Universität für Bodenkultur Wien

ENVEURO at the

University of Natural Resources and Life Sciences, Vienna

http://www.boku.ac.at/int-master-ells-enveuro.html

WELCOME TO BOKU!

Contacts at BOKU

- Programme coordinator:
  Priv.-Doz. Dr. Markus Puschenreiter
  markus.puschenreiter@boku.ac.at

- Deputy programme coordinator
  Ao.Univ.Prof. Dr. Maria Fürhacker
  maria.fuerhacker@boku.ac.at

- Administrative issues:
  Ulrike Piringer
  ulrike.piringer@boku.ac.at

Student consulting hours:
Mo-Fr, 10.00-12.00 + We 14.00-16.00

Teacher Team at BOKU

- **Water Resources**:
  Maria Fürhacker: maria.fuerhacker@boku.ac.at

- **Soil Resources and Land Use**:
  Markus Puschenreiter: markus.puschenreiter@boku.ac.at

- **Ecosystems and Biodiversity:**
  Karin Tremetsberger: karin.tremetsberger@boku.ac.at,
  Johann Zaller: johann.zaller@boku.ac.at

- **Climate Change:**
  Herbert Formayer: herbert.formayer@boku.ac.at

Content

- Overview
- Programme Structure
- Basic Semester Package at BOKU
- Specialisations at BOKU + Courses
- Individual Course Plan
- Erasmus (or Alternatives)
- Master Thesis and Graduation

EnvEuro is for students who want:

- The best from two universities (double degree)
- Choice between six specialisations
- Tailor-made semester packages
- International network, competences, outlook and career prospects
- Integrated study abroad and housing service
- Jobs with environmental management, technology, research and analysis in public and/or private sector

Structure of the Programme

Universität für Bodenkultur Wien

1. Semester: basic semester at home university

2. Semester: start specialisation at home university

3. Semester: continue specialisation or second specialisation at host university

4. Semester: thesis at host university

Basic Semester at BOKU:

The aim of the Basic semester is to bring students to a **common level of knowledge**, introduce the **main concepts in Environmental Science**, and establish a **solid foundation for the specialisations in the Advanced Semester Packages.**

15 ECTS Environmental Management in Europe

15 ECTS BOKU courses

Each partner university offers four specialisations according to the following scheme:

Specialisation	BOKU	UHOH	UCPH	SLU
Water Resources	x			x
Environmental Impacts		x	x	
Soil Resources and Land Use	x	x	x	x
Ecosystems and Biodiversity	x	x	x	
Environmental Management		x	x	x
Climate Change	x	X*	x	

*** only ASP-2**

Water Resources

Main objective: to provide a sound understanding of water management issues in a river basin.

The legal framework is an integral part of the courses taught.

The **competing interest** of water utilization and resulting conflicts are analysed.

Knowledge of sustainable water management is instructed.

Focus is on integrated water shed management and ecological engineering.

Second Years

Universität für Bodenkultur Wien

Specialisation II: Water Resources (min 30 ECTS)				
	Course ID	Course	BOKU	
Comp.	816338	Water resources planning and management	3	
Comp.	811362	On site solutions for water supply and sanitation	3	
Comp.		Master's thesis seminar	2	
	811334	Risk assessment in the aquatic environment	3	
	816336	Integrated flood risk management	3	
	816332	Computer based river modelling	3	Requirements: See BOKUonline
	912314	Mountain forest climatology and headwater hydrology	4,5	
	815311	Simulation in vadose zone environment	3	
	815319	Irrigation design	3	Requirements: See BOKUonline
	815327	Computing seminar on hydraulics and rural water management	4,5	not offered in 2018/19
	812347	Human impacts in riverine landscapes	2	
	812349	Ecological river landscape management	2	
	812384	Aquatic biomonitoring and -assessment	2	
	815314	Development and application of water erosion models	2	connected with subject "Using water erosion models"
	815335	Using water erosion models	3	connected with subject "Development and application of water erosion models
	812342	Ecology of aquatic systems	3	
	816334	Hydrological processes and modelling	3	Requirements: See BOKUonline
		Free elective lecture (free elective)	6	
Sum			55	

Soil Resources and Land Use

The main objective of the specialisation in Soil Resources and Land Use is to understand the soil functions in ecosystems and crop production systems.

Focus is on soil fertility for biomass production, soil filter capacity, habitat for flora and fauna, source of raw materials, physical basis for human activity and construction and protection of cultural heritage.

