

# Curriculum and Module Description

## Master study programme Forest Information Technology

The present curriculum characterizes sequence and content of the International Master Study Programme Forest Information Technology (M.Sc.) at the Faculty of Forest and Environment of the University of Applied Sciences, Eberswalde (UASE) in Germany and the Faculty of Forestry of the Warsaw University of Life Science (WULS) in Poland. The study programme consists of four semesters and is divided into mandatory and elective modules. Assignment rules for elective modules are as follows:

Elective modules open to students from different semesters can be selected only once. If the number of applicants for elective modules exceeds the number of available places, priority is given to students from lower semesters. 10% of the places can be assigned according to criteria defined by the lecturer. Registration and selection procedure of the elective modules are accomplished by the head of the study programme at the end of the lecture period of the previous semester (exception: selection procedure for first and fourth semester will be accomplished during the first week of the corresponding semester).

In order to achieve not only the Master of Science degree from UASE but also from WULS, students are obliged to choose one elective module from each of the two marked groups (A [Principles of Landscape Ecology, Forest Ecology, Landscape Systems Analysis] and B [Sustainable Forest Management, Forest Monitoring, Forest Inventory, Forest Mensuration, Forest Productivity, Forest Ecosystem Modelling, Introduction to Ecosystem Modelling]) during the whole study period. Specific advice will be given by the responsible programme coordinator. All other specific requirements for the selection of modules are determined in the corresponding module description.

### Semester: 1                      Mandatory

<b>Data analysis and management I</b>		<b>CR: 6</b>	<b>EF: WE 180</b>				
Module components	Goal		SWH	TF	TL	EF	CR
Database management	Students know theoretical fundamentals of databases and are able to plan and to implement databases and to retrieve data from databases using various software tools.		2	L, PE	E	WE 90	3
Statistics I	Students know selected descriptive and analytical statistical methods and are enabled to accomplish environmental data analyses.		2	L, PE	E	WE 90	3
<b>Fundamentals of programming</b>		<b>CR: 3</b>	<b>EF: WR</b>				
Module components	Goal		SWH	TF	TL	EF	CR
Programming I	Students understand the theoretical fundamentals of computer programming and are able to create application programs of limited extent and function in a systematic way using an object-oriented programming language.		2	L, PE, S	E	WR	3
<b>Geomatics I</b>		<b>CR: 9</b>	<b>EF: PP, PR</b>				
Module components	Goal		SWH	TF	TL	EF	CR
Geographic information systems I	Students know theoretical fundamentals of Geographic Information Systems (GIS) and are enabled to use GIS for various purposes of natural resources management.		4	L, PE, S	E	PP	6
Remote sensing	Students know theoretical fundamentals and are enabled to use remote sensing as one of forest and environment monitoring tools.		2	L, PE, P	E	PR	3

Teaching form (TF)					Examination form (EF)							
Lecture	Seminar	Practical Exercise	Tutorial	Project	Technical discussion	Project presentation	Oral report	Written exam	Term paper	Protocol	Work report	Project report
L	S	PE	T	P	TD	PP	OR	WE	TP	P	WR	PR

