

# Environmental Science -Soil, Water and Biodiversity Master of Science



August 2013

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#### Preamble

This curriculum provides applicants and students as well as teaching and administrative staff with comprehensive information about the M.Sc. programme "Environmental Science – Soil, Water and Biodiversity" (EnvEuro – a European Master in Environmental Science). It contains information on the programme structure, summarises the most important exam regulations and admission requirements.

The information presented reflects the current situation. Titles and contents of compulsory and optional modules are sometimes subject to change. Due to administrative reasons such changes can only be considered in printed materials with delay. For this reason all information is provided without liability.

If in doubt, please refer to the co-ordinator of the programme (<u>enveuro@uni-hohenheim.de</u>) to obtain upto-date information. For up-to-date module descriptions please refer to the web-pages at <u>www.uni-hohenheim.de/modulkatalog</u>. Time schedules and lecture halls of all courses are displayed in the Course Catalogue of the University of Hohenheim, available at the beginning of each semester on the university's homepage: <u>www.uni-hohenheim.de</u>.

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#### The Master Programme "Environmental Science – Soil, Water and Biodiversity"

**Programme Design** The M.Sc. programme in "Environmental Science – Soil, Water and Biodiversity" (EnvEuro) is a two-year study programme which has been developed and is now contributed to by the following universities: University of Copenhagen (Denmark), University of Hohenheim (Germany), Swedish University of Agricultural Science (Sweden) and the University of Natural Resources and Life Science Vienna (Austria), all members of the "Euroleague for Life Sciences". The language of instruction is English.

The full programme has an extent of 120 ECTS and is constructed by 4 Semester packages, each with a value of 30 ECTS (one basic Semester package/BSP, two advanced Semester packages/ASPs, and a thesis). All students will start up with a common introduction week in August, held at the UCPH University in Copenhagen, <u>in which participation is obligatory</u>. Teaching starts with an e-learning module, introducing the students to European environmental practices including legislation, regulation, monitoring/data collection and Policy (EME). The first year (BSP and 1<sup>st</sup> ASP) of the M.Sc. programme is carried out at the home university. The second year (2<sup>nd</sup> ASP and thesis) is carried out at one of the partner universities.

University of Hohenheim Home university		Host univer (UCPH / SLU /	•	
Basic S	emester: emester ge/BSP	Second Semester: Advanced Semester Package 1/ASP 1 (one to choose)	Third Semester: Advanced Sem. Package 2/ASP 2 (one to choose)	Forth Semester Master thesis
		Environmental Impacts 30 ECTS	Water Resources SLU or BOKU, 30 ECTS	
		Environmental Management	<b>Environmental</b> <b>Impacts</b> UCPH, 30 ECTS	UCPH
Introduc- tion week and EME	2 <sup>1</sup> / <sub>2</sub> modules	30 ECTS	Soil Resources and Land Use UCPH or SLU or BOKU, 30 ECTS	or SLU
module (e-lear- ning based), 15 ECTS	each 6 ECTS 15 ECTS	Soil Resources and Land Use 30 ECTS	<b>Ecosystems and</b> <b>Biodiversity</b> SLU or BOKU, 30 ECTS	or BOKU
		<b>Climate Change</b> 30 ECTS	<b>Environmental</b> <b>Management</b> UCPH, 30 ECTS	30 ECTS
			<b>Climate Change</b> UCPH or SLU or BOKU, 30 ECTS	

Programme Design of the M.Sc. "EnvEuro"

UCPH = University of Copenhagen, Faculty of Life Sciences, Denmark SLU = Swedish University of Agricultural Sciences, Sweden BOKU = University of Natural Resources and Life Science, Austria

Programme Objectives and Conditions	The programme EnvEuro focuses on the relationships between natural re- source uses in Europe and the effects it has on environment and health, and aims at providing analytical and management tools as well as environmental technologies for sustainable production systems in areas with high pressures on natural resources. Water resources take a central role in the programme as water quantities and quality is a powerful measure of mass and energy balances in agriculture, industries and households including pollution loads. Six different specialisations allow for an individually tailored M.Sc. programme. The University of Hohenheim provides an excellent platform for development of a M.Sc. programme based on European knowledge and experience. The Master degrees of the University of Hohenheim are highly regarded academically, as well as being well received by employers internationally.
	The University of Hohenheim fosters contacts and partnerships with more than 50 universities worldwide as well as many renowned national and international institutions and companies. Students enrolled at Hohenheim are encouraged to take full advantage of this existing network in respect of their studies that opens doors to future opportunities.
Career Perspectives	The M.Sc. programme aims at providing candidates who can work professionally with soil, water, climate change and biodiversity in an

environmental context and related to the use of natural resources, and based on insight in European ecosystems and knowledge on current European environmental management.

Candidates will have excellent skills for jobs in all public and industrial sectors working with optimisation of production within the regulative and legislative framework for maintaining high environmental and health standards.

*Modules at the University of Hohenheim* EnvEuro starts each year in the end of August with a compulsory intensive introduction course in Copenhagen. Afterwards students return to Hohenheim for the modules of the basic semester package (BSP). The BSP at Hohenheim consists of three compulsory modules and one elective module:

	Compulsory modules (BSP)	Blocked?	Credits
3005-410	Environmental Management in Europe (EME)	Intro-week + e-learning	15
3103-440	Matter Cycling in Agroecosystems	block 3	6
3402-420	Quantitative Methods in Biosciences (Part 1: Basic Statistics)	unblocked	3
List of sem	ii-elective modules (BSP) (one to choose)	Blocked?	Credits
3202-420	Global Change Issues	block 4	6
4904-430	Land Use Economics (high level!)	block 4	6
3803-450	Crop Production Affecting the Hydrological Cycle ( <i>high level!</i> )	block 4	6
3004-410*	Inland Water Ecosystems	block 5	6
1201-410	Remote Sensing	unblocked	6

\* Please register for participation as described in the module descriptions.

Each 6 ECTS- Module at the University of Hohenheim corresponds to a workload of 4 SWS ("Semesterwochenstunden"=weekly contact hours per Semester), which are 56 contact hours per module, and in addition at least the same time for preparation at home, summing up to a total workload of about

140-180 hours for each module. It may consist of different forms of teaching (e.g. seminar, lecture, practical, excursion)..

