Faculty:

Engineering

Site:

Campus Karthause



University of Applied Sciences

Degree Title:	
Information Technology	
Academic Title:	Prerequisites for Admission:
Bachelor of Engineering (B.Eng.)	<ul> <li>The general examinations required for entrance into universities or institutes of higher education (<i>Allgemeine Hochschulreife</i> or <i>Fachhochschulreife</i>), or a recognised equivalent preparatory qualification</li> <li>Industrial placement (min. 13 weeks)</li> </ul>

### Aim of the Course:

The aim of the Bachelor Degree course is to offer a practical, vocational qualification for future-oriented specialists and managers. The central theme of the course has been geared towards the recommendations given by the Association of German Electrical Engineers (*VDE*) and Association of German Engineers (*VDI*) and those of the association of electrical engineering and information technology faculties at universities of applied science.

## Structure of the Course/Curriculum:

1. Semester	2. Semester	<ol><li>Semester</li></ol>	4. Semester	5. Semester	<ol><li>Semester</li></ol>	7. Semester
Mathematik I (10c)	Mathematik II (5c)	Mathematik III (5c)	Ingenieur-Informatik IIII (5c)	Rechnemetze/ Kommunikationssysteme II (5c)	Embedded Systems (5c)	Prædsphase (15c)
Grundlagen der Elektrotechnik I (5c)	Grundlagen der Elektrotechnik II (5c)	Grundlagen der Elektrotechnik III (5c)	Elektronik II (5c)	Betriebssysteme (5c)	Nichttechnisches Wahlpflichtmodule 1 (5c)	
Technische Physik I (5c)	Grundlagen der Informationstechnik I (5c)	Grundlagen der Informationstechnik II (5c)	Rechnernetze/ Kommunikationssysteme I (5c)	Digitale Signalverarbeitung I (5c)	Technisches Wahlpflichtmodul I (5c)	
Ingenieur-Informatik I (5c)	Technische Physik II (5c)	Messtechnik (2c)	Softwaretechnik I (5c)	Regelungstechnik (5c)	Technisches Wahlpflichtmodul II (5c)	Bachelor-Thesis
(5c) (5c) (5c)	Regelungstechnik (5c)	Hochfrequenztechnik (5c)	Technisches Wahlpflichtmodul III (5c)	(12c)		
	Ingenieur-Informatik III (5c)	Messtechnik/Sensorik (3c)	Datenbanken (2,5c)	Studienarbeit (5c)	Kolloquium (3c)	
				Antriebe (2,5c)		

## 'Bachelor of Engineering' in Information Technology

#### Semester 1

Mathematics I (10c) Principles of Electrical Engineering I (5c) Technical Physics I (5c) Engineering Informatics I (5c) Digital Technology (5c)

#### Semester 2

Mathematics II (5c) Principles of Electrical Engineering II (5c) Principles of Information Technology I (5c) Technical Physics II (5c) Engineering Informatics II (5c) Foreign Languages (3c) General Studies (2c)

#### Semester 3

Mathematics III (5c) Principles of Electrical Engineering III (5c) Principles of Information Technology II (5c) Measuring Methods (2c) Technical Physics III (5c) Engineering Informatics III (5c) Electronics I (5c)

#### Semester 4

Engineering Informatics IIII (5c) Electronics II (5c) Computer Networks/Communication Systems I (5c) Software Engineering I (5c) Control Engineering (5c) Measuring Methods/Sensor Engineering (3c)

# Semester 5

Computer Networks/Communication Systems II (5c) Operating Systems (5c) Digital Signal Processing I (5c) Control Engineering (5c) High Frequency Technology (5c) Data Bases (2.5c) Drives (2.5)

## Semester 6

Embedded Systems (5c) Non-Technical, Elective Module I (5c) Technical, Elective Module I (5c) Technical, Elective Module II (5c) Technical, Elective Module III (5c) Assignment (5c)

#### Semester 7

Practical Phase (15c) Bachelor Thesis (12c) Final Oral Examination (3c)

## **Employability/Professional Activities:**

The Bachelor Degree in Information Technology is designed to prepare students for the following occupational areas in particular:

the design of information technology systems, the development of human-machine interfaces, data base administration, systems consulting, the development of 'embedded systems', specification and requirements analyses, customer support, network administration, and the set-up of modern communication systems.

## Final Examination/Examination Regulations:

- Legal basis: regulations governing the examination on the B.Eng. Electrical Engineering, Information Technology and Mechatronics degrees
- Module examinations, thesis and final oral examination

### Additional Information:

- Modular
- Accredited degree course

# Admission to Postgraduate Studies

Successful completion of the BA course qualifies a student for acceptance onto a Master Degree Course.

# The Faculty's ECTS-/International Student Advisor

Prof. Dr. Andreas Kurz, E-Mail: kurz@fh-koblenz.de