SWH = semester work hours; TL = teaching Language, CR = credits

\* offer uncertain, please check with the programme coordinator

**Semester: 1 Elective**

<b>Computer science and technology</b>		<b>CR: 4</b>	<b>EF: TD 20</b>				
<b>Module components</b>	<b>Goal</b>		<b>SWH</b>	<b>TF</b>	<b>TL</b>	<b>EF</b>	<b>CR</b>
Computer science and technology	Students know topical fundamentals of computer science and technology including current computer hardware and possess practical skills using different computer environments and operating systems.		3	L, PE	E	TD 20	4
<b>Ecosystem modelling (B)</b>		<b>CR: 4</b>	<b>EF: TD 20</b>				
<b>Module components</b>	<b>Goal</b>		<b>SWH</b>	<b>TF</b>	<b>TL</b>	<b>EF</b>	<b>CR</b>
Ecosystem modelling (B)	Students have a principal understanding of notion and approach of ecosystem modelling and have basic practical skills to plan, develop and apply models of ecosystem related target areas.		3	L, PE, S	E	TD 20	4
<b>German culture and language</b>		<b>CR: 2</b>	<b>EF: TD 20</b>				
<b>Module components</b>	<b>Goal</b>		<b>SWH</b>	<b>TF</b>	<b>TL</b>	<b>EF</b>	<b>CR</b>
German culture and language	Students know the fundamentals of the current German society and are able to apply German language in everyday situations.		3	PE, S	G, E	TD 20	4
<b>Landscape systems analysis (A)</b>		<b>CR: 4</b>	<b>EF: TD 20</b>				
<b>Module components</b>	<b>Goal</b>		<b>SWH</b>	<b>TF</b>	<b>TL</b>	<b>EF</b>	<b>CR</b>
Landscape systems analysis (A)	Students are enabled to understand concepts, principles and methods of landscape systems analysis and are trained to select and to apply different quantitative methods of landscape systems analysis for varying targets.		3	L, PE, S	E	TD 20	4
<b>Project planning and management</b>		<b>CR: 4</b>	<b>EF: PP, PR</b>				
<b>Module components</b>	<b>Goal</b>		<b>SWH</b>	<b>TF</b>	<b>TL</b>	<b>EF</b>	<b>CR</b>
Project planning and management	Students are acquainted with methods of project planning and management and are able to apply these methods in practice.		3	L, P	E	PP (50%) PR (50%)	4
<b>Scientific writing and presenting</b>		<b>CR: 4</b>	<b>EF: PP, TP</b>				
<b>Module components</b>	<b>Goal</b>		<b>SWH</b>	<b>TF</b>	<b>TL</b>	<b>EF</b>	<b>CR</b>
Scientific writing and presenting	Students know the fundamentals of effective scientific writing and oral presenting.		3	PE, S	E	TP (50%) PP (50%)	4
<b>Specialisation module I (Current technologies and applications)</b>		<b>CR:</b>	<b>EF:</b>				
<b>Module components</b>	<b>Goal</b>		<b>SWH</b>	<b>TF</b>	<b>TL</b>	<b>EF</b>	<b>CR</b>
Specialisation module I (Current technologies and applications)	Students become acquainted with current developments of IT and their applications in forestry and environment related areas.		3	L, PE, S	E		4

Teaching form (TF)					Examination form (EF)							
Lecture	Seminar	Practical Exercise	Tutorial	Project	Technical discussion	Project presentation	Oral report	Written exam	Term paper	Protocol	Work report	Project report
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**Semester: 2                      Mandatory**

<b>Data analysis and management II</b>		<b>CR: 6</b>	<b>EF: PR 20, WE 90</b>				
<b>Module components</b>	<b>Goal</b>		<b>SWH</b>	<b>TF</b>	<b>TL</b>	<b>EF</b>	<b>CR</b>
Programming II	Students are able to develop application programmes of increased extend using the object oriented programming approach.		2	L, PE, P	E	PR 20	3
Statistics II	The main objective of the course is to introduce the use of the statistical programming environment for practical statistical problem solving.		2	L, PE, S	E	WE 90	3
<b>Geomatics II</b>		<b>CR: 6</b>	<b>EF: PR, WE 90</b>				
<b>Module components</b>	<b>Goal</b>		<b>SWH</b>	<b>TF</b>	<b>TL</b>	<b>EF</b>	<b>CR</b>
Forest photogrammetry	The main objective of the course is to introduce the use of Photogrammetry and other related tools in solving of various forestry-related problems.		2	L, PE, P, S	E	WE 90	3
Geographic information systems II	The main objective of the module is to introduce the use of GIS and GPS in solving of various forestry-related problems.		2	L, PE, S	E	PR	3
<b>Operational forestry I</b>		<b>CR: 6</b>	<b>EF: TD 20, WE 90</b>				
<b>Module components</b>	<b>Goal</b>		<b>SWH</b>	<b>TF</b>	<b>TL</b>	<b>EF</b>	<b>CR</b>
Close-to-nature silviculture and nature conservation	The objective of this module is to develop an understanding of major principles of close-to-nature silviculture determining its role in the sustainable forest resource management and multifunctional forestry.		2	L, PE	E	WE 45	3
Forest utilization	Students are able to recognize wood of the most important European tree species. Further they gain knowledge about wood properties, wood processing, industry and forest resources.		2	L, PE, T	E	TD 20 (10%) WE 45 (90%)	3

