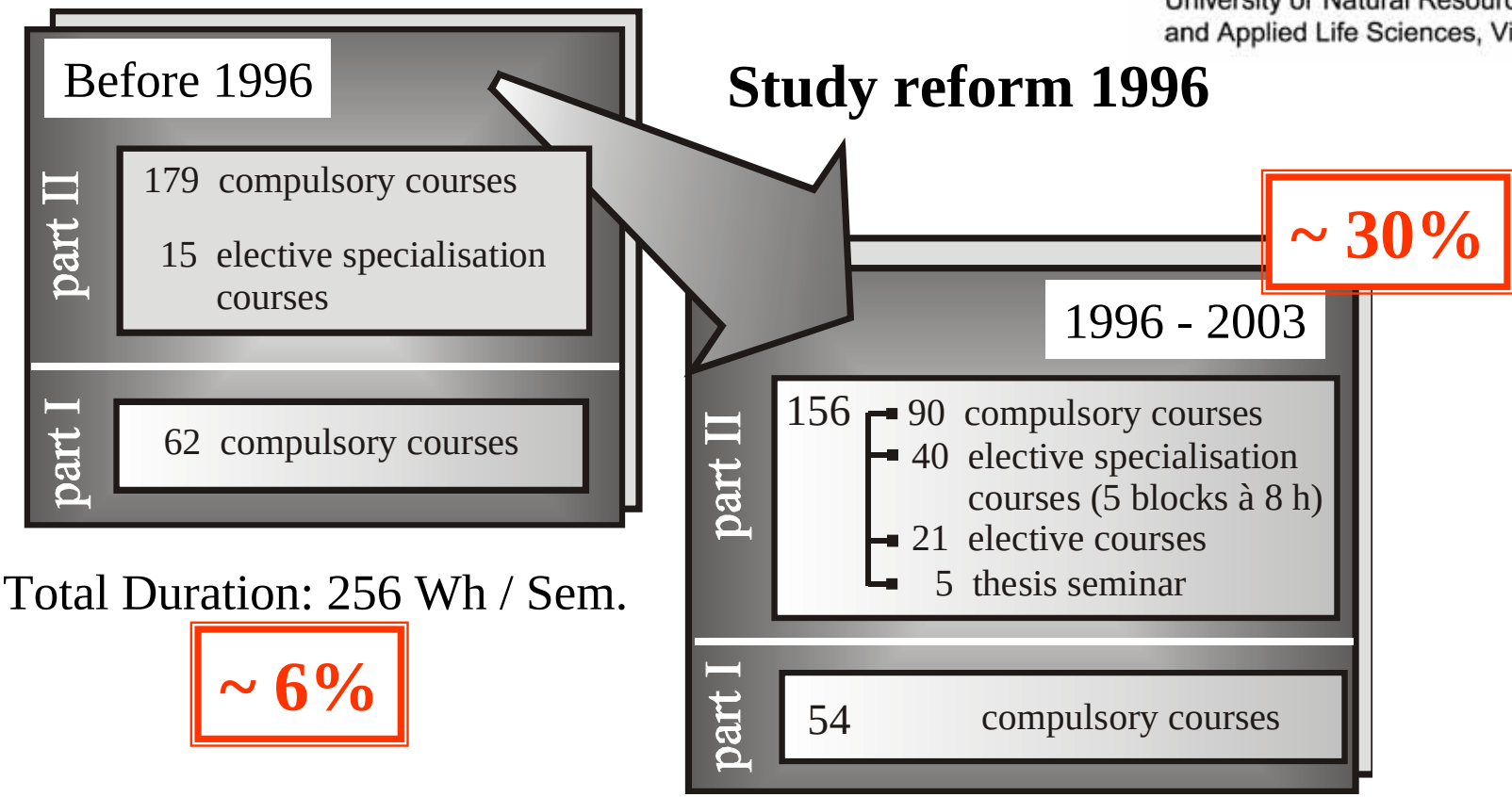

From Dipl.-Ing. to Bologna

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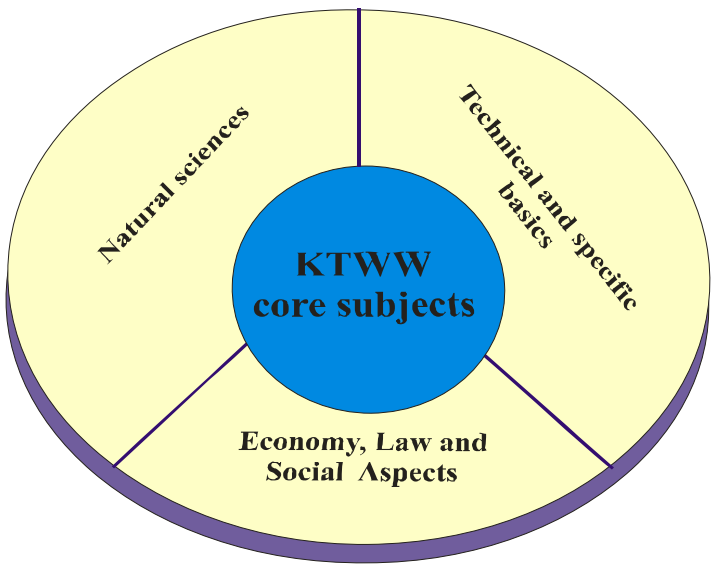
KTWW- Bachelor Environmental Engineering

6 Semester



Master-Programme

4 Semester

General Fundamentals

Master programme: Environmental Engineering
Water Management
Land Management and Civil Engineering

