

# **Research and Education in Forest Sciences**

## **Universität für Bodenkultur Wien**

**BOKU University**

**Introduction - Msc European Forestry**  
**22nd of January 2026**

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# Universität für **B**oden**K**ultur (BOKU)



## BOKU – facts and figures

- Founded in 1872 – celebrated 150 years in 2022
- ~ **11.000 students** in 8 Bachelor, 35 Master (12 int./double degree programmes; 9 Master programs in English) and 12 PhD programs (~ 800 students); **1550 graduates** per year; students satisfaction: top ranked in Austria; 20% foreign students; Greenmetric University ranking: no. 8 world wide, 2 in education; QS World University Ranking by Subject: Rank 33
- ~ **3200 employees** (head count); ~700 scientists employed on a project basis; ~ 74 full professors (1/3 non Austrians), ~ 130 Assoc. Profs
- ~ **1050 ongoing projects**, ~ 100 EU projects, ~ 110 FWF projects, participation in several excellence projects (FWF, COMET, Christian Doppler, Laura Bassi, WWTF, Marie Curie,...)
- ~ 100 Mio € GUF, **64 Mio € external resources** (projects; basis 2023)
- ~ **2500 scientific publications** per year (~ 690 SCI), ~ 1400 presentations per year
- Organized in 5 departments – restructuring process ongoing

# Mountain Forests

Foto: SPÖRK

# BOKU - international master programs

Further information : [www.boku4you.at](http://www.boku4you.at)

- Animal Breeding and Genetics
- Applied Limnology – Wetland Management
- Environmental Sciences – Soil, Water and Biodiversity
- **European Forestry**
- Horticultural Sciences
- Material and thermal utilization of renewable raw materials (German)
- **Mountain Forestry**
- **Natural Resources Management and Ecological Engineering**
- Organic Agricultural Systems and Agroecology
- Safety in the Food Chain
- Sustainability in Agriculture, Food Production, Food Technology in Danube R.
- Viticulture, Oenology and Wine Economy (in German)
- Water Management and Environmental Engineering



## Master programs related to forestry at BOKU

- provide education in managing **mountain forest resources** with a global perspective
- teach students to **recognise and solve problems** in mountain forest management and conservation
- Focus on timber production and forest engineering within **multifunctional management**
- **integration** of engineering, socio-economics and natural sciences by use of ecosystem modeling
- strengthen **interdisciplinary** approaches in forestry

## Selected courses in MSc EF thematic areas

|                                                         |                                                                           |     |
|---------------------------------------------------------|---------------------------------------------------------------------------|-----|
| <b>Decision support systems for resource management</b> | Remote sensing and GIS in natural resource management                     | 3   |
|                                                         | Decision support systems                                                  | 3   |
|                                                         | Multiple criteria decision making in natural resource management          | 3   |
| <b>Resource management for ecosystem services</b>       | Natural resource management in mountain forests I, III                    | 4+2 |
|                                                         | Agroforestry in mountain regions                                          | 2   |
|                                                         | Biodiversity and conservation of mountain forests                         | 2   |
|                                                         | Natural resources management in mountainous areas III - wildlife problems | 2   |
| <b>Spatial and ecological modelling</b>                 | Modelling of mountain forest ecosystems                                   | 2.5 |
|                                                         | Adapting forest management to climate change                              | 2   |
| <b>Resource economics and policy</b>                    | Forest resource economics                                                 | 4.5 |
|                                                         | Innovations for sustainable forest management                             | 4   |
|                                                         | Mountain forest policy                                                    | 4.5 |
| <b>Silviculture and engineering</b>                     | Harvesting systems for mountainous regions                                | 2   |
|                                                         | Cable yarding project                                                     | 1.5 |
|                                                         | Road network planning                                                     | 3   |
|                                                         | Field camp III - integrated forest management applications                | 3   |

