



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

The three pillars study programmes at BOKU for sustainable Bioeconomy

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www.boku.ac.at





Universität für Bodenkultur
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and Life Sciences, Vienna

Mission statement BOKU

The University of Natural Resources and Life Sciences, Vienna, the *Alma Mater Viridis*, sees itself as an **education and research centre for renewable resources**, which are a necessity for human life.

With its wide range of areas of expertise it is the task of BOKU to contribute significantly to the **protection of life resources for future generations**.

With a connection between **natural sciences, engineering and economics**, BOKU is trying to deepen the knowledge of an **ecologically and economically sustainable use of natural resources in a cultivated landscape**.

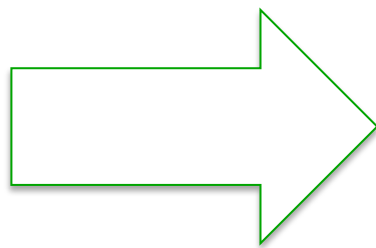
Global questions and challenges

"Grand Challenges": many questions have to be solved in/for future

- global change
- limited natural resources and their loss
- longing for renewable resources and their limitations
- exploitation of nature and loss of biodiversity
- increasing poverty – gap between poor and rich
-



→ Important role of universities



Need for critical thinking interaction !
Need for holistic systems thinking !
Need for interdisciplinarity in study programs !

Source: Policy Paper by „BIOS Science Austria“

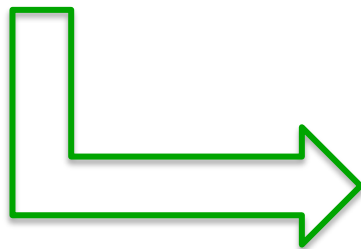


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Sustainable Bioeconomy

"Bioeconomy is the **knowledge-based production and use of organic resources** in order to provide products, procedures and services for all economic sectors in the framework of a **sustainable economic system**...."

Among the most important sectors of the bioeconomy are those of **primary production (agriculture, forestry and fisheries), the food and feeding stuff industry, the wood-processing businesses**, the pulp and paper industry, as well as parts of the chemical and **biotechnological industry**, and of **renewable power industry**...."

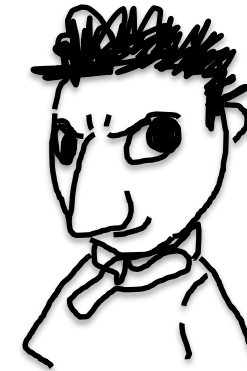


**How to prepare our students to
contribute to a
sustainable Bioeconomy?**

Sustainable Bioeconomy

needs innovative graduates
with holistic systems thinking skills:

- strong scientific thinking ability
- interdisciplinary thinking abilities
- willingness to build bridges between specialists and people
- ability of multidimensional thinking
- knowledge in basics and theory of natural-, technical-, economic- and social sciences
- know the practical applications and the demands of society
- willingness to keep up with the state of the art (→ Life Long Learning)