related Programmes:
International Course in Environmental Management and Ecological Engineering
ENVEURO

Water Management and Environment

Interdisciplinary topics

Land Management and Civil Engineering

elective lectures

Thesis work

From Dipl.-Ing. to Bologna

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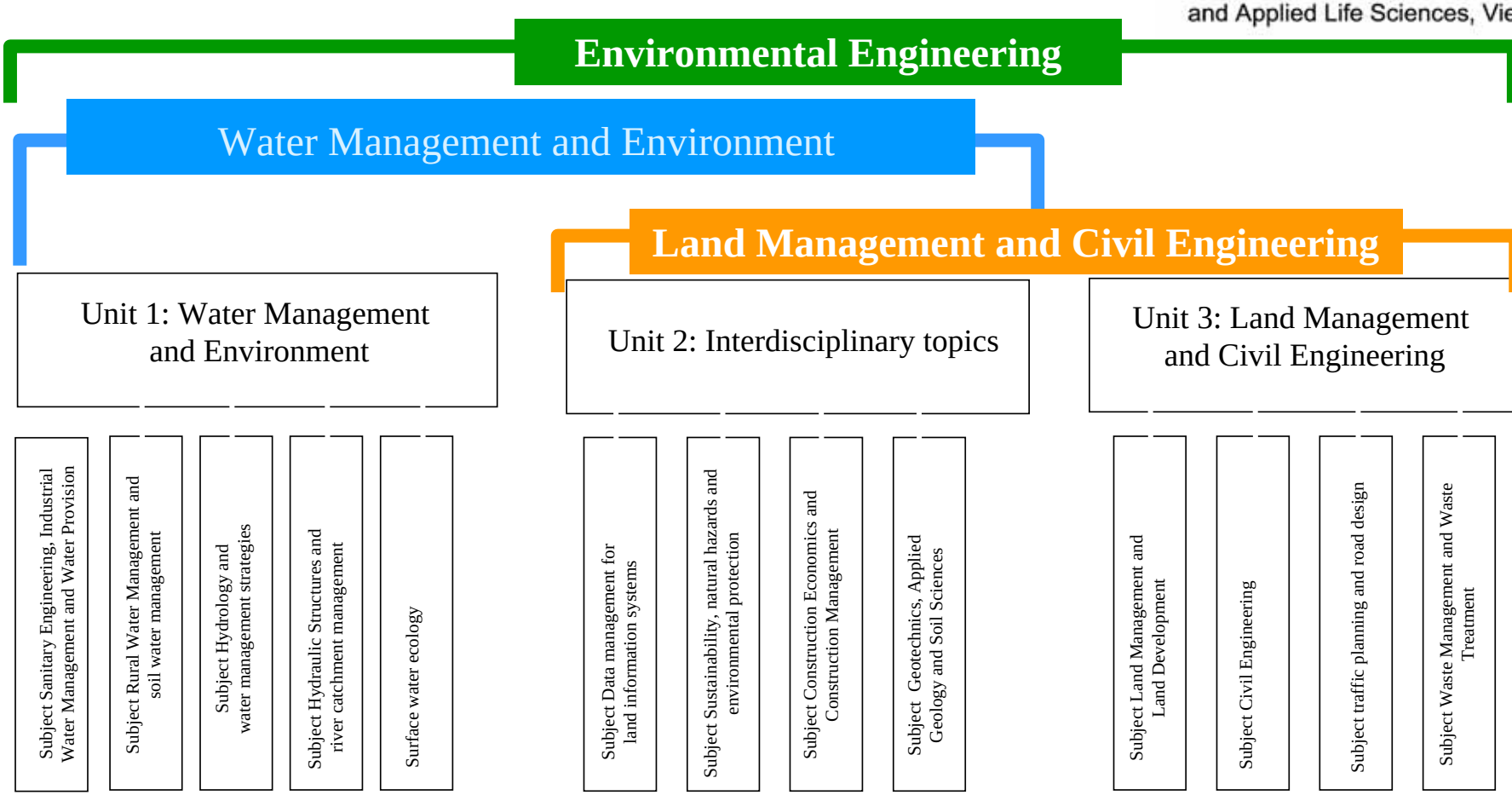