Teaching form (TF)					Examination form (EF)							
Lecture	Seminar	Practical Exercise	Tutorial	Project	Technical discussion	Project presentation	Oral report	Written exam	Term paper	Protocol	Work report	Project report
L	S	PE	T	P	TD	PP	OR	WE	TP	P	WR	PR

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**Semester: 2 Elective**

<b>Digital processing of remotely sensed data</b>		<b>CR: 4</b>	<b>EF: PR</b>				
<b>Module components</b>	<b>Goal</b>	<b>SWH</b>	<b>TF</b>	<b>TL</b>	<b>EF</b>	<b>CR</b>	
Digital processing of remotely sensed data	The main objective of the course is to provide students with the ability of processing remotely sensed data for forestry and environmental purposes.	3	L, PE	E	PR	4	
<b>Forest ecology (A)</b>		<b>CR: 4</b>	<b>EF: WE 90</b>				
<b>Module components</b>	<b>Goal</b>	<b>SWH</b>	<b>TF</b>	<b>TL</b>	<b>EF</b>	<b>CR</b>	
Forest ecology (A)	Students are able to analyse processes in forests and of interactions between processes and external influences for practical purposes.	3	L, PE, S	E	WE 90	4	
<b>Forest information systems</b>		<b>CR: 4</b>	<b>EF: PR</b>				
<b>Module components</b>	<b>Goal</b>	<b>SWH</b>	<b>TF</b>	<b>TL</b>	<b>EF</b>	<b>CR</b>	
Forest information systems	The main objective of the course is to introduce students to a wide range of topics in nowadays forest ecosystem management, information systems architecture and their use in forest ecosystems management. Students will know the utility of various information systems for forestry data analyses and will be able to apply them for solving problems related to forestry and natural environment.	3	PE, P, S	E	PR	4	
<b>Polish culture and language</b>		<b>CR: 4</b>	<b>EF: TD 20</b>				
<b>Module components</b>	<b>Goal</b>	<b>SWH</b>	<b>TF</b>	<b>TL</b>	<b>EF</b>	<b>CR</b>	
Polish culture and language	Students know the fundamentals of the current Polish society and are able to apply Polish language in everyday situations.	3	PE, S	E	TD 20	4	
<b>Social and market survey methods</b>		<b>CR: 4</b>	<b>EF: WE 90</b>				
<b>Module components</b>	<b>Goal</b>	<b>SWH</b>	<b>TF</b>	<b>TL</b>	<b>EF</b>	<b>CR</b>	
Social and market survey methods	Students understand basics of social and market surveys, know tools and methods for social and market surveys, and are able to design and elaborate surveys.	3	L, S	E	WE 90	4	
<b>Spatial analysis</b>		<b>CR: 4</b>	<b>EF: PP</b>				
<b>Module components</b>	<b>Goal</b>	<b>SWH</b>	<b>TF</b>	<b>TL</b>	<b>EF</b>	<b>CR</b>	
Spatial analysis	To introduce students to wide range of topics regarding spatial analyses; develop students' abilities to choose adequate analysis and successfully process and analyze spatial data and information about environmental objects and processes	3	PE, S	E	PP	4	
<b>Specialisation modul II (Current technologies and applications)</b>		<b>CR:</b>	<b>EF:</b>				
<b>Module components</b>	<b>Goal</b>	<b>SWH</b>	<b>TF</b>	<b>TL</b>	<b>EF</b>	<b>CR</b>	
Specialisation modul II (Current technologies and applications)	Students become acquainted with current developments of IT and their applications in forestry and environment related areas.	3		E		4	

Teaching form (TF)					Examination form (EF)							
Lecture	Seminar	Practical Exercise	Tutorial	Project	Technical discussion	Project presentation	Oral report	Written exam	Term paper	Protocol	Work report	Project report
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Semester: 2

Elective

**Sustainable forest management (B)**

CR: 4

EF: TD 20

Module components

Goal

SWH

TF

TL

EF

CR

Sustainable forest management (B)

Students are able to use various sources of information and different techniques to prepare management plans and are able to analyze the impact of various management scenarios on forest structure.