Second Years

Universität für Bodenkultur Wien

Specialisation II: Soil resources & Land Use (min 30 ECTS)				
	Course ID	Course	BOKU	
Comp.	911300	Soil physics and chemistry	3	
Comp.	911327	Soils and global change	4	
Comp.		Master's thesis seminar	2	
	815322	Soil erosion models and their application	4,5	
	815314	Development and application of water erosion models	2	connected with subject "Using water erosion models"
	815335	Using water erosion models	3	connected with subject "Development and application of water erosion models
	911304	Soil indicators	3	offered in summer semester
	911322	Role of soils in nature conservation and wildlife management	1,5	
	911340	Soil - plant science workshop: From the hypothesis to publication I	3	Requirements: See BOKUonline
	815321	Soil conservation and soil protection	3	
	815320	Soil water management	3	
	815311	Simulation in vadose zone environment	3	
	911344	Ecology and management of the rhizosphere in ecological engineering	3	
	912314	Mountain forest climatology and headwater hydrology	4,5	
	816336	Integrated flood risk management	3	
	911328	Chemistry of soil water	2	offered every second year **NOT WS2018**
	933302	Protection of natural resources by organic farming	3	offered every second year
	911312	Rhizosphere processes and application to agriculture and soil protection	3	Requirements: See BOKUonline
	911325	Specific methods in soil analysis	1	register for course 911717
	911326	Specific methods in soil analysis	1	register for course 911717
	911342	Soils and food security	2	
	911321	Field course soil ecology	3	
	871360	Risk management and vulnerability assessment	3	
	871358	Dynamics of geophysical flows	3	Requirements: See BOKUonline
		Free elective lecture (free elective)	6	
Sum			72,5	

Ecosystems and Biodiversity

Focus is placed on the performance of ecological studies, and on the spatial and temporal variation in populations, including the human influence and possibilities for sustainable management of ecological resources.

The main objective is to provide an understanding of the ecological processes that govern the distribution and abundance of organisms, the structure of organism communities and the dynamics of matter and energy in ecosystems

Second Years

Specialisation II: Ecosystems and Biodiversity (min 30 ECTS)				
	Course ID	**Course**	**BOKU**	
Comp.	**831312**	**Plant and environment**	**3**	
Comp.	**812342**	**Ecology of aquatic systems**	**3**	
Comp.		**Master's thesis seminar**	2	
	816332	Computer based river modelling	3	Requirements: See BOKUonline
	811334	Risk assessment in the aquatic environment	3	
	913311	Multiple criteria decision making in natural resource	3	
	912317	Air pollution effects on forest ecosystems	3	
	912314	Mountain forest climatology and headwater hydrology	2,5	
	911344	Ecology and management of the rhizosphere in ecological engineering	3	
	913339	Modelling of mountain forest ecosystems	2,5	Requirements: See BOKUonline
	914310	Assessing diversity in forest stands	3	
	732337	Innovations for sustainable forest management	4	
	911312	Rhizosphere processes and application to agriculture and soil protection	3	Requirements: See BOKUonline
	857300	Geo-data management	3	
	833301	Soil ecology	3	
	834305	Conservation biogeography and genetics	3	
	812347	Human impacts in riverine landscapes	2	Requirements: See BOKUonline
	812349	Ecological river landscape management	2	
	833311	Farmland ecology	1	
	916323	Field Camp I - introduction to mountain forestry and forest sciences	2	
	857304	Remote sensing and image processing	6	offered in summer semester
	833319	Seminar in global change and ecosystems	2	Requirements: See BOKUonline
	831304	Ecology and population biology of plants in agro-ecosystems	5	Requirements: See BOKUonline
	833317	Formulation of questions and experimental design in ecological research	4,5	Requirements: See BOKUonline
		Free elective lecture (free elective)	6	
Sum			**77,5**	

Climate Change

Focus is on understanding the impacts of climate change on natural and managed ecosystems and human society. Students will learn to chose and apply technical, managerial and economic and political tools relevant for adapting to climate change and reducing greenhouse emissions at global, regional and local scales.

The main objective of the specialisation in Climate Change is to provide the theoretical knowledge, analytical tools and practical competences to understand climate change and to address the challenges of climate change adaptation and mitigation.