In the second semester students have to choose one of the following specialisations of **advanced semester package 1** (ASP1). These semester packages consist of three types of modules: compulsory, semi-elective, and elective. Students have to combine the modules so that 30 (or 33, if module 3005-420 is chosen) credits are achieved. Besides the compulsory modules, priority should be given to the semi-elective modules. Students may choose up to two elective modules from the module catalogue of the Faculty of Agricultural Sciences (not listed here, available at <a href="https://www.uni-hohenheim.de/modulkatalog.html?&L=1">https://www.uni-hohenheim.de/modulkatalog.html?&L=1</a>). The compulsory and semi-elective modules of ASP1 at Hohenheim are:

Compulso	ry modules (together 18 credits)	Blocked?	Credits
3102-450	Spatial Data Analysis with GIS	block 7	6
3802-450	Biodiversity, Plant and Animal Genetic Resources	block 8	6
3103-460	Environment 1 Science Project	block 9	6
Elective m	odules		
	les may be freely choser from the module c the Faculty of Agricultural Sciences	atalogue of all	master
Suggestion	s for-elective modules	Plocked?	Credits
			Cicaio
3005-420	Climate Change Impacts, Adaptation and Mitigation	e-learning, unblocked	15

#### Specialisation: Environmental Impacts (until summer term 2013)

#### Specialisation Environmental Impacts (projected: summer term 2014)

Compulsor	y modules (together 18 credits)	Blocked?	Credits	
3103-450 S	Spatial Data Analysis with GIS	block 7	6	
	Biodiversity, Plant and Animal Genetic Resources	block 8	6	
3103-460 E	Environmental Science Project	block 9	6	
Elective mo	odules			
-	Up to two modules may be freely chosen from the module catalogue of all master courses of the Faculty of Agricultural Sciences			
Suggestions	s for-elective modules	Blocked?	Credits	
1201-500 F	Remote Sensing of the Earth System	unblocked	6	
	Environmental Pollution and Soil Organisms	block 6	6	

Specialisation Environmental Management (until summer term 2013)

Compulso	ry modules (together 12 credits)	Blocked?	Creats
			Calus
3103-450	Spatial Data Analysis with GIS	block	6
4201-410	Agricultu, 1 and Food Policy	block 8	6
Semi-elect	ive modules (at lease 6 credits to choose)	Blocked?	Credits
3005-420	Climate Change Impaces, Acceptation and	e-learning,	15
	Mitigation	unblocked	
3103-460	Environmental Science Project	block 9	6
Elective m	or les		
Up to wo modules may be freely chosen from the module catalogue of all			
master courses of the Faculty of Agricultural Sciences			

## Specialisation Environmental Management (proj.: summer term 2014)

Compulsory modules (together 12 credits)	Blocked?	Credits
3103-450 Spatial Data Analysis with GIS	block 7	6
4201-410 Agricultural and Food Policy	block 8	6
<b>Semi-elective modules</b> (at least 6 credits to choose)	Blocked?	Credits
3103-460 Environmental Science Project	block 9	6
3603-500 Exercises in Biological Pest Control	block 10	6
4403-470 Renewable Energy for Rural Areas	block 9	6
4407-430 Precision Farming	block 6	6
Elective modules		
Up to two modules may be freely chosen from the module catalogue of all master courses of the Faculty of Agricultural Sciences		

#### Specialisation Soil Resources and Land Use (until summer term 2013)

Compulso	ry modules (together 12 credits)	Blocked?	Credits
3301 470	Fertilisation and Applied Soil Chemistry in the Tropics and Subtropics	e-learning	
3103-450	Spatial Data Analysis with GIS	block	6
Semi-elect	ive modeles (at least 6 credits to choose)	Plocked?	Credits
3401-450	Conservation A griculture	unblocked	6
3005-420	Climate Change Impacts, Adaptation and Mitigation	e-learning, unblocked	15
3102-420	Project in Soil Science	unblocked	6
3102-440	Environmental Ponution and Soil Organisms	block 6	6
3101-430	Interdit ciplinary Advanced Soil Science Project	clock 9	6
Elective	odules		
Ur to two i	odules modules may be freely chosen from the mod rses of the Faculty of Agricultural Sciences	lule	catalogue

Compulso	ory modules (together 12 credits)	Blocked?	Credits
3301-470	Fertilisation and Applied Soil Chemistry in the Tropics and Subtropics	e-learning, unblocked	6
3103-450	Spatial Data Analysis with GIS	block 7	6
Semi-elect choose)	tive modules (at least 6 credits to	Blocked?	Credits
3401-450	Conservation Agriculture	unblocked	6
3102-420	Project in Soil Science	unblocked	6
3102-440	Environmental Pollution and Soil Organisms	block 6	6
3101-430	Interdisciplinary Advanced Soil Science Project	block 9	6
Elective n	nodules		
-	modules may be freely chosen from the courses of the Faculty of Agricultural S		logue of

Specialisation Soil Resources and Land Use (proj.:summer term 2014)

### Specialisation Climate Change (until summer term 2013)

y modules (together 21 credits)	Blocked?	Creatits		
	e-learning,	15		
U U	unnocked			
Spatial Data Analysis with GIS	block 7	6		
Elective modules				
Two modules may be freely chosen for a the module catalogue of all master courses of the Faculty of Agricultural Science				
s for elective modules	Blocked?	Credits		
Biodiversity, Plant and Animal Genetic	blick 8	6		
		0		
P-sources		0		
	block 9	6		
	es may be freely chosen from the module of the Faculty of Agricultural Science s for elective modules	Climate Change Impacts, Adaptation and Mitigatione-learning, unbrockedSpatial Data Analysis with GISblock 7odulesblock 7es may be freely chosen from the module catalogue of all ne Faculty of Agricultaral ScienceBlocked?s for elective codulesBlocked?		