3

L, PE, P, S

E

TD 20

4

Teaching form (TF)					Examination form (EF)							
Lecture	Seminar	Practical Exercise	Tutorial	Project	Technical discussion	Project presentation	Oral report	Written exam	Term paper	Protocol	Work report	Project report
L	S	PE	T	P	TD	PP	OR	WE	TP	P	WR	PR

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**Semester: 3**

**Mandatory**

<b>Operational forestry II</b>		<b>CR: 6</b>	<b>EF: PP, WR, WE 90</b>				
<b>Module components</b>	<b>Goal</b>		<b>SWH</b>	<b>TF</b>	<b>TL</b>	<b>EF</b>	<b>CR</b>
Forest policy	Students can apply fundamentals of modern Forest policy in practice.		3	L, PE, S	E	PP	3
Forest technology and engineering	Students are able to manage the sustainable use of forest resources by using new technologies, optimization and planning techniques.		3	L, PE, P	E	WR (25%) WE 90 (75%)	3
<b>Research project</b>		<b>CR: 12</b>	<b>EF: PR</b>				
<b>Module components</b>	<b>Goal</b>		<b>SWH</b>	<b>TF</b>	<b>TL</b>	<b>EF</b>	<b>CR</b>
Research project	Students are enabled to plan and accomplish a research project of moderate size and have consolidated their graduate profession empowering competences.			P	E	PR	12
<b>Scientific internet colloquium</b>		<b>CR: 4</b>	<b>EF: TP</b>				
<b>Module components</b>	<b>Goal</b>		<b>SWH</b>	<b>TF</b>	<b>TL</b>	<b>EF</b>	<b>CR</b>
Scientific internet colloquium	Students are able to open new areas of IT applications, extend and manifest abilities for accomplishing scientific work incl. writing and reviewing scientific papers.		3	S	E	TP	4

Teaching form (TF)					Examination form (EF)							
Lecture	Seminar	Practical Exercise	Tutorial	Project	Technical discussion	Project presentation	Oral report	Written exam	Term paper	Protocol	Work report	Project report
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**Semester: 3 Elective**

<b>Administration and management in forestry</b>		<b>CR: 4</b>	<b>EF: WR</b>				
<b>Module components</b>	<b>Goal</b>	<b>SWH</b>	<b>TF</b>	<b>TL</b>	<b>EF</b>	<b>CR</b>	
Administration and management in forestry	The objective of the course is to develop knowledge about specific forest management processes and to reflect their importance for the competitive position and growth of forest businesses. Students will know how to use some analytical tools helpful in solving economic problems in forestry. The influence of non-timber forest functions on the financial results of forest businesses will also be analyzed and discussed.	3	L, PE, P	E	WR	4	
<b>Ecosystem modelling (B)</b>		<b>CR: 4</b>	<b>EF: TD 20</b>				
<b>Module components</b>	<b>Goal</b>	<b>SWH</b>	<b>TF</b>	<b>TL</b>	<b>EF</b>	<b>CR</b>	
Ecosystem modelling (B)	Students have a principal understanding of notion and approach of ecosystem modelling and have basic practical skills to plan, develop and apply models of ecosystem related target areas.	3	L, PE, S	E	TD 20	4	
<b>Forest biometry</b>		<b>CR: 4</b>	<b>EF: PR, TD 20</b>				
<b>Module components</b>	<b>Goal</b>	<b>SWH</b>	<b>TF</b>	<b>TL</b>	<b>EF</b>	<b>CR</b>	
Forest biometry	The main objective of the course is to introduce to theoretical foundations of forest measurements, use of principles and techniques for evaluating and monitoring forest growth and yield in various methods.	3	L, P, S	E	PR (50%) TD 20 (50%)	4	
<b>Forest decision support systems</b>		<b>CR: 4</b>	<b>EF: PR</b>				
<b>Module components</b>	<b>Goal</b>	<b>SWH</b>	<b>TF</b>	<b>TL</b>	<b>EF</b>	<b>CR</b>	
Forest decision support systems	Students know the growth dynamics of trees and forest stands and are able to use various growth models and Forest Decision Support Systems to derive and support decisions.	3	L, S	E	PR	4	
<b>Geographic information systems and remote sensing in forest protection</b>		<b>CR: 4</b>	<b>EF: OR, TD 20</b>				
<b>Module components</b>	<b>Goal</b>	<b>SWH</b>	<b>TF</b>	<b>TL</b>	<b>EF</b>	<b>CR</b>	
Geographic information systems and remote sensing in forest protection	Students are enabled to use remote sensing and geographic information system in different applications related to forest protection.	3	S	E	TD 20 (50%) OR (50%)	4	
<b>Internet programming</b>		<b>CR: 4</b>	<b>EF: PR</b>				
<b>Module components</b>	<b>Goal</b>	<b>SWH</b>	<b>TF</b>	<b>TL</b>	<b>EF</b>	<b>CR</b>	
Internet programming	Students know the potentials of the Internet as source and target of various forest and environmental information and are able to develop static and dynamic websites.	3	PE, P, S	E	PR	4	