Second Years

Universität für Bodenkultur Wien

Specialisation II: Climate Change (min 30 ECTS)				
	Course ID	Course	BOKU	
Comp.	814301	Meteorological conditions and precipitation	3	Requirements: See BOKUonline
Comp.	814305	Climate change scenarios and regional impact	3	Requirements: See BOKUonline
Comp.		Master's thesis seminar	2	
	814308	Interdisciplinary seminar on agriculture, climate change and transition	3	
	833319	Seminar in global change and ecosystems	2	
	816336	Integrated flood risk management	3	
	913331	Climate change and forest management	2	
	811334	Risk assessment in the aquatic environment	3	
	912314	Mountain forest climatology and headwater hydrology	4,5	
	915344	Technology assessment	3	Requirements: See BOKUonline
	871360	Risk management and vulnerability assessment	3	
	815321	Soil conservation and soil protection	3	
	871332	Disaster management	2	
	732337	Innovations for sustainable forest management	4	
	857320	Remote sensing and GIS in natural resource management	3	
	851320	Statistics of extreme events and geostatistics	3	Requirements: See BOKUonline
	730306	Foresights - what future to expect? (Late lessons from early warnings)	2	
	814326	Climate change impacts, adaption and mitigation	15	Requirements: See BOKUonline
		Free elective lecture (free elective)	6	
Sum			69,5	

Environmental Management

The main objective of the specialisation in Environmental Management is to provide theoretical, analytical and practical competences to address the challenges associated with management of natural resources and the environment.

More specifically the specialisation focuses on agri-environmental systems analysis and modelling, sustainable food systems, landscape ecology, environmental and natural resources economics, and environmental policy and legislation.

The **specialisation** introduces bio-physical and technical approaches to a more sustainable management of the agricultural environment, analytical tools to assess the sustainability of agri-food systems and the economic and legal aspects of environmental management.

Environmental Impacts

The main objective of the specialisation in Environmental Impacts is to provide a solid understanding of the impacts of human activities on the environment and natural resources.

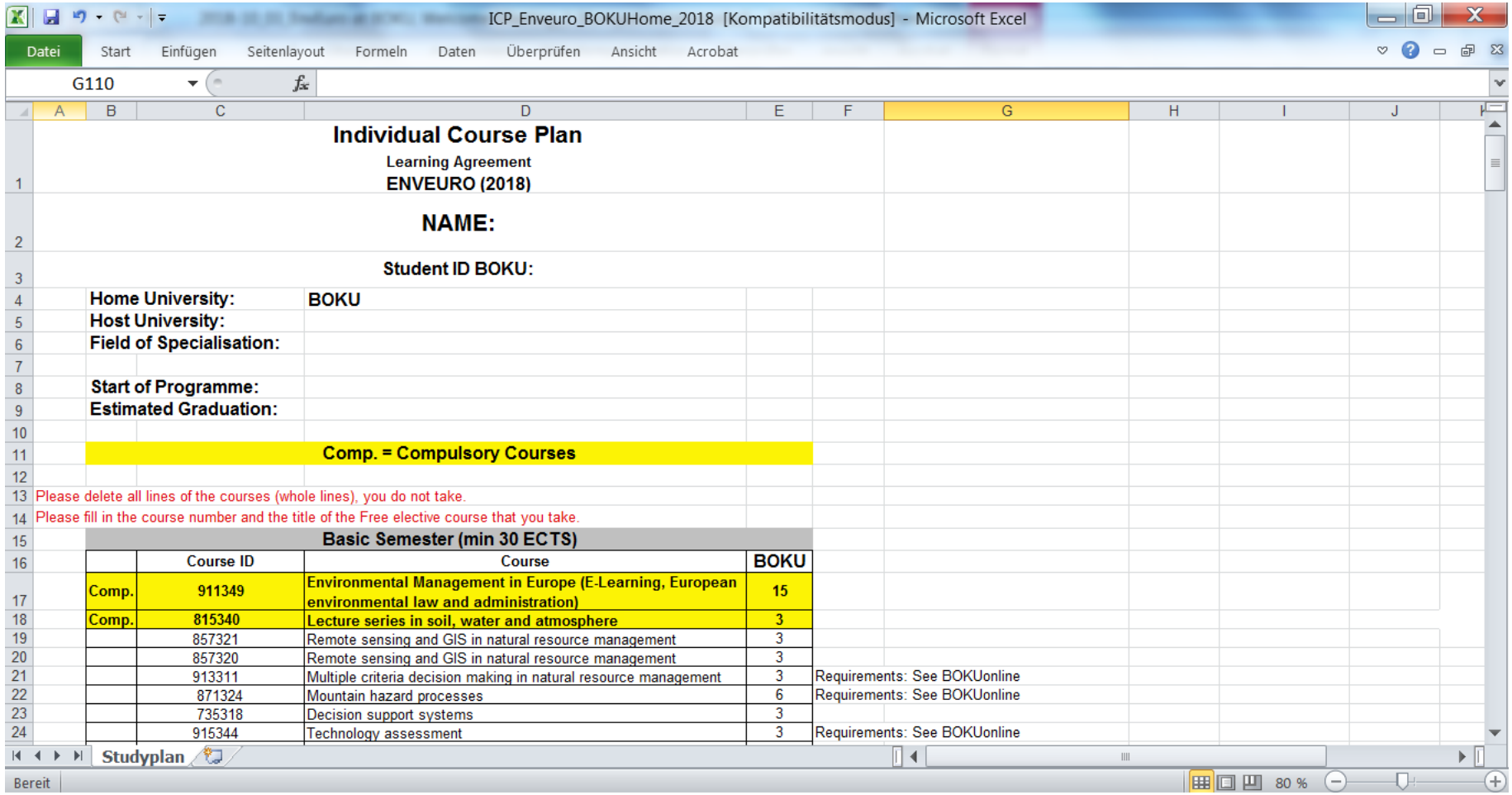
Focus is on the analysis of environmental impacts at the scales from organisms to landscapes, the analysis of ecosystem functioning and ecosystem disturbances, the analysis of implications for human well-being, and the development of technologies to reduce and remediate environmental pollution, resource depletion and environmental change.