### Specialisation Climate Change (projected for summer term 2014)

Compulso	bry modules (together 6 credits)	Blocked?	Credits
3103-450	Spatial Data Analysis with GIS	block 7	6
Semi-elect choose)	tive modules (at least 12 credits to	Blocked?	Credits
3802-420	Biodiversity, Plant and Animal Genetic Resources	block 8	6
3103-460	Environmental Science Project	block 9	6
4404-470	Renewable Energy for Rural Areas	block 9	6
3103-500	Energy and Water Regime at the Land Surface	unblocked	6

1201-490	Climate History and Evolution of the Earth System	unblocked	4
1201-500	Remote Sensing of the Earth System	unblocked	6
1201-440	Measurement, Modeling and Data Assimilation I	unblocked	8
Elective n	nodules		
Up to two modules may be freely chosen from the module catalogue of all master courses of the Faculty of Agricultural Sciences			

Upon request of the students the examination board can allow to substitute semi-elective modules of these four specialisations by modules from other master programmes of the University of Hohenheim. This substitution needs the approval of the mentor.

- *Individual Timetable* The Course Catalogue of the University of Hohenheim contains information on times, lecturers and lecture rooms of all courses and is available at the beginning of each semester online at the university's homepage: <u>www.uni-hohenheim.de</u>. It is linked to the Module Descriptions. A tool to compose an individual timetable is available on the Intranet. Mind: especially non-blocked modules often consist of more than one course.
- *Course Contents* For details about contents, lecturers and methods of instruction refer to the module description site (**www.uni-hohenheim.de/modulkatalog**).

*Credit Point System* The M.Sc. programme has a total requirement of 120 ECTS credits.

The examination result is expressed in grades and marks. The highest score is 1.0 [grade A]. A score of 4.0 [grade D] is required for passing.

The end score is calculated as a weighted average score according to the credits achieved in all modules and the Master Thesis.

	marks and grades		
	grade	es	mark
excellent performance	very good	А	1.0
		A-	1.3
performance considerably	good	B+	1.7
exceeding the above average		В	2.0
standard		B-	2.3
performance meeting the average	medium	C+	2.7
standard		С	3.0
		C-	3.3
performance meeting minimum	pass	D+	3.7
criteria		D	4.0
performance not meeting minimum criteria	fail	F	5.0

The credit point system used in the M.Sc. programme is fully compatible with the European Credit Transfer System, ECTS.

Study and Examination Plan Students have to seek advice of the mentor of the programme on which elective modules are suitable for their individual profile. During the first three months of study the candidate must have the study and examination plan approved, in which all chosen modules are mentioned including the definite specification of the examination semester. The study and examination plan has to be signed by the co-ordinator or the mentor before it is handed in to the examination office. By handing in the Study and Examination Plan students are automatically registered for the chosen module examinations. Exchanges of modules need to be approved.

**Examinations** Performance is examined through continuous assessment. Each module is examined upon completion. The examinations of the blocked modules are held at the end of the respective block period. Those for the unblocked modules are held in the two examination periods that follow the lectures. Withdrawal on the first trial of each module examination is possible up to 7 days before the examination date. The examination will be postponed to the next possible examination period.

The claim for examination expires if:

- a minimum of six examinations has not been passed by the end of the second Semester at the latest
- an examination of one of the modules has not been passed by the end of the sixth semester at the latest
  - in one of the 15 modules an exam has to be repeated more than two times

The claim for examinations does not expire if the candidate cannot be held responsible for the failure to comply with the deadlines. The students themselves are responsible for complying with these examination deadlines as well as all other regulations given in the examination regulations. The examination regulations (https://www.uni-hohenheim.de/pruefung.html) are distributed by the examination office.

Please mind that plagiarism, that means the take-over of text or phrases in a written examination (even within a partial performance) without quoting them accordingly, will be marked as attempt of deception and the respective examination performance is to be graded "fail" (F; mark 4.0). A declaration (https://agrar.uni-hohenheim.de/plagiate.html?&L=1) has to be attached to homework, presentations, and to the thesis and the final digital text document has to be transferred to the mentoring supervisor.

- **Exam Repetition** In case of failure the examination office will inform the student via mail. Normally, the letter includes the repetition date. In some cases the date for repetition has not been pointed out at the time of informing the students. Students are responsible themselves to check with the responsible professor or the examination office about dates for repeater exams. Usually repeater exams for blocked modules will be scheduled by the responsible professor within the same semester. Repeater exams in lectures will usually automatically be scheduled for the next examination period.
- *Master Thesis* The Master Thesis shall show that the candidate is able to work independently on a problem in the field of "Environmental Science – Soil, Water and Biodiversity" within a fixed period of time by applying scientific methods. The exam consists of a written (thesis) and an oral (defence) part. The candidate has to defend the essential arguments, results and methods of the thesis in a colloquium of 30-45 minutes. The written part of the Master Thesis has to be completed within a period of six months. It is usually written during the fourth Semester at the host university. Thesis work includes a literature review, new and original data derived from field work, a period of writing-up and, finally, a presentation.
- **Quality Assurance** The quality of courses and modules is evaluated in a two year rotation by the students of all study programmes. The evaluation sheets are distributed and evaluated by the Faculty of Agricultural Sciences and the results are sent back to the lecturers in an **anonymous** format. The lecturers are asked to discuss the results with the students at the end of their courses.

Teaching Staff at Hohenheim	Most modules are organised and taught by professors who have broad experi- ence in international research. Students also benefit from Hohenheim's active links with academic partners worldwide.
Mentoring	A personal mentor from the teaching staff is assigned to advise on appropriate profiles and support smooth and goal-oriented progress. The study and examination plan has to be signed by the mentor before it is handed in to the examination office. Elective modules that are suitable for the individual profile, can be discussed first with the department advisor for the programme.
Modules at the Partner Universities	The typical student is expected to spend one year at Hohenheim and one year at one of the partner universities; the first year comprising the BSP plus $1^{st}$ ASP at one university and the $2^{nd}$ year at another university where the $2^{nd}$ ASP plus the thesis work is performed. This set up is recommended because of the different Semester structures at the partner universities. Between the BSP and the $1^{st}$ ASP moving will not work due to overlap between Semesters (see scheme on page 20.
	The modules of the other partner universities can be found at: http://www.enveuro.eu/Master-programme/Specialisations-and- courses.aspx

*Hohenheim's ASP 2* The modules offered for incoming students for which Hohenheim is the host university are listed below.

