



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

MSc Natural Resources Management and Ecological Engineering NARMEE

- International Joint Master Programme –

**BOKU-Information for Students
Starting the Programme at Lincoln University**

**(Home University – Lincoln University
Host University – BOKU, Vienna)**

I. Description of Programme

CONCEPT

International Joint Master in Natural Resources Management and Ecological Engineering

This International Master Programme is based on a collaboration between BOKU, University of Natural Resources and Applied Life Sciences, Vienna, Lincoln University, New Zealand (LU), and CULS, Czech University of Life Sciences, Prague.

Homepages:

Lincoln University

www.lincoln.ac.nz

Czech University of Life Sciences, Prague

www.czu.cz/en

General objective:

The focus is preparing for an international career in Natural Resources Management and Ecological Engineering by enhancing comparative studies at different universities, in the southern and in the northern hemisphere.

The Programme at BOKU comprises the following four **Subjects**:

Ecological Engineering (EE)
Nature Conservation & Wildlife Management (NC)
Risk Management (RM)
International Business and Sustainability (IB)

II. Courses

To be able to graduate at BOKU a total amount of 40 ECTS have to be gained at BOKU.

Students from Lincoln University have to study at BOKU for 1 semester. They have to choose 30 ECTS of BOKU courses (at least 20 ECTS have to be part of the NARMEE programme) and will gain 10 ECTS for their thesis (a co-supervisor at BOKU is needed!)

After their arrival they have to work out an Individual Course Plan together with the programme coordinator at BOKU.

Introduction and Case Studies					
911.315	Introduction in Natural Resources Management and Ecological Engineering	VO	3.0	WS	3.0
811.354	Case Studies in Sanitary Engineering	SE	3.0	WS	3.0

Basic Studies					
Course Number	Lecture	Type	Teaching hours	WS/SS	ECTS
ECOLOGICAL ENGINEERING (EE)					
811.356	Water Supply and Wastewater Treatment	VO	2.0	WS	3.0
816.338	Water Resources Planning and Management	VO	2.0	WS	3.0
816.335	Introduction to Water and Soil (Soil Hydrological Processes)	VO	1.0	WS	1,5
911.316	Indicators for Natural Resources Management and Ecological Engineering in the International Context	VU	1.0		1,5
NATURE CONSERVATION AND WILDLIFE MANAGEMENT (NC)					
914.306	Assessing Diversity in Forest Stands	VW	2.0	WS	3.0
832.312	(Eco-) tourism & Management of Protected Areas	VX	2.0	SS	3.0
RISK MANAGEMENT (RM)					
816.336	Integrated Flood Risk Management	VO	2.0	WS	3.0
857.321	Remote Sensing and GIS in Natural Resource Management	VO	2.0	WS	3.0
857.320	Remote Sensing and GIS in Natural Resource Management	UE	2.0	WS	3.0
915.327	Project Management	VU	2.0	SS	3.0
INTERNATIONAL BUSINESS AND SUSTAINABILITY (IB)					
731.324	Resource and Environmental Economics	VO	2.0	SS	3.0
731.325	International Commodity Markets and Trade Policy (<i>Agricultural and Food Policy II</i>)	VO	2.0	WS	3.0
732.326	Institutions and Policies of the EU (<i>Introduction to the Law and Politics of the European Union</i>)	VO	2.0	SS	3.0

* The course 911.316 is offered only every two years.

General Skills

Course Number	Lecture	Type	Teaching hours	WS/SS	ECTS
ECOLOGICAL ENGINEERING (EE)					
771.304	Environmental Chemistry	SE	3.0	SS	4,5
811.357*	Biology, Chemistry and Microbiology for Civil Engineering*	VU	2.0	SS	3.0
816.342	Possible Impacts of Climate Change on Water Resources	VO	2.0	SS	3.0
816.340	Ecologically Oriented Methods and Monitoring in River Engineering	VU	2.0	SS	3.0
911.317	Soil Properties and Processes for Ecological Engineering	VU	2.0	SS	3.0
NATURE CONSERVATION AND WILDLIFE MANAGEMENT (NC)					
913.311	Multiple Criteria Decision Making in Natural Resource Management	VS	2.0	WS	3.0
933.302*	Protection of Natural Resources by Organic Farming**	VS	2.0	WS	3.0
832.302	Human Dimensions in Wildlife Research & Management	VO	1.0	SS	1,5
832.311	More Recent Conflict Species in Wildlife Management	VX	1.0	SS	1,5
RISK MANAGEMENT (RM)					
871.322	Science of Natural Mountain Disasters	VS	3.0	WS	4,5
871.304	Hazard and Risk Assessment	VS	3.0	SS	4,5
915.344	Technology Assessment	VS	2.0	WS	3.0
732.346	Social Studies of Risk	VS	2.0	WS	3.0
874.300	Soil- bioengineering techniques (slopes & gullies)	VY	2,5	SS	3,5
732.318	Forest Policy Analysis	VS	2.0	SS	3.0
INTERNATIONAL BUSINESS AND SUSTAINABILITY (IB)					
731.327	Principles of Empirical Research Methods in the Social Sciences	VO	2.0	SS	3.0
731.328	Valuation Methods for Natural Resources (<i>Economic Valuation of Market Goods and Natural Resources</i>)	VO	2.0	SS	3.0
735.329	Decision Making in Management with Special Emphasis on Cultural Differences	VO	2.0	SS	3.0
731.347	Regional Economics and Regional Governance	VO	2.0	SS	3.0

* The courses 811.357 and 933.302 are offered only every two years.