# Other selected courses of Msc Mountain Forestry program

|                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|----------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Introduction to mountain forestry and scientific skills</b> | <b>Field Camp I - Introduction to mountain forestry and forest sciences (2)</b><br>Methods of data collection, management and analysis (2)                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Ecology of Mountain Forests</b>                             | <b>Mountain forest dynamics and fire ecology (3)</b><br><b>Mountain forest soils and forest nutrition (2,5)</b><br>Field Camp II -Concepts and methods of site ecology, forest growth and yield (3)<br>Mountain forest climatology and headwater hydrology (2,5)<br><i>Biodiversity and conservation of mountain forests (2)</i><br><i>Air pollution effects on forest ecosystems (3)</i><br><i>Chemistry for forestry (1)</i><br><i>Specific methods on soil analysis (1)</i><br><i>Physical and selected chemical methods of soil analysis (4,5)</i><br><i>Forest and water (3)</i> |
| <b>Economic and social dimensions in mountain forestry</b>     | Forest resource economics (4,5)<br>Mountain forest policy (4,5)<br><b>Participatory methods in development research and practice (3)</b><br><b>Project management in development co-operation (2)</b><br><i>Economics of multiple use forestry (1,5)</i><br><i>Innovations for Sustainable Forest Management (4)</i><br><i>Applied development research I (3)</i><br><i>Applied development research II (3)</i><br><i>Organisational behaviour and gender issues (3)</i><br><i>Forest products, marketing and strategy (3)</i>                                                        |

You can make a free choice from the master courses at BOKU as long as they are related to the forest science domain

# Other selected courses from modules of Msc Mountain Forestry program

|                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|---------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Inventory and Monitoring</b>                               | <b>Forest inventory (3)</b><br><b>Modelling of mountain forest ecosystems (2,5)</b><br>Remote sensing and GIS in natural resource management UE (3)<br><i>Remote sensing and GIS in natural resource management VO (3)</i><br><i>3P – Sampling (2)</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Forest Management for goods and environmental services</b> | <b>Natural resource management in mountain forests (4)</b><br><b>Agro forestry in mountain regions (2)</b><br>The role of forests in mountain risk engineering (2)<br>Forest protection (2)<br><i>Protection and mitigation measures against natural hazards (3)</i><br><i>Risk management and vulnerability assessment (3)</i><br><i>Mountain hazard processes (6)</i><br><b>Decision support systems (3)</b><br><b>Multiple criteria decision making in natural resource management (3)</b><br><b>Fire management in mountain forest ecosystems (2)</b><br><b>Adapting forest management to climate change (2)</b><br><i>Natural resources management in mountainous areas III -Wildlife problems (2)</i> |
| <b>Forest Engineering</b>                                     | <b>Harvesting systems for mountainous regions (2)</b><br>Field Camp III – Integrated forest management applications (3)<br><b>Road network planning (3)</b><br><b>Cable yarding project (1.5)</b><br><i>Technology assessment (3)</i><br><i>CAD - Computer aided design (1)</i><br><i>Timber harvesting (1)</i>                                                                                                                                                                                                                                                                                                                                                                                             |

# World Heritage Region Hallstatt





**Protection**

**Recreation**

**Hunting**

**Wildlife habitat**

**Livestock Pastures**

**Wood Production**

**Nature and soil conservation**

**Nontimber products**

**Biodiversity**

**Multipurpose forest management**

# Potential fields of research

e.g. for conducting a master thesis

- Silvicultural techniques and management of mountain forests
- Evaluating Sustainable Forest Management approaches and Harvesting techniques
- Forest Ecosystem Modeling and Carbon Storage
- Multi Criteria Decision Making and Decision Support Systems
- Biodiversity and Forest Genetics
- Forest Ecology and Natural Dynamics of forest ecosystems
- Forest Policy Analysis (EFI – FPNR)
- Forest Genetic and Forest Soil Lab
- More than 180 experimental sites
- Experimental garden and Tree Nursery “Knödelhütte”