Agreed – principles, Mobility

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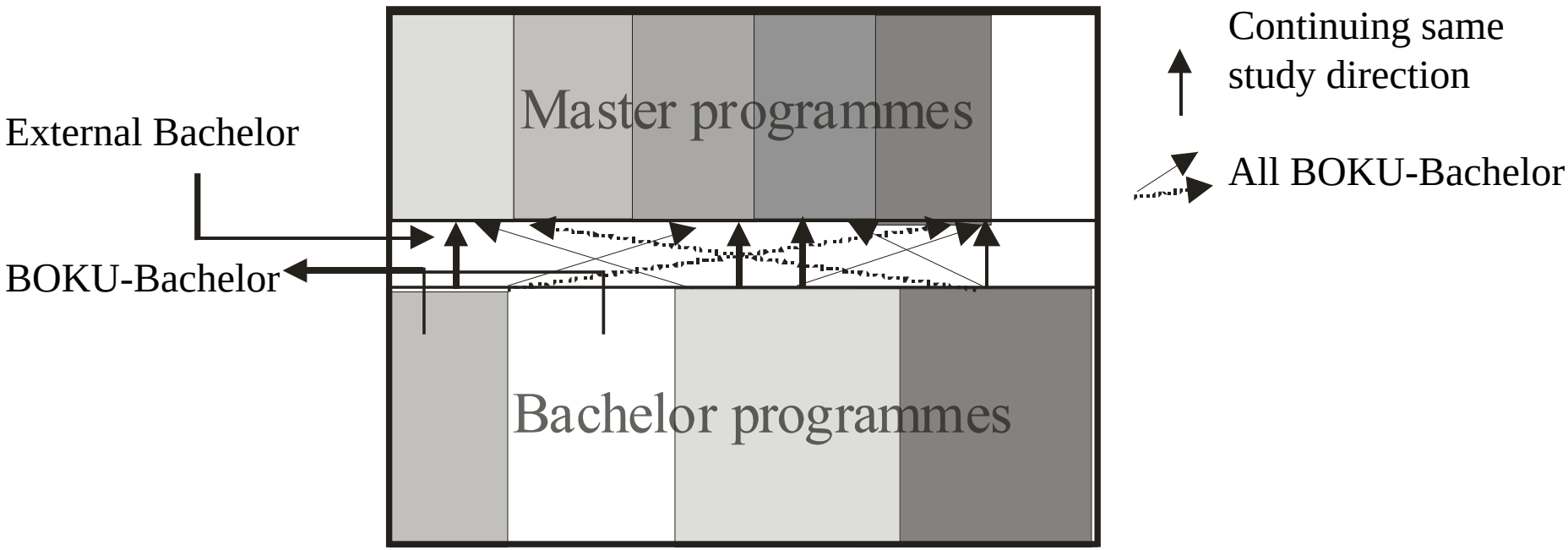

