

# Fachhochschule Eberswalde

## Faculty of Forestry

### Study regulations For the Master Study Course

### International Forest Ecosystem Information Technology (Master of Science)

valid from Winter Term 2004/2005

#### § 1 Scope

The study regulations determine the purpose, content, structure, and process of the four semesters long Master Study Course International Forest Ecosystem Information Technology at Fachhochschule Eberswalde (University of Applied Sciences), based on the examination regulations.

#### § 2 Topic of the Course

International Forest Ecosystem Information Technology imparts knowledge of collecting, processing, and communication with environmental information in the field of international forest ecosystems using new types of technology and media. The course imparts the following contents by teaching based on practical work:

- collecting environmental data using methods of remote sensing and terrestrial inventory processes
- processing environmental data using geographical information systems, data base systems, and statistical processes
- modelling, simulation, and visualation of environmental data using new types of media, especially considering the internet.
- significance of biodiversity and ecology of global forest ecosystems
- significance of international environmental protection and nature conservation
- international processes for sustainable and multiple forest economy and for wood use
- significance of socio-economical and political framework conditions of international ecological problems
- organisational and communicative abilities for analysing, handling, solving of, and communicating with international environmental problems as well as facts of use of resources

With this, the topic of this program is the experimental object *,environment, information, and man'* and the examination of research and inventory, conservation and management of forest ecosystems on a scientific basis. In addition, the course integrates natural science, technics, social, and political sciences as well as information technology.

### **§ 3 Purpose and Aims of the Program**

- (1) Purpose of the program is the acquisition of theoretical and practical knowledge on scientific basis in the field of application of modern technology of information in the environmental sector with particular orientation towards research and inventory, conservation and management of international forest ecosystems. The degree Master of Science qualifies to enter a profession and/or to begin a doctorate program.
- (2) Specific aims of the course are to train (according to professional and academic practice):
  - specialised and methodical competence (special knowledge considering scientific methods)
  - competence to decide and act (ability of problem solving)
  - social competence (interpersonal abilities in the international and interdisciplinary working milieu, particularly abilities in the fields of communication, organisation, teamwork, staff leading, and conflict solving)
  - language competence (very good knowledge of English, good knowledge of German and a third language)

### **§4 Admission Requirements**

- (1) The total annual capacity for the Master course is 34 applicants for the winter term. If there are more than 34 applicants, there will be a selection procedure according to the valid version of the prescription of allocation of university places of courses with restricted admission by the universities of the Land Brandenburg (Hochschulvergabeordnung – HVVBbg). A proportion of 50 % of the places in this course is reserved for foreign applicants. The admission deadlines for international programs at Fachhochschule Eberswalde, fixed in the matriculation order, are valid for German as well as for foreign applicants.
- (2) The program bases consecutively on the course International Forest Ecosystem Management (Bachelor of Science), but nevertheless, it is open to applicants possessing a university degree like Bachelor, Diplom (FH), Diplom, First State Examination in the field of forestry, environmental sciences or related disciplines, for example:
  - Forest economy and forestry
  - Ecology and environmental sciences
  - Environmental geodesy
  - Information technology in the environmental area
  - Geography
  - Biology, focused on landscape
  - Agricultural economics and sciences
  - Landscape management and nature conservation
  - Horticulture, landscape architecture, environmental planning, land improvement, town and country planning and teaching qualification with main focus on one of the above named subject areas.

If the degree of an applicant is suitable in content, a full-time representative of the faculty, who is responsible for the selection of applicants for higher education, decides individually.

- (3) Every applicant has to demonstrate very good English knowledge as language condition of admission: extension course English (Abitur, at least 5 points), 'Test of English as a Foreign Language (TOEFL)' with 450 points for the paper-based test or 133 points for the computer-based test, comparable qualification, and English as native or official language of the home country. For checking whether English is the native or official language or not, information of the Foreign Ministry is applicable.
- (4) For foreign applicants, a certificate of good knowledge of German language is an additional language condition of admission: German language examination 'Mittelstufe 1' of the Goethe-Institute or comparable qualification.
- (5) Applicants should prepare a motivation letter relating to the chosen program and the aspired profession. Background knowledge as well as academic and practical experiences in the field of information technology in the environmental area are recommended, but not required for admission.
- (6) In case of doubt, the Student Affairs Office of Fachhochschule Eberswalde and a full-time representative of the faculty of forestry decide on the individual suitability of the applicant.