## Selected master thesis topics of last years

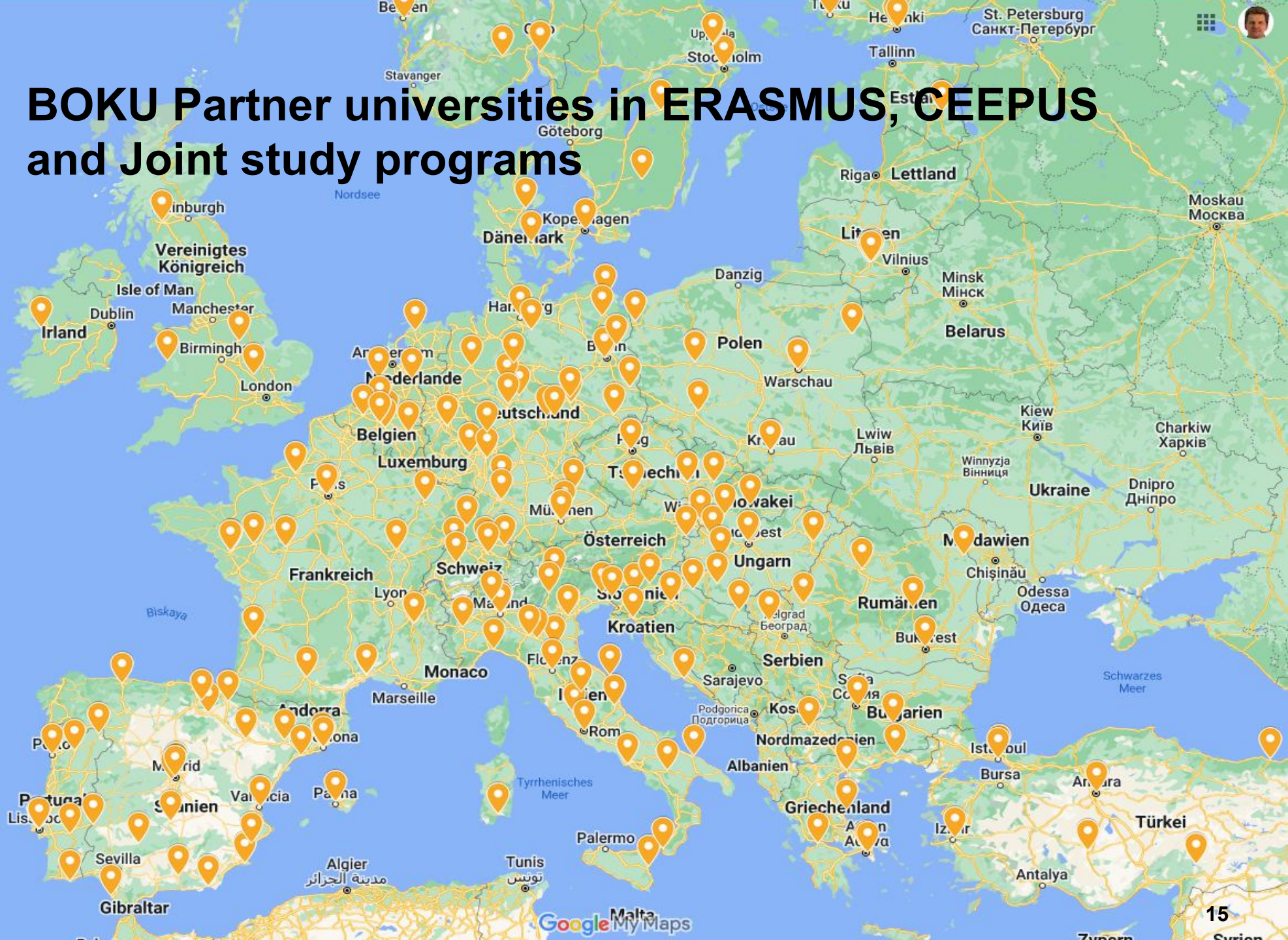
- Do, Phu Tien (2025) Analysis of the patents in forestry and forest-based sector : reviewing trends and gaps based on the European patent database
- Basauri Torres, Y. (2025): The role of LEADER as support of social innovation in forest-related case studies in rural areas in Austria, Germany, Finland, and Spain
- Tiongco N. J. (2024) **Innovation in the European Forest** Sector: Trends and Characteristics of EU Funded Projects
- Corning, S.: (2024): Island of Fire - Testing the Accuracy of **IIASA's wildfire model** (FLAM) in Sardinia, IT
- Magtibay, K. M. (2022): Frame Analysis of the Roles of Forests in **SDG 15.1-related Policies**.
- Hardalau, D.G. (2022): Comparative assessment of **natural regeneration** across natural forest reserves in Austria
- Starcevic A.(2022) Forest dynamics of the **natural forest reserve** Schiffwald
- Wangchuk R. (2022) The Factors that Influence the Contribution of **Non-Wood Forest Products** to Rural Livelihoods and the Roles of Policies surrounding NWFPs in Bhutan
- Imparato Maximo Y. (2022): Forest **bioeconomy** in Brazil: recent developments and opportunities.
- Hoang, T.T. (2021): Analysis of the **stakeholder perceptions** and trends of forest fire occurrence in the Alpine region.
- Nazari, M. (2020): Identifying successful mechanisms for the implementation of payment for **ecosystem services**
- Yosef, A. B.(2019): **Growth assessment of tree species** growing in the Amhara region in Ethiopia
- Delazari Deniz L. (2017): Modelling time and fuel usage in **timber transport** in mountain forestry.
- Silva Andrade M. (2017): Evaluation of **drought effects** on radial stem growth of Norway spruce and Scots pine in Tyrol.
- Tariyal G. (2017): Building **resilient livelihoods** towards biotic and abiotic disturbance factors in Bhutan – A community based adaptation to global change.
- Ohler C. (2017) Cooperation or conflict? An analysis of global **forest governance**.
- Vejnovic V. (2016) Analysis of the readiness of Serbia to effectively comply with and implement the **European Timber Regulation**
- Yang L. (2015) Influence on nitrogen nutrition form and drought cycles on the **fine root respiration** of two tree species