The modules in ASP2 comprise two types of modules: semi-elective, and elective. Students have to combine semi-electve modules of their specialisation so that a minimum of 24 credits is achieved. In addition students may choose one elective module from the module catalogue of the Faculty of Agricultural Sciences (not listed here, available at <a href="https://www.uni-hohenheim.de/modulkatalog.html?&L=1">https://www.uni-hohenheim.de/modulkatalog.html?&L=1</a>). The semi-elective modules of ASP2 at Hohenheim are listed below.

Upon request of the students the examination board can allow to substitute semi-elective modules of these four specialisations by modules from other master programmes of the University of Hohenheim. This substitution needs the approval of the mentor.

Semi-elective modules		Blocked?	Credits
3202-430	Air Pollution and Air Pollution Control	block 1	6
4402-440	Agricultural Production and Residues	block 1	6
3202-410	Ecotoxicology and Environmental Analytics	block 2	6
3103-440	Matter Cycling in Agroecosystems	block 3	6
4403-580	Water and Soil Management in Agricultural Production	block 3	6
3202-420	Global Change Issues	block 4	6
4602-460	Environmental Microbiology, Parasitology and Microbial Ecology	block 4	6
3004-410	Inland Water Ecosystems	block 5	6
4406-410	Waste Management and Waste Techniques	unblocked	6
Elective module			
One module may be freely chosen from the module catalogue of all master courses of the Faculty of Agricultural Sciences			

Specialisation: Environmental Impacts (until winter term 2013/2014)

### Specialisation: Environmental Impacts (winter term 2014/2015)

Semi-elective modules	Blocked?	Credits		
To be defined later				
(No further modules can be given right now (August 2013) since the whole M.Sc. module catalogue at UHOH will probably change completely in winter term 2014/2015)				
Thus, ASP2 will be updated in spring 2014				
It is however guaranteed that a full semester package in the specialisation Environmental Impacts will be offered in winter term 2014/2015				

Specialisation: Environmental Management (until winter term 2013/2014)

Semi-elective modules		Blocked?	Credits
4904-460	Farm System Modelling	block 1	6
4901-420	Poverty and Development Strategies	block 1	6
4403-580	Water and Soil Management in Agricultural Production	block 3	6
3004-410	Inland Water Ecosystems	block 5	6
4201-440	Economics and Environmental Policy	unblocked	6
4406-410	Waste Management and Waste Techniques	unblocked	6
Elective module			
One module may be freely chosen from the module catalogue of all master courses of the Faculty of Agricultural Sciences			

Semi-elec	tive modules	Blocked?	Credits	
3005-420	Climate Change Impacts, Adaptation and Mitigation	e-learning, unblocked	15	
To be defined later				
(No further modules can be given right now (August 2013) since the whole M.Sc. module catalogue at UHOH will probably change completely in winter term 2014/2015)				
Thus, ASP2 will be updated in spring 2014				

Specialisation: Soil Resources and Land Use (until winter term 2013/2014)

Semi-elective modules		Blocked?	Credits
3101-410	Tropical Soils and Land Evaluation	block 1	6
3202-410	Ecotoxicology and Environmental Analytics	block 2	6
4403-580	Water and Soil Management in Agricultural Production	block 3	6
4904-430	Land Use Economics	block 4	6
3301-440	Soil Fertility and Fertilisation in Organic Farming	unblocked	6
3301-470	Fertilisation and Applied Soil Chemistry in the Tropics and Subtropics	e-learning	6
3102-420	Project in Soil Sciences (in English and German)	unblocked	6
3102-450	Molecular Soil Ecology	unblocked	6
Elective module			
One module may be freely chosen from the module catalogue of all master courses of the Faculty of Agricultural Sciences			

Specialisation Soil Resources and Land Use (winter term 2014/2015)

Semi-elective modules	Blocked?	Credits	
3005-420 Climate Change Impacts, Adaptation and Mitigation	e-learning, unblocked	15	
To be defined later			
(No further modules can be given right now (August 2013) since the whole M.Sc. module catalogue at UHOH will probably change completely in winter term 2014/2015) Thus, ASP2 will be updated in spring 2014			

Semi-elect	Semi-elective modules		Credits
3202-430	Air Pollution and Air Pollution Control	block 1	6
4403-580	Water and Soil Management in Agricultural Production	block 3	6
3202-420	Global Change Issues	block 4	6
3803-450	Crop Production Affecting the Hydrological Cycle	block 4	6
3004-410	Inland Water Ecosystems	block 5	6
1201-410	Remote Sensing	unblocked	6
4201-440	Economics and Environmental Policy	unblocked	6

Elective module			
One module may be freely chosen from the module catalogue of all master			
courses of the Faculty of Agricultural Sciences			

Specialisation: Climate Change	<mark>(winter term 2014/2015)</mark>
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	Semi-elective modules	Blocked?	Credits				
	3005-420 Climate Change Impacts, Adaptation and Mitigation	e-learning, unblocked	15				
	To be defined later						
	the whole M.Sc. module catalogue at UHO	(No further modules can be given right now (August 2013) since the whole M.Sc. module catalogue at UHOH will probably change completely in winter term 2014/2015)					
	Thus, ASP2 will be updated in spr	ing 2014					
Double Degree	On successful completion of the M.Sc. programme a "Master of Science" (M.Sc.) in "Environmental Scie Biodiversity" is issued. A double degree constitutes of of the two universities where the student has conduct degree entitles the student to continue with a Ph.D./do total grade is above average.	ence – Soil, V f a certificate f ed his/her stu	Vater and from each dies. This				
Admission Requirements	Admission to the M.Sc. programme EnvEuro at Hohenheim is restricted to 10 students per year. Applicants require an above-average Bachelor of Science (B.Sc.) or equivalent degree in a natural science area such as Agricultural Sciences, Agricultural Biology, Biology, Environmental Sciences, Natural Resources or other following at least three years of university studies. Apart from grades and educational achievements, professional experience, motivation and other relevant activities (e.g. social, political) will be considered.						
	Applicants whose native language is not English and country with English as official language have t proficiency in English (i.e. a minimum of 83 point TOEFL Test).	o provide a	proof of				
Application Deadline	The application deadline for Non-EU-citizens is 1 <sup>st</sup> Ja EU-citizens it is 1 <sup>st</sup> of June each year. Please note th year in the end of August with a compulsory one-wee course in Copenhagen. All students from the four introduced to each other to ensure that all students a and host universities will get to know each other.	hat EnvEuro s k intensive int partner univer	tarts each roduction sities are				
Fees and Expenses	A registration fee (at present 115,05 € per semester) student. Students are expected to cover their own liv housing, food, health insurance, study materials etc. (appendix)	ing expenses,	including				
Scholarships	Unfortunately, the University of Hohenheim is neither scholarships nor to assist with the application proce- grants should therefore be directed to the relevant organ	edure. Applica	-				
	Applicants wishing to obtain a grant are advise information from the German Embassy or Consulate i						

is generally advisable to apply for a scholarship and to secure confirmation well in advance.

