



Department for Electrical Engineering and Information Technology

# Study Regulations

for the master studies

Electrical Engineering and Information Technology

from February 7, 2007

as amended on May 5, 2010

**!!!This document is only for information. The German version is legally binding!!!**

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## **§ 1 Area of application**

(1) On the basis of the examination regulations, the present study regulations specify the aim, the content and the structure of the master study course

*“Electrical Engineering and Information Technology”*

at the Department for Electrical Engineering and Information Technology (FEIT) of the Otto-von-Guericke-University Magdeburg.

(2) This master study course is a non-consecutive course of the profile type "more research oriented". There are strong links to applications in this course.

(3) The study course is accomplished as a full-time and presence study.

## **§ 2 Purpose of the study**

(1) The purpose of the study is to acquire detailed knowledge and capabilities working autonomously applying scientific methods. In doing so, the ability should be gained to independently get acquainted with the manifold challenges of applied, research-related and teaching-related fields of activity and to cope with the frequently changing tasks appearing throughout the career. Besides the acquisition of knowledge and the development of abilities in the various types of courses, the self-study is essential for the successful final degree.

(2) The graduates should gain competence in electrical engineering and information technology. Based on scientifically established knowledge and method orientated approach they should be capable solving scientific tasks.

(3) Prospective occupational fields are:

- Development engineer in electrical and electronic industry as well as information technology
- Scientist at research institutes
- Manager in public services
- Product manager and sales

## **§ 3 Degree**

After successfully passed examinations the Otto-von-Guericke-University awards the academic degree

**“Master of Science”**  
abbreviated: “M.Sc.”

## **§ 4 Prerequisites for admission**

(1) The prerequisite for admission to this master study course is the proof of one of the following degrees from the application area of the Framework Act for Higher Education:

A bachelor degree, master degree or diploma degree acquired at a university or technical university in electrical engineering, information technology, or comparable areas with a grade of at least “good”

(2) About the admission with comparable degrees according to section 1 or degrees which have not been acquired within the application area of the Framework Act for Higher Education or in other exceptional cases the examination board decides after verification of the individual case.

(3) Language skills

- Courses are conducted in English. There are therefore expected sufficient knowledge of English.
- Foreign applicants have to prove sufficient knowledge of the English language. As a proof, one of the following certificates is accepted:
  - TOEFL (Test of English as a Foreign Language), at least 550 points (old test procedure) and 213 points (computer procedure since 1998), or 79-80 points (internet based), respectively.
  - IELTS (International English Language Testing System), number of points 6.0
  - Certificate of Proficiency in English B
  - Certificate of Advanced English C

If the applicant fails the above criteria by not more than 10 %, application could be approved if appropriate documents can be provided like a Bachelor study in English.

(4) The certificates and proofs have to be presented in German and English language respectively and in an appropriate translation by a certified interpreter.

## **§ 5 Start and duration of the study**

(1) The study course is created in a way that it can be finished within the regular period of study of 4 semesters including the master thesis with the colloquium.

(2) The course are offered with the start of the study in winter semester.

## **§ 6 Extent of the study**

(1) The study effort of the student is adequate to 120 credit points for this period of time.

(2) The successful completion of the examinations as given in the examination schedule of the examination regulations and the production of the master thesis including the colloquium are necessary for the successful termination of the study course. The master thesis and the colloquium are adequate to an effort of 30 credit points. The thesis has to be submitted one semester after its issue the latest.

(3) The time-frame can be extracted from the regular degree program attached.

## § 7 Contents of the study

(1) The modules including the module exams necessary for the successful pass of the study course are prescribed in the examination regulations. The recommended distribution of the modules to the semesters can be extracted from the regular degree program attached.

(2) The examination achievements to be proven consist of the module examinations and the master thesis with the colloquium. The number and the type of exams are defined in the examination regulations. It will be tested course-related.

(3) The master thesis is an independent research work that has to be submitted in written form and has to be defended. In doing so the student should show that he or she is able to work independently on a problem of a specific area with scientific methods within a given period of time.

## § 8 Structure of the study

(1) The course offer contains compulsory modules, elective modules and optional modules. It is in the lecturers' responsibility to balance the different teaching methods of their modules in accordance with applicable regulations. The following rules have to be observed:

- The course comprises 120 CP. Compulsory modules provide 40 CP, elective modules 50 CP and the final Master's thesis 30 CP.
- Optional modules must be proven by the tutor or respective professor.

(2) All modules which are necessary for the successful termination of the study are named compulsory modules, according to the examination and study regulations.

(3) All modules the students have to choose from a specific number of modules are named elective modules, in compliance with the examination and study regulations. Within the chosen field of study, they allow the student to follow individual propensities and interests and they account for expert requirements of the future field of activity. The list of elective modules is being changed according to the capacity and availability of the lecturers and is being adapted to the course offer of the faculty. Other modules of all faculties of the Otto-von-Guericke-University can be accepted as elective modules in agreement with course consultant. The acceptance must be request by the examination board.

(4) All modules which the students at their own choice can take additionally to the compulsory and elective modules, that are necessary for the termination of the study course, and which are from the course offer of this study course, according to the module list, are named optional modules. Other modules can be taken in consideration of their valid admission restrictions. The students can take a test in the optional modules. The result of this exam is not taken into account for fixing the final grade. If desired, it is included in the certificate.

(5) The registration for a favoured elective subject or an optional subject has to be made in the first lecture after the start of the respective semester after clearance with the course adviser. If less than 5 students register for a module, the module will be cancelled and the student s must select from other remaining courses. The decision will be made by the examination board.

## **§ 9** **Types of courses**

- (1) Lectures, seminars, tutorials, colloquia, laboratory internships, research projects and excursions, also in combination, are carried out.
- (2) Lectures put basic technical, theoretical and methodical knowledge across in a coherently and systematically presentation.
- (3) Seminars serve the purpose to elucidate theoretical problems which are related to practice in cooperation of lecturers and students. This might happen in changing work methods (presentation, seminar paper, theses preparation, discussion).
- (4) Tutorials help to acquire basic methods, abilities and skills.
- (5) The deepened scientific examination between lecturer and students to selected topics takes place in colloquia.
- (6) Excursions serve the purpose to collect information, to view and to make contact to the practice locally.
- (7) Research projects support the development of abilities useful for the independent scientific work and the practice-oriented solution of integrated problems. They are performed in groups.
- (8) Laboratory internships help to reinforce the contents of the study due to a practical application.

## **§ 10** **Course advice**

- (1) A course consultation is offered. Especially for questions regarding the course of study, the replacement of modules and for problems that lead to a considerably exceed of the time-limit for a regular period of study, the consultation is strongly recommended.
- (2) The consultation is mandatory for fixing the major fields of study.
- (3) For every student a mentor as a contact person for questions about the study and the teaching is placed at disposal.

## **§ 11** **Coming into effect**

These study regulations come into effect on the day after the announcement in the Administrative Handbook to all students and employees of the Otto-von-Guericke-University.

Written on the basis of the decisions made by the faculty board of the Department for Electrical Engineering and Information Technology from 05.05.2010 and on the basis of the decisions made by the Academic Senate of the Otto-von-Guericke-University from 16.06.2010.

Magdeburg, 13.07.2010

Prof. Dr. K. E. Pollmann  
Rector of the Otto-von-Guericke-University Magdeburg