# BOKU - part of many networks

- ELLS - Euroleague for Life Sciences
- ICA - Association for European Life Science Universities
- AGRINATURA - Network of European Agricultural Universities and Scientific Complexes Related with Agricultural Development
- SILVA - European Forest Science Academic Network
- IUFRO International Union of Forest Research Organisations
- European Bioeconomy University (EBU)
- Africa-UniNet (Austrian-African Research Network)



# BOKU Partner universities in ERASMUS, CEEPUS and Joint study programs



## City of Vienna

- Very good public transport
- Many green spaces
- A lot of tourist attractions
- Music and concerts
- Sport and outdoor facilities
- Delicious Food Specialities



## Tourist attractions (i)



**City Hall**



**Parliament**



**Burgtheater**



**State Opera**



**Hofburg**

## Tourist attractions (ii)



**St. Charles's Church**



**Belvedere Palace**



**St. Stephen's Cathedral**



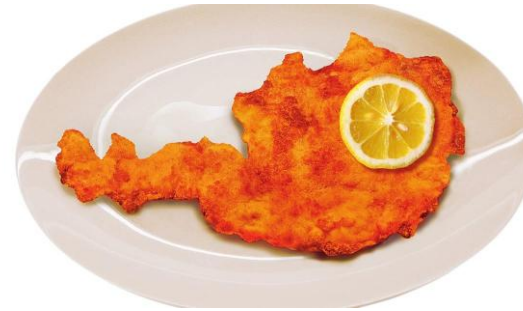
**Schönbrunn Palace**



**Giant Wheel**

## Vienna is known for many traditional dishes

- Wiener Schnitzel



- Tafelspitz



- Apfelstrudel



- sweet pancakes



- Sachertorte



- ...Mozartkugeln and many more ;-)