Modularised curriculum concept

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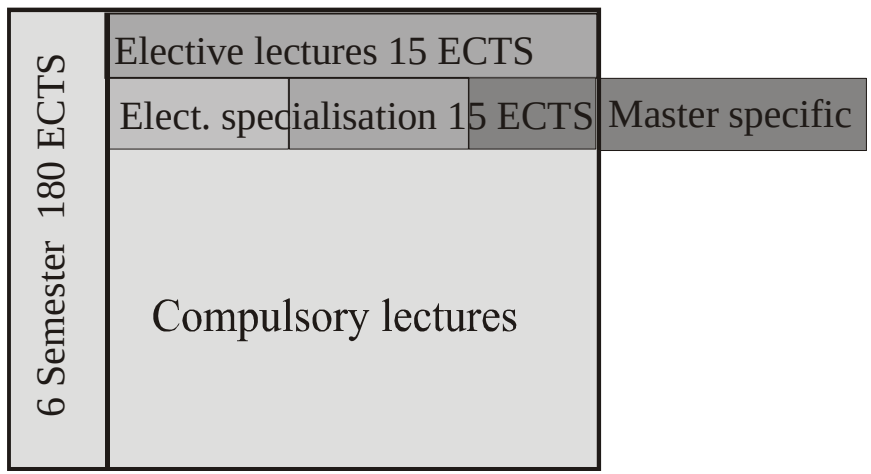
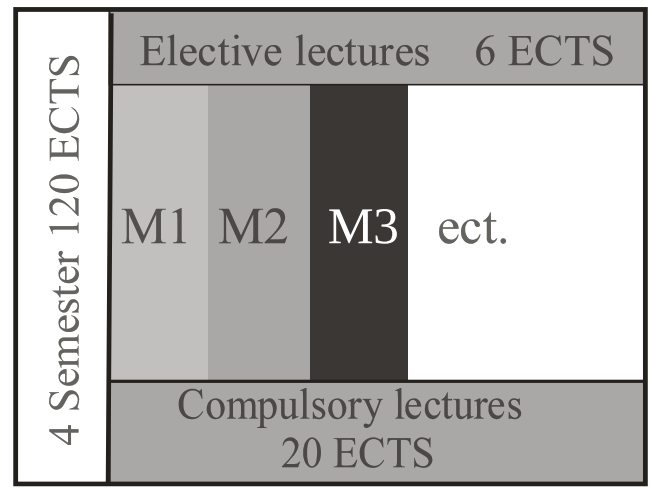
Bachelor



Master



Importance of modularisation

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General structure of the Joint European Master in Environmental science					
University 1	1st semester BSP	Intro-week in August + e-learning in semester. European environmental law & administration			
		Compulsory or elective courses, 15 ECTS			
	2nd semester 1st ASP	Compulsory courses, 15 ECTS			
		Elective courses, 15 ECTS			
		Summer course			
University 2	3rd semester 2nd ASP	Compulsory courses, 15 ECTS			
		Elective courses, 15 ECTS			
Univ. 1 or 2	4th semester	Thesis, 30 ECTS			

Importance of modularisation

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General structure at the four universities: 30 ECTS

KVL

1 semester & 3 semester	Block 1 first course	Block 2 first course
	Block 1 second course	Block 2 second course
2 semester & 4 semester	Block 3 first course	Block 4 first course
	Block 3 second course	Block 4 second course

SLU

1 semester & 3 semester	Block 1A & Block 1B	Block 2A & Block 2B
2 semester & 4 semester	Block 3A & Block 3B	Block 4A & Block 4B

UHOH

1 semester & 3 semester	Block 1	Block 2	Block 3	Block 4	Block 5
2 semester & 4 semester	Block 6	Block 7	Block 8	Block 9	Block 10

Unblocked modules run for whole semester

Agreed - principles

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BOKU

1 semester (fall) Basic	E Learning	
	Block B1	
1 semester (spring) Basic	Block B2	Block WR2, Block SRL, Block ECO2
2 semester (Fall)	- Block WR3, Block SRL3, Block ECO3	
2 semester (Spring)	- Block WR2, Block SRL, Block ECO2	
3 semester (Fall)	- Block WR3, Block SRL3, Block ECO3	
3 semester (Spring)	- Block WR2, Block SRL, Block ECO2	

Theme name: Water Resources, Soil Resources and Land use, Ecosystems and Biodiversity

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Life is a dynamic process and as defined by eschatology it is heading in the direction for the better (Teilhard de Jardin)

Contact

Universität für Bodenkultur Wien
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Thank you for your attention

BOKU experiences with curriculum development

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MRE

New Master Programmes in English

- **Mountain Forestry**
- **Mountain Risk Engineering**
- **Horticultural Sciences?**
- **International Master of Natural Resources Management and Ecological Engineering**
- **Safety in the Food Chain**
- **Environmental Sciences – Soil, Water and Biodiversity**