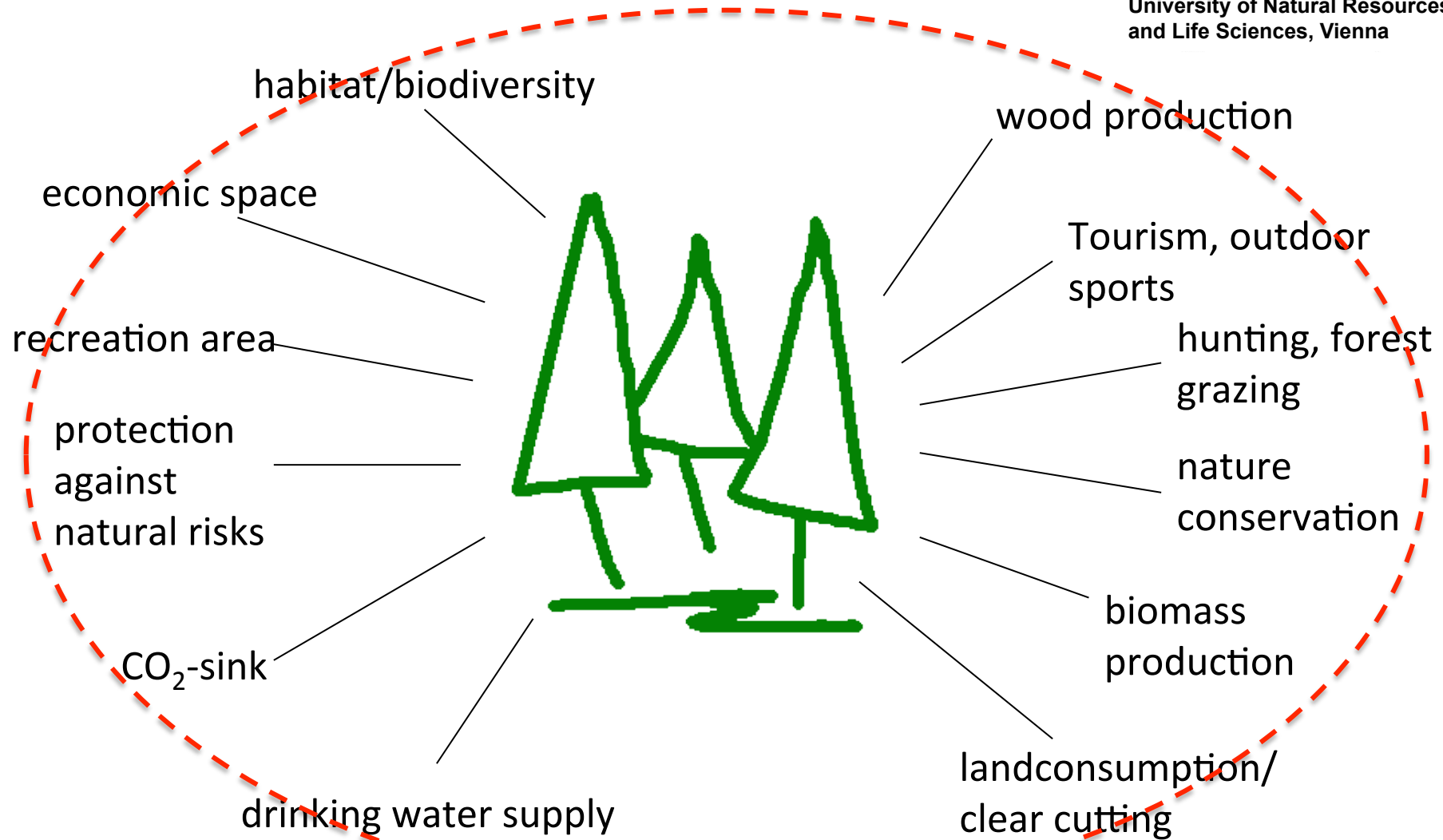


Sustainable Bioeconomy needs interdisciplinary approaches

e.g. forest management



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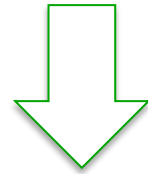
dialog between people

dialog between disciplines



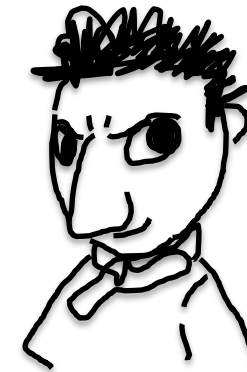
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We need innovative graduates
with holistic systems thinking skills:



graduates with knowledge in

- Natural Sciences
- Technical Sciences
- Economics and Social Sciences

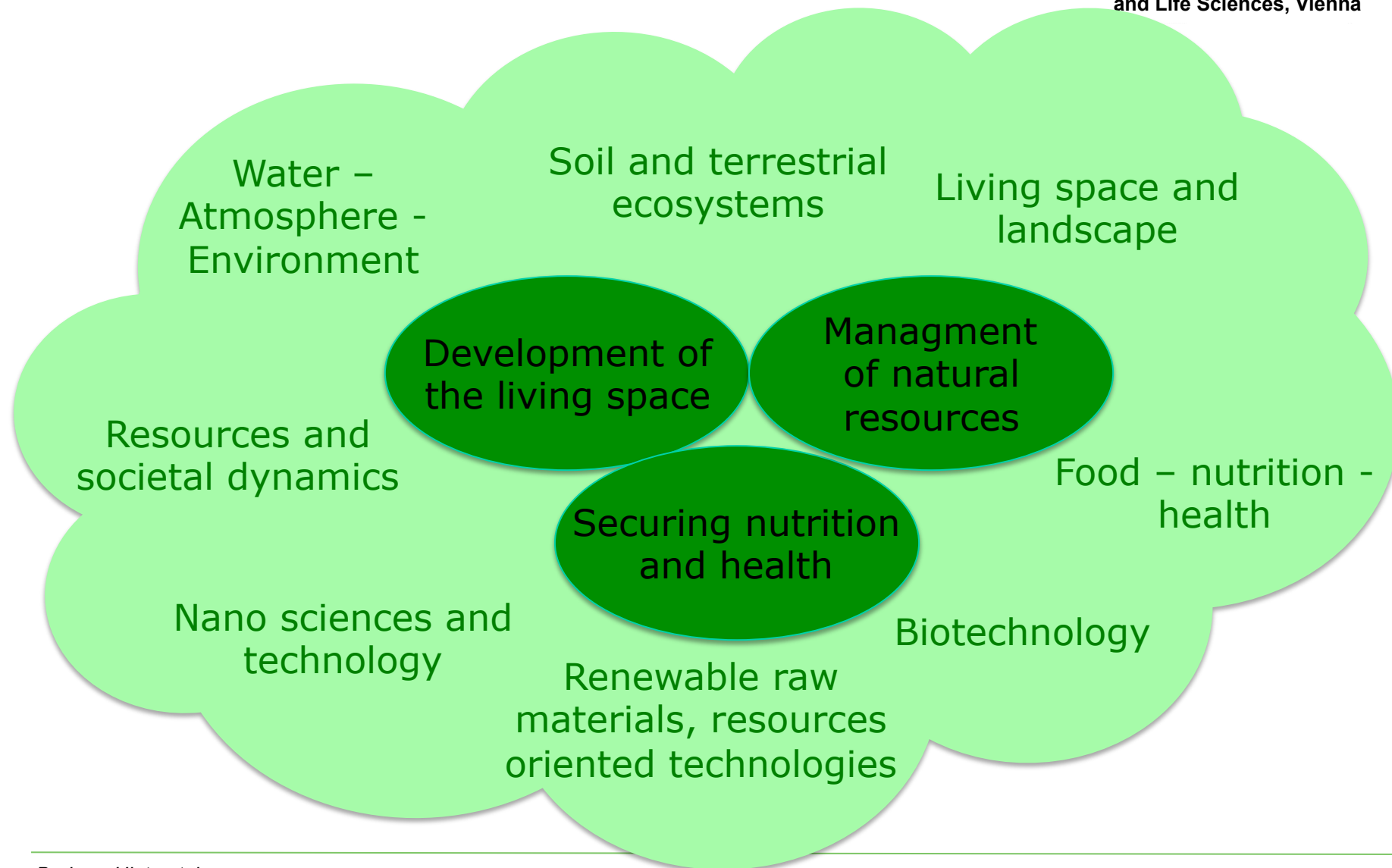


**BOKU Study
Programs**



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BOKU – themes and competences





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BOKU bachelor programs

- Forestry
- Wood and Fibre Technology
- Environment and Bio Resources Management
- Environmental Engineering
- Food Sciences and Biotechnology
- Agricultural Sciences
- Landscape Architecture and Planning
- Viticulture, Oenology and Wine Marketing
- Equine Sciences
- Further information: www.boku4you.at :