Specialisation

Course Number	Lecture	Type	Teaching hours		ECTS
ECOLOGICAL ENGINEERING (EE)					
811.358	Planning and Design in Water Supply and wastewater Treatment	UE	2.0	SS	3.0
813.359	Waste Recycling and Composting	VO	2.0	SS	3.0
911.318	Ecology and Management of the Rhizosphere in Ecological Engineering	UE	3.0	WS	4,5
816.339	Sediment Regime and River Morphology	VO	2.0	SS	3.0
815.306	Applied Soil Physics	PR	3.0	SS	4.5
815.311	Simulation in Vadose Zone Environment	VU	2.0	WS	3.0
911.319	In-situ Treatment of Polluted Soils and Sediments: Phytoremediation, In-situ Fixation and Attenuation Techniques	UE	3.0	SS	4.5
811.332	Water Resources Management in Developing Co-operation	VU	2.0	SS	3.0
811.360	Modelling in Sanitary Engineering (Sewer, Treatment Plant + Receiver)	VU	3.0	WS	4.5
811.362	On Site Solutions for Water Supply and Sanitation	VO	2.0	WS	3.0
811.363	Industrial Water Management	VO	2.0	SS	3.0
816.332	Computer Based River Modelling	VU	2.0	WS	3.0
815.321	Soil Conservation and Soil Protection	VU	2.0	WS	3.0
852.316	Global Design Studio	PJ	4.0	SS	6.0
NATURE CONSERVATION AND WILDLIFE MANAGEMENT (NC)					
834.321	Biocultural Diversity in Rural Landscapes	VS	2.0	SS	3.0
912.324	Fire Ecology - Vegetation and Wildlife	VO	1.0	SS	1.5
832.321	BOKU International Wildlife Lectures	VS	2.0	WS und SS	3.0
913.302	Decision Support Systems	VS	2.0	WS	3.0
732.333	Innovations for sustainable Forest Management	VS	2.0	WS	3.0
911.322	Role of Soils in Nature Conservation and Wildlife Management	VU	1.0	WS	1.5
RISK MANAGEMENT (RM)					
871.319	Protection and Mitigation Measures against Natural Hazards	VX	3.0	SS	4.5
871.305	Integral Risk Management	VS	2.0	WS	3.0
911.320	Risk Management by Soil Protection and Remediation	VU	1.0	SS	1.5

911.320	Environmental Risk Analysis and Management	VO	2.0	SS	3.0
815.322	Soil erosion models and their application	VU	3.0	WS	4.5
816.347	Application of GIS in Hydrology and Water Management	VO	2.0	SS	3.0
INTERNATIONAL BUSINESS AND SUSTAINABILITY (IB)					
731.330	International Trade and Environment	VO	2.0	SS	3.0
731.331	WTO and International Environmental Agreements	VO	2.0	SS	3.0
731.333	Globalisation and Rural Development	VO	2.0	SS	3.0
731335	Game Theory in Environmental and Natural Resource Management	VO	2.0	SS	3.0

Explanations:

Basics

The Basics are designed in a way to provide a specific overview of the specialisations offered within the framework of the Master programme to foster the holistic understanding of environmental management and engineering and to encourage interdisciplinary study. These courses are flexible and can be taken in the first and second semester.

General Skills

General skills are offered at a level where students are asked to decide on the subject they wish to specialise in. There is room for flexibility, but the decision process is supervised and finally approved by the course director (Individual Course Plan).

Specialisation

This part is devoted to intensive work in the selected specification. Subjects of specialisation have to be closely connected with the following Master thesis.

Types of Courses at BOKU:

VO	Vorlesung = lecture	teacher talks, possibilities for student-questions
SE	Seminar = seminar	special and profound lecture
UE	Uebung = exercise	practical exercises; labs;
EX	Exkursion = excursion	field trip
PR	Praktikum = practical course	practical course; lab
PJ	Projektarbeit = project work	project work or group work

There can also be combinations of different types of courses, e.g.:

VS	lecture + seminar
VU	lecture + exercises
VX	lecture + excursion
VY/VZ	lecture + practical exercises + excursion

III. Contact at BOKU

Administrative Coordinator NARMEE (general questions, enrolment, courses, ...)	Mag. Ulrike Piringer ulrike.piringer@boku.ac.at Center for International Relations BOKU - University for Natural Resources and Life Sciences, Vienna Peter Jordan - Str. 82A, 1190 Vienna, Austria Phone: +43-1-47654-2621 FAX: +43-1-47654-2606 Office hours: Monday – Friday 10.00-12.00 am Additionally Wednesday 2.00-4.00 pm
Exchange Coordinator (exchange, stay at BOKU, life in Vienna,...)	Ruth Girstmair , Bakk.techn. ruth.girstmair@boku.ac.at Center for International Relations BOKU - University for Natural Resources and Life Sciences, Vienna Peter Jordan - Str. 82A, 1190 Wien, Austria Phone: +43-1-47654-2605 FAX: +43-1-47654-2606 Office hours: Wednesday 2.00-4.00 pm Thursday and Friday 10:00-12:00 am
Programme Co-ordinator (scientific questions)	Prof. Raimund Haberl raimund.haberl@boku.ac.at