- *Cost of Living* Students have to come up for their own living expenses. The standard of living is comparatively high and so is the cost of living. On estimate, a single student needs approximately Euro 700 per month. Apart from accommodation fees and food expenses, additional costs have to be taken into account, i.e. excursion fees, registration fees (see above), health insurance (which is a pre-requisite for registering with a German university), personal liability insurance, study material, etc.
- **Housing** Each student is responsible for finding accommodation for him-/herself. The University of Hohenheim cannot guarantee accommodation in dormitories due to lack of capacity. However, the University of Hohenheim offers assistance with looking for accommodation. This may help international students to fulfil visa requirements. Rent for a single-room apartment amounts to about Euro 250 to 400 per month, depending on the size of the flat and distance from the University or the city of Stuttgart.
- DormitoriesDormitories are located on the campus or walking distance to the campus. All<br/>rooms are furnished and equipped with internet access. Kitchen and Bath<br/>facilities have to be shared with other students. The rent varies in between 210<br/>and 270,-  $\notin$  per room per month, depending on the room and dormitory itself.<br/>A caution fee of 400,-  $\notin$  will have to be paid once in the beginning of the<br/>rental contract, in advance before moving in.
- *Visa Application* Students from outside the European Union have to apply for a visa in order to study in Germany. Applicants are strongly advised to contact the cultural department of the German Embassy or Consulate responsible for the city of residence as soon as the letter of admittance has been received. The letter of admittance will certify that knowledge of the German language is not required for participating in the Hohenheim Master programme.

The basic requirements for a student visa are the following: valid passport, photographs, proof of high school diploma / previous university study, letter of admittance from the University of Hohenheim and proof of a financing source for the duration of the study (or at least for the first year). As a prerequisite for obtaining a visa at least EUR 650 per month are required. Therefore, for the first year, applicants will have to prove a minimum availability of EUR 7,800 of own resources, unless some other financing source is at their disposal. In the latter case, one (or more) person(s) or sponsor(s) have to take official responsibility for all costs pertaining to the entire period of study.

Responsible Scientist<br/>and Mentor at UHOHProf. Dr. Andreas Fangmeier<br/>Department: Plant Ecology and EcotoxicologyContactProgramme Coordinator EnvEuro<br/>University of Hohenheim (790)<br/>70593 Stuttgart<br/>Germany<br/>Tel. +49-(0) 711-459-23305<br/>Fax +49-(0) 711-459-23315<br/>E-mail: enveuro@uni-hohenheim.de<br/>http://www.uni-hohenheim.de/enveuro

## Block Periods 2013/2014

	Block	Period
<u> </u>	1	14.10 06.11.2013
Winter Semester	2	07.11 29.11.2013
Sem	3	02.12 20.12.2013
er (		+07.0108.01.2014
Vint	4	09.01 31.01.2014
	5	03.02 25.02.2014
	6	01.04 25.04.2014
Semester	7	28.04 21.05.2014
Sen	8	22.05 06.06.2014
ner		+ 16.06 24.06.2014
Summer	9	25.06 18.07.2014
N.	10	21.07 12.08.2014

**Important Advice for the Personal Time-Table:** Blocked modules will usually take place Monday to Friday from 2 p.m. to 6 p.m. Non-blocked modules will usually be taught in the morning. This shall enable students to combine blocked and unblocked modules. (Because of the limited number of lecture rooms, this aim can unfortunately not always be kept.) While working out your personal time-table, please be aware of the following facts: the morning is assigned for the personal preparation of the blocked modules too and the block periods B4, B5 and B9, B10 will have a relevant overlapping with the first examination period of the unblocked modules!