Teaching form (TF)					Examination form (EF)							
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**Semester: 3 Elective**

<b>Landscape systems analysis (A)</b>		<b>CR: 4</b>	<b>EF: TD 20</b>				
<b>Module components</b>	<b>Goal</b>		<b>SWH</b>	<b>TF</b>	<b>TL</b>	<b>EF</b>	<b>CR</b>
Landscape systems analysis (A)	Students are enabled to understand concepts, principles and methods of landscape systems analysis and are trained to select and to apply different quantitative methods of landscape systems analysis for varying targets.		3	L, PE, S	E	TD 20	4
<b>Non-wood forest products and services</b>		<b>CR: 4</b>	<b>EF: WR, WE 90</b>				
<b>Module components</b>	<b>Goal</b>		<b>SWH</b>	<b>TF</b>	<b>TL</b>	<b>EF</b>	<b>CR</b>
Non-wood forest products and services	The main objective of the course is to present forest as a source of various non-wood forest products as well as problems of estimation of non-wood forest resources, its utilization, market and law instruments.		3	L, PE	E	WE 90 (50%) WR (50%)	4
<b>Principles of landscape ecology (A)</b>		<b>CR: 4</b>	<b>EF: PR</b>				
<b>Module components</b>	<b>Goal</b>		<b>SWH</b>	<b>TF</b>	<b>TL</b>	<b>EF</b>	<b>CR</b>
Principles of landscape ecology (A)	Students have an understanding of landscape processes and skills of improvement of functioning of disturbed landscapes.		3	L, P, S	E	PR	4
<b>Programming III</b>		<b>CR: 4</b>	<b>EF: WR</b>				
<b>Module components</b>	<b>Goal</b>		<b>SWH</b>	<b>TF</b>	<b>TL</b>	<b>EF</b>	<b>CR</b>
Programming III	Students are enabled to use methods of object oriented programming with ArcObjects, Visual Basic and Visual Basic for Applications, to extend ArcGIS Desktop applications and to programmatically access Database systems.		3	L, PE, S	E	WR	4
<b>Project planning and management</b>		<b>CR: 4</b>	<b>EF: PP, PR</b>				
<b>Module components</b>	<b>Goal</b>		<b>SWH</b>	<b>TF</b>	<b>TL</b>	<b>EF</b>	<b>CR</b>
Project planning and management	Students are acquainted with methods of project planning and management and are able to apply these methods in practice.		3	L, P	E	PP (50%) PR (50%)	4
<b>Scientific writing and presenting</b>		<b>CR: 4</b>	<b>EF: PP, TP</b>				
<b>Module components</b>	<b>Goal</b>		<b>SWH</b>	<b>TF</b>	<b>TL</b>	<b>EF</b>	<b>CR</b>
Scientific writing and presenting	Students know the fundamentals of effective scientific writing and oral presenting.		3	PE, S	E	TP (50%) PP (50%)	4

Teaching form (TF)					Examination form (EF)							
Lecture	Seminar	Practical Exercise	Tutorial	Project	Technical discussion	Project presentation	Oral report	Written exam	Term paper	Protocol	Work report	Project report
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**Semester: 3**

**Elective**

**Specialisation modul IIIe (Current technologies and applications)**

**CR: 4**

**EF:**

Module components	Goal	SWH	TF	TL	EF	CR
Specialisation modul IIIe (Current technologies and applications)	Students become acquainted with current developments of IT and their applications in forestry and environment related areas.	3	S	E		4

**Specialisation modul IIIw (Current technologies and applications)**

**CR: 4**

**EF:**

Module components	Goal	SWH	TF	TL	EF	CR
Specialisation modul IIIw (Current technologies and applications)	Students become acquainted with current developments of IT and their applications in forestry and environment related areas.	3	S	E		4