*sounds just like
specialists?*

www.boku4you.at

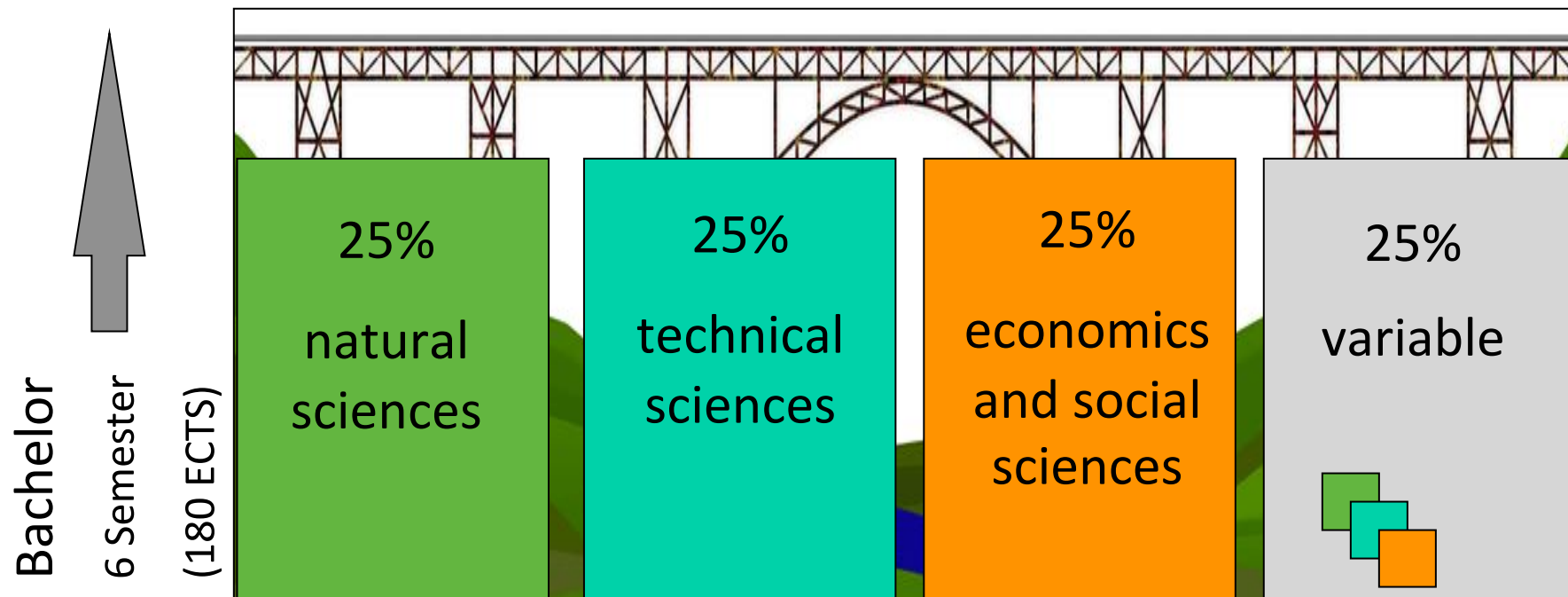
Curricula at BOKU
















Bachelor programs



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Bridging the disciplines



	H89000	Department of Material Sciences and Process Engineering (MAP)
	H79000	Department of Biotechnology (DBT)
	H81000	Department of Water - Atmosphere - Environment (WAU)
	H80000	Department of Nanobiotechnology (DNBT)
	H77000	Department of Chemistry (DCH)
	H83000	Department of Integrative Biology and Biodiversity Research (DIB)
	H75000	Department of Food Science and Technology (DLWT)
	H85000	Department of Landscape, Spatial and Infrastructure Sciences
	H73000	Department of Economics and Social Sciences (WiSo)
	H93000	Department of Sustainable Agricultural Systems
	H87000	Department of Civil Engineering and Natural Hazards
	H91000	Department of Forest- and Soil Sciences
	H95000	Department of Crop Sciences (DNW)
	H97000	Department of Agrobiotechnology, IFA-Tulln
	H94000	Department of Applied Genetics and Cell Biology (DAGZ)



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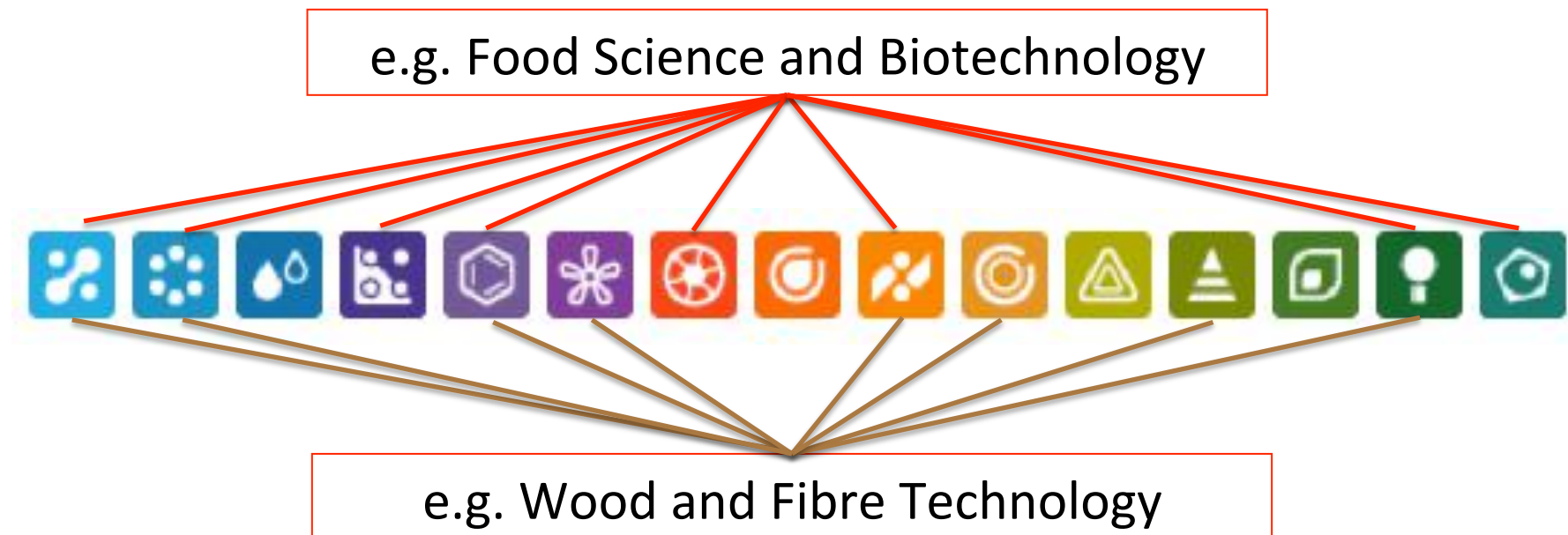
BOKU-departments
provide the lectures for
many study programs