#### Please check module descriptions for how to register for participation in the module!

## **Blocked Modules Winter Semester 2013/14**

= Compulsory	<b>1</b> (17 days)	<b>2</b> (17 days)	3(17 dovo)	<b>4</b> (17 days)	<b>5</b> (17 days)	
			<b>3</b> (17 days) <b>02.12. – 20.12.13</b>			by Arrangement
Study Course	14.10 06.11.2013	07.11 29.11.2013	+ 07 08.01.2014	09.01 31.01.2014	03.02 25.02.2014	
M. Sc.	• 4904-460 (Berger)	• 4902-410 (Brockmeier)	<b>4903-480</b> (Birner)	<b>4301-410</b> (Knierim)	<b>4201-420</b> (Grethe)	
AgEcon	Farm System Modelling	Applied Econometrics	Governance, Institut. and	Knowledge and	Advanced Policy	
			Organisat. Development	Innovation Management	Analysis Modelling	
	4901-420 (Zeller) Poverty and	4904-450 (Berger) Farm and Project	● <b>4902-420</b> (Brockmeier) Int. Food and Agr. Trade	4904-430 (Berger) Land Use Economics		
	Development Strategies	Evaluation	<b>4901-470</b> (Zeller) Quant.			
M. Sc.	• 4901-420 (Zeller)	• 3802-410 (Sauerborn)	• 4403-580 (Müller, J.)	• 3801-420 (Cadisch)	● 4801-450 (Valle	
AgriTropics	Poverty and	Ecology and	Water and Soil Manage-	Crop Production Systems	Zárate) Livestock	
	Development Strategies	Agroecosystems	ment in Agric. Production	◯ <b>3803-450</b> (Asch)	Production Systems	
	○ 4301-430 (Knierim)	○ 4904-450 (Berger)	O <b>4901-470</b> (Zeller)	Crop Production Affecting	O <b>3405-410</b> (Zikeli)	
	Rural Communication	Farm and Project	Quantitative Methods in	the Hydrological Cycle	Organic Farming in the	
	and Extension	Evaluation	Economics	⊖- <b>3501-440</b> (Melchinger)	Tropics and Subtropics	
	◯ <b>3101-410</b> (Stahr)		○ <b>4801-430</b> (Valle	Plant Breeding and Seed	O <b>4903-510</b> (Birner)	
	Tropical Soils and Land		Zárate) Livestock	Science in the T+S	Agriculture and Food Se-	
	Evaluation	O <b>3803-440</b> (Asch) Signal-	Breeding Programmes	O <b>4903-490</b> (Birner)	curity in Fragile Systems	
	O 4801-410 (Valle	ling in Plants under Stress	<b>4902-420</b> (Brockmeier)	Social Dimensions of		
	Zárate) Genetic Resour-	O 4802-440 (Dickhöfer)	International Food and Agri-			
	ces and Animal Husban-	Phys.+Ec. Asp.Livestock	cultural Trade	O 4802-470 (Focken) ◄	(11 full days in Ahrens-	
	dry Systems	Nutrition in the Tropics		Experimental Aquaculture	burg near Hamburg!)	
M. Sc.		◯ <b>3803-440</b> (Asch)	<b>3501-460</b> (Melchinger)			<b>4 3301-460</b> (Müller, T.
Crop Sciences		Signalling in Plants under	Planning. of Breeding			Exercises in Plant
		Stress	Programmes			Nutrition (after B5)
M. Sc.	VB <b>● 4402-440</b>	• 3202-410 (Fangmeier)	• 3103-440 (Streck)	• 4602-460 (Hölzle)	<b>3004-410</b> (Tremp)	
EnviroFood	(Gallmann) Agricultural	Ecotoxicology and	Matter Cycling in Agro-	Environmental Micro-	Inland Water	
	Production and Residues	Environmental Analytics	Ecosystems	biology, Parasitology	Ecosystems	4 2204 400 (Müller T
	VB● 1503-410 (Haus- mann) Food Technology	<ul> <li>3802-410 (Sauerborn)</li> <li>Ecology and</li> </ul>	● 4403-580 (Müller, J.) Water and Soil Manage-	<ul> <li>3202-420 (Fangmeier)</li> <li>Global Change Issues</li> </ul>	<ul> <li><b>3003-410</b> (Schöne)</li> <li>Food Safety and Quality</li> </ul>	<ul> <li>3301-460 (Müller, T Exercises in Plant</li> </ul>
	and Residues	Agroecosystems	ment in Agric. Production	Clobal Change Issues	Chains	Nutrition (after B5)
	● 3202-430 (Fangmeier)	, igi deced yeteine	<b>4902-420</b> (Brockmeier)		(ten days in February, 6	rtainion (altor 20)
	Air Pollution and Air		International Food and Agri-		hours per day)	
	Pollution Control		cultural Trade			
M. Sc.	O <b>4402-440</b> (Gallmann)	O 3202-410 (Fangmeier)	• 3103-440 (Streck)	<b>3803-450</b> (Asch)	<b>3004-410</b> (Tremp)	
EnvEuro	Agricultural Production	Ecotoxicology and	Matter Cycling in Agro-	Crop Production Affecting	Inland Water	
(first year and	and Residues	Environmental Analytics	Ecosystems	the Hydrological Cycle	Ecosystems	
elective modules	O <b>3202-430</b> (Fangmeier)	O 3802-410 (Sauerborn)	O <b>4403-580</b> (Müller, J.)	◯ <b>4602-460</b> (Hölzle)		
of second year)	Air Pollution a Control	Ecology and	Water and Soil Manage-	Environmental Micro-		
	○ 4904-460 (Berger)	Agroecosystems	ment in Agric. Production	biology, Parasitology	1	
	Farm System Modelling			<b>3202-420</b> (Fangmeier)		
	O <b>4901-420</b> (Zeller) Po-			Global Change Issues	1	
	verty and Dev. Strategies			<b>4904-430</b> (Berger)		
	O <b>3101-410</b> (Stahr) Trop.			Land Use Economics		
	Soil and Land Evaluation					

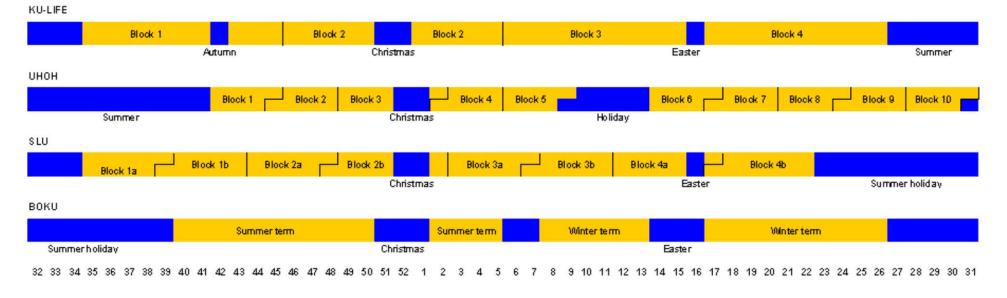
## **Blocked Modules Summer Semester 2014**