**Tree ring analysis**

**CR: 4**

**EF: PR, WE 60**

Module components	Goal	SWH	TF	TL	EF	CR
Tree ring analysis	Students are able to conduct research based on tree-ring data and have an extended understanding of past responses of tree growth to environmental variability and prediction of forest responses to change of environment in the future.	3	PE, S	E	PR (40%) WE 60 (60%)	4

Teaching form (TF)					Examination form (EF)							
Lecture	Seminar	Practical Exercise	Tutorial	Project	Technical discussion	Project presentation	Oral report	Written exam	Term paper	Protocol	Work report	Project report
L	S	PE	T	P	TD	PP	OR	WE	TP	P	WR	PR

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**Semester: 4 Elective**

<b>Environmental data analysis</b>		<b>CR: 6</b>	<b>EF: PR</b>				
<b>Module components</b>	<b>Goal</b>		<b>SWH</b>	<b>TF</b>	<b>TL</b>	<b>EF</b>	<b>CR</b>
Environmental data analysis	Students know theoretical fundamentals of analyzing non-spatial and spatial environmental data and are able to pre-process, compile and analyze large structured and unstructured environmental data sets for different targets. Students are able to apply related software for data analysis and visualization.		4	L, PE, S	E	PR	6
<b>Forest inventory and modelling (B)</b>		<b>CR: 6</b>	<b>EF: PR, WE 90</b>				
<b>Module components</b>	<b>Goal</b>		<b>SWH</b>	<b>TF</b>	<b>TL</b>	<b>EF</b>	<b>CR</b>
Forest inventory and modelling (B)	Students are able to apply deepened knowledge of the statistical fundamentals of forest inventory for planning and evaluating inventories.		4	L, P, S	E	WE 90 (50%) PR (50%)	6
<b>Remote sensing for environmental monitoring</b>		<b>CR: 6</b>	<b>EF: TD 20</b>				
<b>Module components</b>	<b>Goal</b>		<b>SWH</b>	<b>TF</b>	<b>TL</b>	<b>EF</b>	<b>CR</b>
Remote sensing for environmental monitoring	Students are able to select main fields and apply possible practical application of remote sensing techniques with a landscape ecological approach.		4	L, S	E	TD 20	6
<b>Remote sensing for global monitoring</b>		<b>CR: 6</b>	<b>EF: PR</b>				
<b>Module components</b>	<b>Goal</b>		<b>SWH</b>	<b>TF</b>	<b>TL</b>	<b>EF</b>	<b>CR</b>
Remote sensing for global monitoring	Students are enabled to use Remote Sensing (RS) and Geographic Information Systems (GIS) for various purposes in different applications related to phenomena observed on global scale.		4	L, S	E	PR	6
<b>Specialisation modul IVe (Current technologies and applications)</b>		<b>CR: 6</b>	<b>EF:</b>				
<b>Module components</b>	<b>Goal</b>		<b>SWH</b>	<b>TF</b>	<b>TL</b>	<b>EF</b>	<b>CR</b>
Specialisation modul IVe (Current technologies and applications)	Students become acquainted with current developments of IT and their applications in forestry and environment related areas.		4	S	E		6
<b>Specialisation modul IVw (Current technologies and applications)</b>		<b>CR: 6</b>	<b>EF:</b>				
<b>Module components</b>	<b>Goal</b>		<b>SWH</b>	<b>TF</b>	<b>TL</b>	<b>EF</b>	<b>CR</b>
Specialisation modul IVw (Current technologies and applications)	Students become acquainted with current developments of IT and their applications in forestry and environment related areas.		4	S	E		6
<b>Web databases</b>		<b>CR: 6</b>	<b>EF: PR</b>				
<b>Module components</b>	<b>Goal</b>		<b>SWH</b>	<b>TF</b>	<b>TL</b>	<b>EF</b>	<b>CR</b>
Web databases	Students know the theoretical fundamentals and possess the practical skills to design and to implement Internet based databases.		4	L, PE, S	E	PR	6

Teaching form (TF)					Examination form (EF)							
Lecture	Seminar	Practical Exercise	Tutorial	Project	Technical discussion	Project presentation	Oral report	Written exam	Term paper	Protocol	Work report	Project report
L	S	PE	T	P	TD	PP	OR	WE	TP	P	WR	PR

SWH = semester work hours; TL = teaching Language, CR = credits

\* offer uncertain, please check with the programme coordinator