### **§ 5 Standard Duration and Structure of the Course**

- (1) The standard duration of studies is four semesters in order to reach the Master's-degree. These four semesters are subdivided as follows:
  - 1<sup>st</sup> semester: specialised knowledge
  - 2<sup>nd</sup> semester: specialised knowledge
  - 3<sup>rd</sup> semester: specialised knowledge in the course of studies abroad at an international university, as far as possible at a partner university
  - 4<sup>th</sup> semester: research work within the bounds of the Master's thesis and specialised knowledge
- (2) Within the standard duration of studies, as a rule, the students have a course workload of 79 hours. Of these, an amount of 20 hours course workload during the 3<sup>rd</sup> semester is completed at an international university, preferably at one of the partner universities. Since the curriculum of the study semester abroad is organized according to the required academic credits, the total of course workload can vary from the amount of 20 and therefore, the total of course workload can deviate from the rule of 79 hours. By writing the Master's thesis, the students prove their ability of scientific treatment oriented towards research or a practical topic.
- (3) The teaching program of the course is structured in core, theme, and special modules. The core modules contain the main teaching contents of the course. They are complemented theme modules of various specialised topics. In each semester, a special module of communication completes the range of courses.
- (4) Each teaching module contains mandatory and elective courses. At the beginning of each semester, the students have to enrol for their elective courses within two weeks. They can choose between the elective courses of all teaching modules offered for the particular semester. The elective courses for each semester have to be chosen in a way that the sum of their academic credits together with the

academic credits of the mandatory courses comes to exactly 30. Only during the study semester abroad, the total of academic credits has to come to at least 30, meaning, the total sum can possibly be higher.

- (5) After successfully completed courses and passed examinations in the particular subjects, credit points are given to the students on the basis of the European Credit Transfer System (ECTS). The total sum of credit points from mandatory and elective courses offered in all teaching modules has to reach an amount of 30. For successfully completed studies a total amount of 120 credit points is required.
- (6) The courses are taught as lectures, seminars, exercise classes, and excursions mainly in English. In exceptional cases, the elective courses can be given in German, but they are not required for completing the Master course successfully. Exact information according to type and extent of the courses that can be offered as block courses as well, is given in the curriculum.
- (7) The Master study course begins with the winter term of the actual year.

## **§ 6 Teaching Modules and Teaching Contents**

The curriculum of the degree program with a description of the teaching modules and courses, English titles of the courses, course workload, form and language of teaching, proof of academic achievement as well as academic credits are enclosed with the examination regulations (enclosure 1).

## **§ 7 Examinations**

Proofs of academic achievement have to be taken continually for all subjects of the teaching modules. Further information and additional conditions for examinations are regulated with the examination regulations.

## **§ 8 Study Semester Abroad**

The 3<sup>rd</sup> semester of the program is a semester abroad at an international university. This is a semester for deepening studies of collecting, processing, and communicating environmental data in the field of international forest ecosystems by using new technologies and media. It should take place preferably at one of the partner universities, but in case of suitability it could take place at another international university as well.

Foreign students can complete this semester at another university in Germany. A full-time representative of the faculty of forestry is responsible for the organization and the content of the study semester abroad. More details about the formal requirements of the study semester abroad are regulated with the examination regulations.

## **§ 9 Transfer of Credits**

The credits obtained during studies are transferred to the European Credit Transfer System (ECTS), differentiated according to the type and quality of the results. By accumulation, these credits lead to the attainment of the degree of Master of Sciences. In addition, they enable the transfer of results in case of changing universities, particularly abroad.

### **§ 10 Study Counselling**

A full-time representative of the faculty of forestry guarantees full advice of the students in specialised and study organization problems.

### **§ 11 Effective Date**

These regulations come into effect on the day after their publication. These study regulations are valid for students at Fachhochschule Eberswalde from the winter term 2004/2005.