E Compulsory	I = Semi-elective	⊖= Elec	tive			
Period	<b>6</b> (17 days)	<b>7</b> (17 days)	<b>8</b> (17 days)	<b>9</b> (17 days)	<b>10</b> (17 days)	
	01.04 25.04.2014	28.04. –	22.05 06.06.2014 +	25.06	21.07	by Arrangement
Study Course	(unbl: 07.04.!)	21.05.2014	16.06 24.06.2014	18.07.2014	12.08.2014	
M. Sc. AgEcon		<ul> <li>4101-410 (Lippert) Environmental and Resource Economics</li> </ul>	● 4201-410 (Grethe) Agricultural and Food Policy	<ul> <li>€ 4903-500 (Birner) Poli- cy Processes in Agric. + Nat. Resource Manag.</li> </ul>	<ul> <li>4903-470 (Birner) Qual. Research Methods</li> <li>4902-430 (Brockmeier)</li> </ul>	
M. Sc. AgriTropics	<ul> <li>3803-470 (Asch)</li> <li>Interdisciplinary Practical Science Training (AgriTropics only!)</li> </ul>	<ul> <li>4901-430 (Zeller) Rural Development Policy and Institutions</li> <li>3801-430 (Cadisch) Integrated Agricultural Production Systems</li> </ul>	<ul> <li>✓ 4201-410 (Grethe) Agricultural and Food Policy</li> <li>✓ 3802-420 (Sauerborn)</li> <li>Biodiversity, Plant and</li> <li>Animal Gen. Resources</li> <li>✓ 4403-550 (Müller, J.)</li> </ul>	<ul> <li>4403-470 (Müller, J.) Renewable Energy f. Rural Areas</li> <li>4801-420 (Valle Zárate) Promotion of Livestock in Trop. Environments</li> </ul>	<ul> <li>4902-430 (Brockmeier) Food and Nutrition Security</li> <li>3803-430 (Asch) Ecophysiology of Crops in the T+S</li> </ul>	
			Postharvest Technology of Food and Bio-Based Prod. <b>4802-450</b> (Dickhöfer) Quant. Meth. in Anim. Nutrition + Veget. Scienc.	_	<ul> <li>4602-450 (Hölzle)</li> <li>Food Safety a. Drinking</li> <li>Water Quality related to</li> <li>Zoonoses in the T+S</li> <li>3501-480 (Melchinger)</li> <li>Breed. of Trop., Ornamental, and Vegetable Plants</li> </ul>	
M. Sc. Crop Sciences	O 4407-430 (Griepentrog) Precision Farming		● <b>3602-460</b> (Gerhards) Information Technologies and Expert Systems		○ 3603-500 (Zebitz) Exercises in Biological Pest Control	
M. Sc. EnviroFood	<ul> <li>3102-440 (Kandeler)</li> <li>Environmental Pollution and Soil Organisms</li> </ul>	● 3103-450 (Streck) Spatial Data Analysis with GIS	<ul> <li>3802-420 (Sauerborn) Biodiversity, Plant and Animal Gen. Resources</li> <li>4403-550 (Müller, J.) Postharvest Technology of Food &amp; Bio-Based Prod.</li> </ul>	<ul> <li>3103-460 (Streck)</li> <li>Environmental Science Project</li> <li>4403-470 (Müller, J.)</li> <li>Renewable Energy for Rural Areas</li> </ul>		
M. Sc. EnvEuro (first year)	<ul> <li>○ 3102-440 (Kandeler)</li> <li>Environmental Pollution and Soil Organisms</li> </ul>	● <b>3103-450</b> (Streck) Spatial Data Analysis with GIS	<ul> <li>3802-420 (Sauerborn) Biodiversity, Plant and Animal Gen. Resources</li> <li>4201-410 (Grethe) Agricultural and Food Policy</li> <li>3101-460 (N.N.)</li> </ul>	<ul> <li>○ 3103-460 (Streck)</li> <li>Environmental Science Project</li> <li>○ 4403-470 (Müller, J.)</li> <li>Renewable Energy for Rural Areas</li> <li>○ 3101-430 (N.N.) Inter-</li> </ul>		
M. Sc. OrganicFood		<ul> <li>4801-480 (Valle Zára- te) Organic Livestock Farming and Products</li> </ul>	Mapping Course	discipl. Adv.Soil Science		

Please check module descriptions to find out how to register for participation in the respective module (<u>https://www.uni-hohenheim.de/modulkatalog.html</u>).

#### Unblocked Modules taught in English at the Faculty of Agricultural Sciences $\bullet = Compulsory$ $\bullet = Semi-elective$ $\bigcirc = Elective$

