

**Examination Regulations**  
**(Provisions specific to the course of studies)**  
**for the Bachelor Course**  
**Electronic Engineering**  
**at the Hamm-Lippstadt University of Applied Sciences**  
**of 20.11.2017**

**NB: Only the German version is legally binding.**

The Hamm-Lippstadt University of Applied Sciences has issued the following examination regulations in accordance with § 2 (4) and § 64 (1) of the Act on Universities of the State of North Rhine-Westphalia (University Act - UA) of 16.9.2014 (GV.NRW. p. 547). These regulations apply only together with the general examination regulations for bachelor courses at the Hamm-Lippstadt University of Applied Sciences.

**§ 1 Objective of the Course**

The bachelor course of studies in Electronic Engineering is intended to communicate to the students, taking account of the requirements and changes in the professional world, the necessary professional knowledge, abilities and methods, and the necessary key qualifications in the areas of electronics, IT and prototyping, so that they become capable of scientific work and communication, critical classification of scientific knowledge and responsible action. Substantial command of the English language is thereby a basis for the deepening and broadening of professional language knowledge continuously aimed at in the course of the study and therefore a condition for success in the study course. The bachelor examination completes the professional qualification in the bachelor course of studies at the Hamm-Lippstadt University of Applied Sciences.

**§ 2 Conditions for Acceptance**

Evidence of adequate knowledge of the English language at the level B2 of the Common European Framework of Reference by means of a certificate accordingly is a condition for acceptance. The evidence must be provided by one of the following successfully taken equivalent tests:

- IELTS: minimum 6.0
- TOEFL (internet based test): minimum 80
- TOEFL (paper based test): minimum 550
- TOEFL (computer based test) minimum 213

Submission of one of the abovementioned certificates will be waived if there is a corresponding note on the final school or university entry qualification certificate on the grade of English knowledge acquired according to Common European Framework of Reference.

### **§ 3 Academic Degree**

If all necessary tests in the bachelor course of studies are passed, the Hamm-Lippstadt University of Applied Sciences awards the academic degree of Bachelor of Engineering (B. Eng.) in the course of studies "Electronic Engineering". A certificate accordingly will be issued.

### **§ 4 Standard Period of Study, Range of Modules to be Taken**

The standard period of study is seven semesters. The average volume is 30 credit points per semester of the standard period of study. For the entire volume of the course including periods of personal attendance, internship, preparation and revision and the bachelor thesis, a total of 210 credit points will be awarded. 190 credit points thereof are attributed to the compulsory part and 20 credit points to the mandatory elective part. The compulsory part contains, in addition to 140 credit points for compulsory modules, 30 credit points for a semester abroad or in an internship, 8 credit points for project work and 12 credit points for the bachelor thesis. The programme of studies with the individual tasks in the modules and the credit points to be awarded is shown in § 5 and 6.

The course can be commenced in the winter semester.

### **§ 5 Bachelor Examination**

The bachelor examination consists in total of the final examinations in the individual modules of the semesters and the bachelor thesis.

1. The compulsory modules with their credit points (ECTS) in full-time study are:

a.	electronic engineering 1	5 ECTS
b.	engineering mathematics 1	5 ECTS
c.	computer science 1	5 ECTS
d.	physical foundations	5 ECTS
e.	industrial design	5 ECTS
f.	scientific work	5 ECTS
g.	electronic engineering 2	5 ECTS
h.	engineering mathematics 2	5 ECTS
i.	computer science 2	10 ECTS
j.	engineering design	5 ECTS
k.	audio and video technologies	5 ECTS
l.	electronic engineering 3	5 ECTS
m.	engineering mathematics 3	5 ECTS
n.	microcontroller	10 ECTS
o.	interactive systems design 1	5 ECTS
p.	audio and video processing	5 ECTS

q.	control engineering	10 ECTS
r.	prototyping and systems engineering	10 ECTS
s.	interactive systems design 2	5 ECST
t.	business communication	5 ECTS
u.	internship/exchange semester	30 ECTS
v.	hardware engineering	10 ECTS
w.	advanced embedded systems	10 ECTS
x	project work	8 ECTS

2. The mandatory elective part “special emphasis” consists of two modules with a total of 20 credit points and the following specialties:

- 1) Special emphasis A (10 ECTS)
  - a) autonomous systems A
  - b) embedded electronic engineering A
- 2) Special emphasis B (10 ECTS)
  - a) autonomous systems B
  - b) embedded electronic engineering B

The specialties a) and b) in the mandatory elective part “special emphasis” can be freely chosen and combined with each other.

3. The bachelor thesis is attributed 12 credit points.

### § 5 Module Plan

The following module plan applies:

Semester 7	Bachelor Thesis CP 12		Project Work CP 8		Special Emphasis B CP 10	
Semester 6	Hardware Engineering CP 10		Advanced Embedded Systems CP 10		Special Emphasis A CP 10	
Semester 5	Internship/Exchange Semester CP 30					
Semester 4	Control Engineering CP 10		Prototyping and Systems Engineering CP 10		Interactive Systems Design 2 CP 5	Business Communication CP 5
Semester 3	Electronic Engineering 3 CP 5	Engineering Mathematics 3 CP 5	Microcontroller CP 10		Interactive Systems Design 1 CP 5	Audio and Video Processing CP 5
Semester 2	Electronic Engineering 2 CP 5	Engineering Mathematics 2 CP 5	Computer Science 2 CP 10		Engineering Design CP 5	Audio and Video Technologies CP 5
Semester 1	Electronic Engineering 1 CP 5	Engineering Mathematics 1 CP 5	Computer Science 1 CP 5	Physical Foundations CP 5	Industrial Design CP 5	Scientific Work CP 5

### **§ 6 Coming into Effect**

These regulations for the bachelor course of studies Electronic Engineering come into effect on the day after their publication. They apply to all students of the said bachelor course of studies who have commenced their study from the winter semester 2018/19.