Individual Course Plan

- Download at: http://www.boku.ac.at/int-master-ells-env-icp.html
- Helps you to keep track on the courses that you have done already and that you still have to do
- Has to be signed by administrative AND programme coordinator
- Is needed for your graduation

- Deadline for submission: BOKU Home: June 1; BOKU Host: November 30 (changes possible afterwards)

- Sent the filled-in document by e-mail to enveuro@boku.ac.at and - as soon as the tutor tells you - come to see me during my office hours to check it together



ICP_Enveuro_BOKUHome_2018 [Kompatibilitätsmodus] - Microsoft Excel

Datei | Start | Einfügen | Seitenlayout | Formeln | Daten | Überprüfen | Ansicht | Acrobat

G110

Individual Course Plan

Learning Agreement

ENVEURO (2018)

NAME:

Student ID BOKU:

Home University:	**BOKU**
Host University:	
Field of Specialisation:	
Start of Programme:	
Estimated Graduation:	

Comp. = Compulsory Courses

Please delete all lines of the courses (whole lines), you do not take.

Please fill in the course number and the title of the Free elective course that you take.

Basic Semester (min 30 ECTS)

	Course ID	Course	BOKU	
Comp.	911349	Environmental Management in Europe (E-Learning, European environmental law and administration)	15	
Comp.	815340	Lecture series in soil, water and atmosphere	3	
	857321	Remote sensing and GIS in natural resource management	3	
	857320	Remote sensing and GIS in natural resource management	3	
	913311	Multiple criteria decision making in natural resource management	3	Requirements: See BOKUonline
	871324	Mountain hazard processes	6	Requirements: See BOKUonline
	735318	Decision support systems	3	
	915344	Technology assessment	3	Requirements: See BOKUonline

Studyplan

Bereit

80 %

2nd years: Thesis at BOKU

- Start looking for a topic and a supervisor as soon as you feel accustomed to the system at BOKU and you know several teachers
- Some institutes offer thesis projects -> check notes announced!
- Your main supervisor has to be at BOKU, the co-supervisor at your home university.
- The thesis has to be submitted and defended at BOKU.
- You have to register your thesis in the Graduation Office (= Study Services), after you have started to work on it.
- More Information:
  - http://www.boku.ac.at/int-master-ells-env-thesis.html
  - EnvEuro master thesis guide

Contact

Zentrum für Internationale Beziehungen (ZIB)
Center for International Relations
http://www.boku.ac.at/international-en.html

Peter Jordan-Straße 82a
1190 Wien
Tel.: 047654 32021
international@boku.ac.at
Office hours: Mo-Fr, 10.00-12.00 + We 14.00-16.00
Exceptions see: http://www.boku.ac.at/piringerulrike.html

Universität für Bodenkultur Wien

THANK YOU FOR YOUR ATTENTION!
HAVE A NICE STAY HERE AT BOKU!

DANKE FÜR IHRE AUFMERKSAMKEIT!
EINEN SCHÖNEN AUFENTHALT HIER AN DER BOKU!