BOKU-departments

are always involved in several different study programs

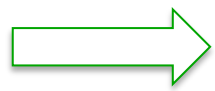


dialog between disciplines and
students get to know the different languages

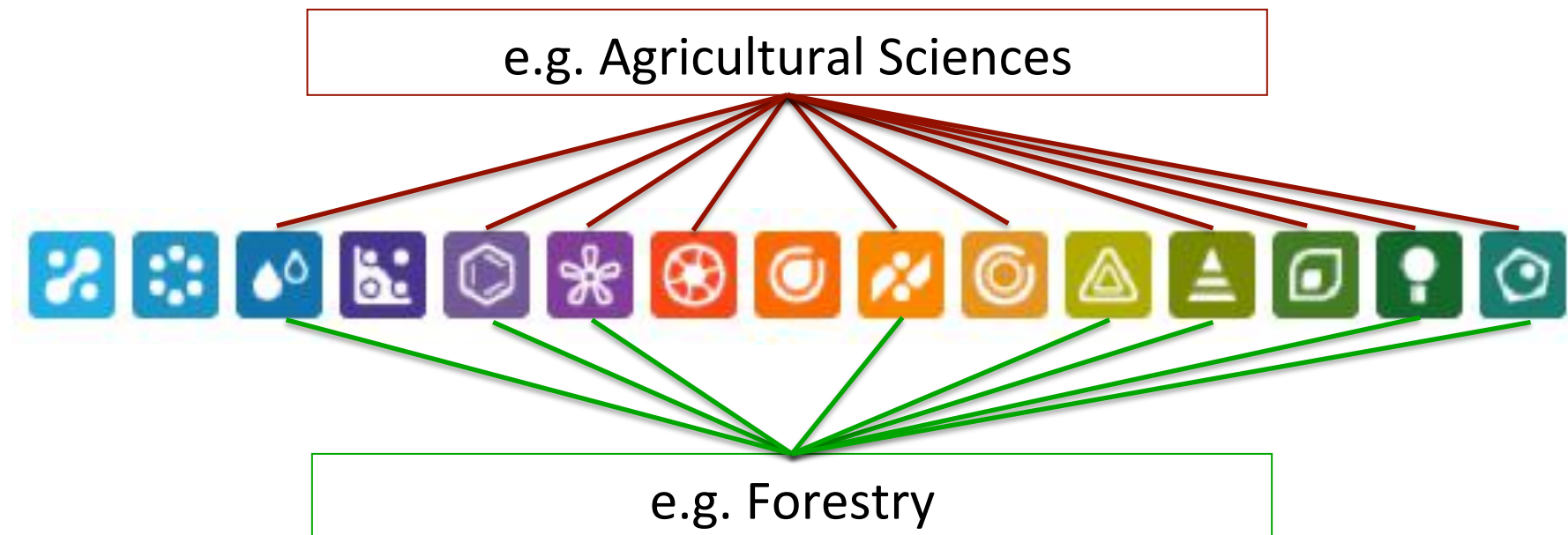


BOKU-departments

are always involved in several different study programs



dialog between disciplines and
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BOKU - Study programs