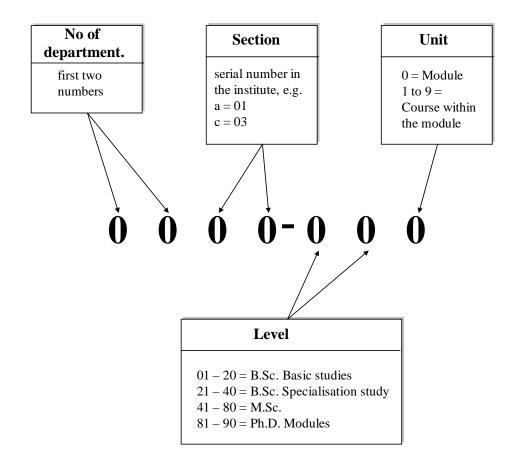
• =	= Cor	mpul	sory	/	€ =	Semi-elective $\bigcirc$ = Elective
u	s	Crop Sciences	ıro	Ļ	ċ	
AgEcon	Agri- Tropics	op iene	EnvEuro	virc	Organic- Food	Unblocked Modules in Winter Semester (October - February)
Ą	Aç T	ပ္ လွ	Ш	ᆔᄮ	РĞ	Unblocked modules in writer Semester (October - rebradry)
0	0	0			0	1201-410 (Wulfmeyer) Remote Sensing
						1201-580 (Wulfmeyer) Physics of the Earth System
-	-	-		-	-	3005-410 (Fangmeier) Environmental Management in Europe (for EnvEuro only!)
0	0	0		0	0	<b>3101-450</b> (Stahr) Major Pedological Field Trip (English + German) ( <i>not in WS 13/14!</i> )
0	0	0	0	0	0	<b>3102-420</b> (Kandeler) Project in Soil Sciences (English + German)
0	0	0	0	0	0	<b>3102-450</b> (Kandeler) Molecular Soil Ecology
0	00	00	0	0	0	<b>3301-450</b> (Müller, T.) Soil Fertility and Fertilisation in Organic Farming
0	0		0	0	0	<b>3301-470</b> (Müller, T.) Fertilisation and Appl. Soil Chemistry in the T+S ( <i>e-learning</i> !) <b>3302-450</b> (Neumann) Plant Symbioses for Nutrient Acquisition
0	0			0	0	<b>3302-450</b> (Neumann) Plant Symbolses for Nuthent Acquisition <b>3302-460</b> (Ludewig) Plant Quality
0	0	•		0	0	<b>3401-470</b> (Claupein) Crop Physiology
0	•	0	•	0	0	<b>3402-420</b> (Piepho) Quantitative Methods in Biosciences
0	0	0	•	0	•	<b>3405-460</b> (Zikeli) Processing and Quality of Organic Food
0	0	0		0	•	<b>3405-470</b> (Zikeli) Organic Food Systems and Concepts
-	-	-	-	-	•	<b>3405-500 (</b> Zikeli) Principles of Organic Food Systems ( <i>for EurOrganic only!</i> )
0	0			0	0	<b>3501-470</b> (Melchinger) Selection Theory
		•				<b>3502-440</b> (Schmid) Methods of Scientific Working for Crop Sciences
0	0			0	0	3502-450 (Schmid) Population and Quantitative Genetics
0	0			0	0	3504-430 (Kruse) Seed Research
0	0			0	0	3601-450 (Vögele) Phytopathology
0	0			0	0	3602-450 (Gerhards) Molecular Aspects of Plant Protection
0	0			0	0	3603-480 (Zebitz) Entomology
0	0	0				4201-440 (Grethe) Economics and Environmental Policy
0	0	0		0	•	4303-440 (I.V. Lemke) Social Conditions of Organic and Sustainable Agriculture
0	0	0	0	0	0	4303-490 (I.V. Lemke) Ethics of Food and Nutrition Security
0	0					4404-450 (Köller) Innovations in Agriculture
0	0	0			0	4406-410 (Kranert) Waste Management and Waste Techniques
	0	0		0	0	4904-410 (Berger) Agricultural Economics Seminar
u	s	е	uro	6	Organic- Food	
AgEcon	Agri- Tropics	up Sien	EnvEuro	vir	rgar ood	Unblocked Modules in Summer Semester (April - July)
Ř	Ϋ́Α	ັນເ	ш	шщ	ōй	
-	-	-		-	-	3005-420 (Fangmeier)Climate Change Impacts, Adaptation a. Mitigation (EnvEuro !)
0	0	0	0	0	0	<b>3101-440</b> (Stahr) Soil Genesis, Classification and Geography ( <i>English</i> + <i>German</i> )
0	0	0	0	0	0	<b>3101-450</b> (Stahr) Major Pedological Field Trip ( <i>English</i> + <i>German</i> )
0	0	0	0	0	0	3102-420 (Kandeler) Project in Soil Sciences (English + German)
			0	0	-	3103-500 (Streck) Energy and Water Regime at the Land Surface
0	0	0		0	0	<b>3301-470</b> (Müller, T.) Fertilisation and Appl. Soil Chemistry in the T+S ( <i>e-learning!</i> )
00	0	0	0	00	0	3401-450 (Claupein) Conservation Agriculture
0	0	0		0	•	3401-460 (Claupein) Organic Plant Production
0	0	•		00	0	<b>3402-450</b> (Piepho) Advanced Statistical Methods for Metric and Catagorical Data
0	0	0		00	•	<b>3405-450</b> (Zikeli) Problems and Perspectives of Organic Farming
0	0			0	$\overline{\mathbf{O}}$	<b>3405-490</b> (Zikeli) Project in Organic Agriculture and Food Systems
0	0			0	0	<b>3501-450</b> (Melchinger) Breeding Methodology <b>3603-420</b> (Zebitz) Crop Protection in Organic Farming
0	0			0	0	<b>3703-420</b> (Zebitz) Crop Protection in Organic Parming <b>3703-430</b> (Wünsche) Crop – Environment Interactions
	0	•			$\cup$	<b>3803-490</b> (Asch) Excursion to the Tropics and Subtropics
•	0	0		0	0	<b>4202-450</b> (Asch) Excursion to the hopics and Subtropics
0	0	0		0	•	<b>4202-450</b> (Becker. T) Markets and Marketing of Quality Food
Ĭ	0	0			0	<b>4303-470</b> (I.V. Lemke) Gender, Nutrition, and Right to Food
0	0	0		Ì	0	<b>4303-480</b> (I.V. Lemke) Global Nutrition
-	•	-	-	-	-	<b>4903-460</b> (Birner) Methods in Interdisciplinary Collaboration <i>(for AgriTropics only!)</i>
	_			1		



## Scheme showing the semester structures at the four partner universities during all calendar weeks

Holiday Semester

## **Explanation of Module Code**



Day Hour	Monday	Thuesday	Wednesday	Thursday	Friday
8 - 9					
9 - 10					
10 – 11					
11 – 12					
12 - 13					
13 – 14					
14 – 15					
15 - 16					
16 - 17					
17 – 18					

# **Lecture Periods**

WS 13/14	First day of <u>un</u> blocked modules:	(42. KW) Monday, 14.10.2013
	First day of blocked modules:	(42. KW) Monday, 14.10.2013
	Last day of <u>un</u> blocked modules:	(5. KW) Saturday, 01.02.2014
	Last day of blocked modules:	(9. кw) Tuesday, 25.02.2014
	First day of blocked modules:	( <u>14. KW</u> ) Tuesday, 01.04.2014
14	First day of <u>un</u> blocked modules:	( <u>15. KW</u> ) Monday, 07.04.2014
SS	Last day of <u>un</u> blocked modules:	(29. KW) Saturday, 19.07.2014
	Last day of blocked modules:	( <u>33. кw</u> )Tuesday, 12.08.2014

**Free of lectures:** All Saints' Day: 01.11.2013, Christmas holidays: 23.12.2013 – 06.01.2014 (blocks: 21.12.13 – 06.01.14), Easter holidays: 18.04. – 21.04.2014, Labour Day: 01.05.2014, Ascension Day: 29.05.2014, Pentecost holidays: 10.06.2014 –14.06.2014 (except excursions), Feast of Corpus Christi: 19.06.2014. The "Dies Academicus" (04.07.2014) will be free of lectures too!

#### Examination periods in winter semester 2013/14

B.Sc. and M.Sc. period 1:	calendar week 6 to 8
B.Sc. and M.Sc.: period 2:	calendar week 13 to 14
Deadline for the registration for exams:	is fixed by the examination office

**Examination periods in summer semester 2013** 

B.Sc. and M.Sc. period 1:	calendar week 30 to 32
B.Sc. and M.Sc.: period 2:	calendar week 39 to 41
Deadline for the registration for exams:	is fixed by the examination office

Questions concerning the examination regulations, the study and examination plan, withdrawal or transcripts of records are answered at the examination office and the exact dates of the module examinations are posted at the online notice-board of the examination office at: (https://www.uni-hohenheim.de/pruefung.html?&L=1).