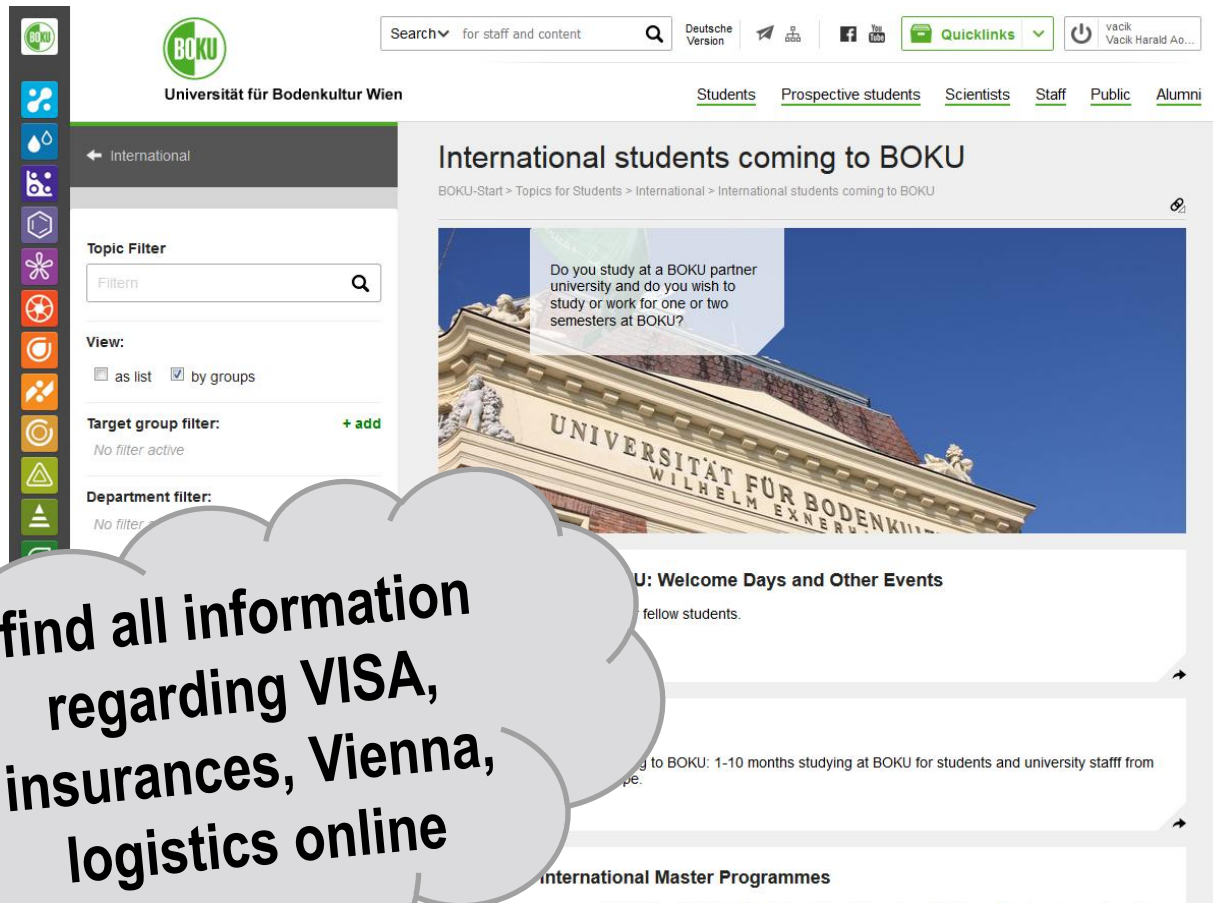


# Import issues



- Semester starts in October / March
- Welcome days offered by BOKU
- Introductory Field Camp I (October) to get to know other international students
- Offer of german language courses by CIR
- FIS – research database allows to finding a supervisor for master thesis topic – please contact me <https://forschung.boku.ac.at/>
- Networking with IFSA student association <https://www.oehboku.at/oeh-boku-international-network/ifsa.html>
- Support by OEAD housing services for finding a study room (monthly rents € 320 – 660.-) <https://www.oeadstudenthousing.at/en/> , finding private rooms/flats require more time and effort
- meals offered at mensa BOKU (new wooden building)
- good infrastructure regarding public transport in the city

# Center for International Relations (CIR)



International students coming to BOKU

Do you study at a BOKU partner university and do you wish to study or work for one or two semesters at BOKU?

UNIVERSITÄT FÜR BODENKULTUR WILHELM EXNERWIEN

U: Welcome Days and Other Events

to BOKU: 1-10 months studying at BOKU for students and university staff from

International Master Programmes



**Welcome days for international students**

find all information regarding VISA, insurances, Vienna, logistics online

contact point for international students from MSc European Forestry programm  
**Katrin Hasenhündel**  
[Katrin.Hasenhuendel@boku.ac.at](mailto:Katrin.Hasenhuendel@boku.ac.at)

<https://boku.ac.at/en/universitaet-fuer-bodenkultur-wien-boku/studieren-an-der-boku/themen-fuer-studierende/internationales/international-students-coming-to-boku/>

# Thanks for your attention!

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