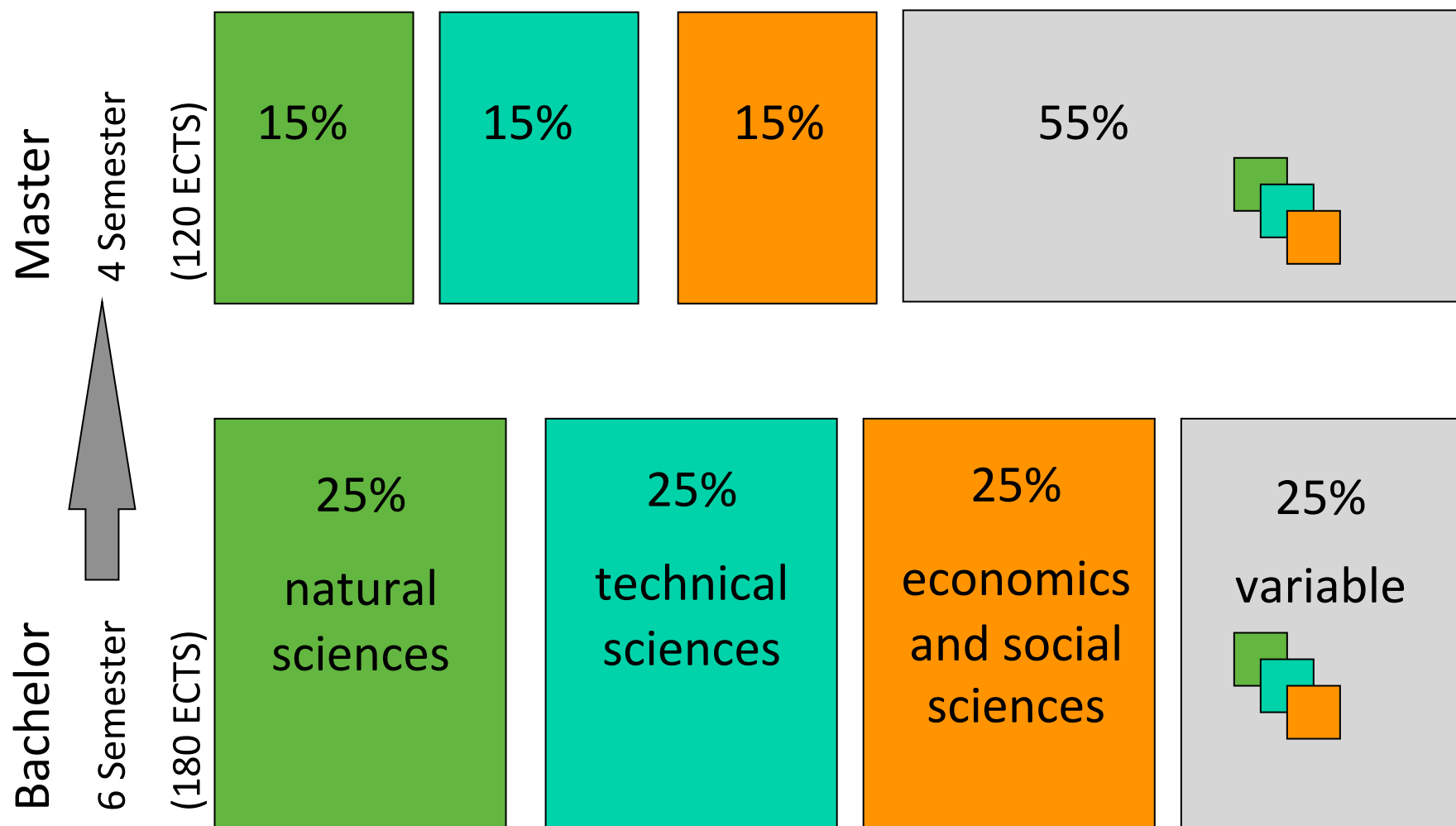
Bachelor	Master (german)	english/internat. Master		Dr/PhD
HNT	HTM	NAWARO		Boku Dr.
FW	FW	MF	EuroF	
	WWM			
	PM			NAWARO
AW	AW-Nuwi	AgroEco EUR-org	HortSc	
	AW-Nupfl		EM-ABG	
	AW-EW		WÖW	
LBT	LWT			Danube AgriFood
	BT			
KTWW	KTWW	WMEE	ENVEURO	Biotop
	AN-WL	AppL	NARMEE	
UBRM	UBRM			IGS-nanoBio
LAP-LARCH	LAP-LARCH			



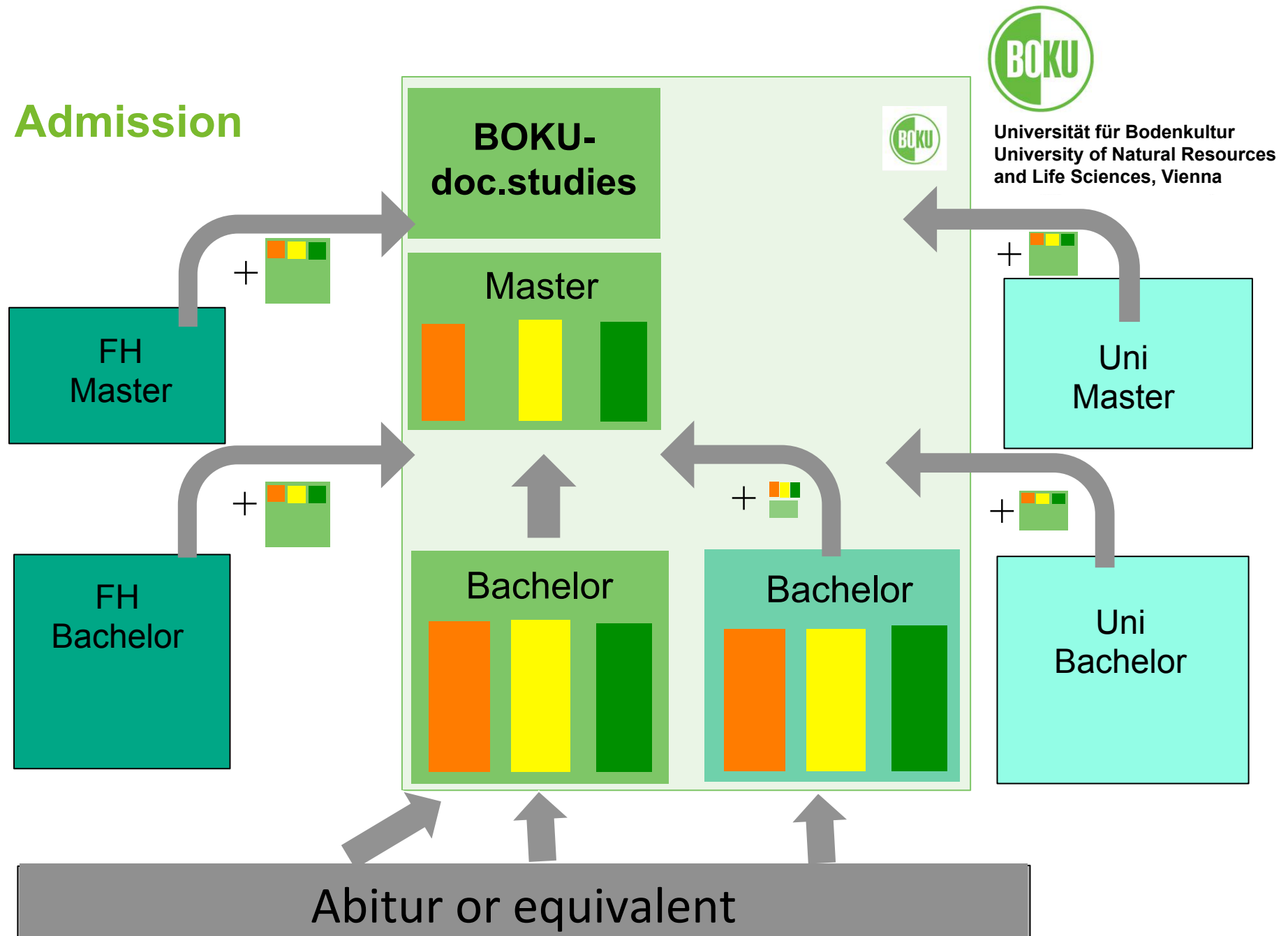
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Curricula at BOKU

Since 2004/2005 Bachelor- and Master Programs



Admission



BOKU-students





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Our universities should educate innovative graduates
with holistic systems thinking skills for a society based
on sustainable bioeconomy!

Thanks for Your attention!





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Thanks for your attention

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