



Hochschule für Angewandte Wissenschaften Hamburg
Hamburg University of Applied Sciences

Information Engineering

Studiengang Information Engineering
Fakultät Technik und Informatik *Abschluss: Bachelor*

What career fields do you work in?

Electronic communications have influenced every day life enormously during the last 150 years. This is obvious both for the established and the emerging economies, whenever we use a telephone or watch television. But it is also true for seemingly remote areas, for even there weather data is collected and volcanic eruptions, thunderstorms or other natural phenomena are monitored by satellite. The rapid development of computers has added previously unimaginable power to all types of data handling.

Consequently we are now witnessing the emergence of technical systems in which information is collected, stored, retrieved and offered for use on a large scale, thus inspiring the concept of the global village .

In view of this we understand information engineering in a broad sense covering everything from electrical engineering and computer science to the development and managing of information systems. There are strong signals from the development of the world economy as well as from the progress of technology that the demand for qualified staff in the field of information engineering will increase substantially during the coming years. To become a successful professional in this field you need a sound basis on both the hardware and software sides of such systems. Physical interconnection of computers, processing of digital signals, software engineering and database management alike, for example are essential areas of experience if you want to be well prepared for your career.

What are the contents of the degree programme?

The Hamburg University of Applied Sciences offers courses that will enable you to meet the challenge of modern information engineering in an atmosphere of international communication and exchange.

CURRICULUM (structure):

1st year: Mathematics, Introduction to Electrical Engineering, Software Construction, Nontechnical Modules and Language Studies

2nd year: Signals and Systems, Electrical Engineering and Applications, Computer Science, Nontechnical Modules

5. Semester: industrial placement (20 weeks)

6./7. Semester: Computer Science, Computer Engineering, Information Engineering, Elective Modules, Bachelor Thesis

What skills and interests should I have?

..... respond to a majority of the following questions with „yes“

1. Do I have strong interest in technology and technical systems?
2. Am I interested in understanding how technical systems work?
3. Am I able to develop enough persistence to reach the solution of a problem?
4. Do I enjoy mathematics?
5. Do I like to think in abstract terms?
6. Am I able to associate familiar objects with unfamiliar objects?

What is particular to the degree programme?

In this degree programme you can also graduate with a Master. Lectures and examinations are conducted in German. To start the German spoken degree programme Information Engineering it is necessary to show a certificate proving your actual knowledge of the German language. All applicants have to present this certificate at the University. It might be a TestDAF, DSH or something comparable.

Are there special requirements for foreign students applicants?

Foreign student applicants should clarify all possible questions concerning study possibilities, admission requirements, courses of studies, and acceptance of foreign reports and certificates in time before coming to Germany, i.e. as soon as one year before the requested degree programme starts.

Further information can be found online under www.haw-hamburg.de keyword: International

Can I study abroad?

Students planning to spend a semester or an academic training abroad might find useful information on the website of the Akademisches Auslandsamt: www.haw-hamburg.de keyword: "international"

How many students and professors does the department have?

In this faculty 990 students (77 female and 913 male) are studying; there are 2 female and 37 male professors.

How do I apply?

Application forms are available within application period – please write to:
Hochschule für Angewandte Wissenschaften Hamburg
Studentensekretariat und Prüfungsamt (Admissions Office)
im Studierendenzentrum
Stiftstraße 69
D–20099 Hamburg (Campus Berliner Tor)
Tel.: + 49.40.25 41 47 40
Mon – Fri 8am – 6pm
studentensekretariat@haw-hamburg.de

When can I apply?

The degree programme admits students only for the winter semester.
1st June – 15th July.
You can download the application forms during the above mentioned periods at www.haw-hamburg.de.

What are the entry requirements?

„Hochschulreife“ (equivalent to German Fachhochschulreife, allgemeine Hochschulreife or fachgebundene Hochschulreife), A-levels or equivalent school leaving certificates. Knowledge of English language proven by accepted certificates, i. e. TOEFL-test (at least 500 points paper test or 220 points computer test), IELTS (minimum Band 6) or comparable tests or certificates about good performance in foreign countries. For German applicants at least "befriedigend" in school certificate.

Is there a restricted number of places?

There is a restricted number of places.

When do lectures start?

The lectures of the wintersemester 2007/08 on the 24th of September.
Further Information is available on our homepage www.haw-hamburg.de

How long is the degree programme?

7 semesters

Do I need to complete a pre-study placement?

No, there is no requirement for a pre-study placement.

Do I have to pay fees?

Each semester 205 Euro have to be paid by every student. This includes 47,50 € for the service of the Students Organisation Hamburg (Studentenwerk Hamburg), 18,50 € for the work done by the self-governing Student Administration (AStA), 4 € for the Semsterticket-Härtefond and 135 € for the semester ticket from the Hamburger Verkehrsverbund (HVV/Hamburg's transport system).
There is also an additional administrative fee of 50 €.
Semester fees of 500 Euro have to be paid by everyone starting in summersemester 2007.

Which degree qualification will I be awarded?

Bachelor of Engineering (B.Eng.)

Who can help me if I have further questions?

General Student Advisory Team
Stiftstraße 69
D–20099 Hamburg (Campus Berliner Tor)
Tel.: + 49.40.428 75–9110;
studienberatung@haw-hamburg.de
Office hours: Mon – Wed 11am – 1pm, Thur 2pm – 6pm
Telephone advisory service: Mon – Wed 10am – 11am, Thur 1pm – 2pm

Studiengang Information Engineering (Bachelor)

International Student Coordinator

Christine Reinking

Berliner Tor 7, Room 1202

20099 Hamburg

Tel.: + 49.40.428 75-8326

mailto:christine.reinking@etech.haw-hamburg.de

Additional information

...you will find on our website

www.haw-hamburg.de/Fb_Elektrotechnik_und_Informatik.8.0.html

STUDIENÜBERSICHT Studiengang Information Engineering

STUDIENÜBERSICHT INFORMATION ENGINEERING (BACHELOR)

BASE STUDIES	1 st study year	Mathematics, Computer Science, Electrical Engineering and non-technical subjects	1 st semester
			2 nd semester
MAIN STUDIES	2 nd study year	Extensions in Electrical Engineering, Digital Systems, Processor Systems and Computer Science	3 rd semester
			4 th semester
EXTEND STUDIES	3 th study year	Practice in Industry oral presentation lecture: Scientific Methods	5 th semester
		Additional Extensions to Information and Computer Engineering	6 th semester
	4 th study year	Compulsory Modules and Project Bachelorarbeit	7 th semester
BACHELOR OF ENGINEERING			

CURRICULUM Information Engineering

1./2. Sem.	Basic Studies I	= 96 units	
3./4. Sem.	Basic Studies II		
5. Sem	Industrial Placement + lecture	= 4 units	
6./7. Sem.	Major Studies	= 36 units	<i>Bachelor of Engineering</i>

1 unit consists of 16 lectures of 45 minutes.

Basic Studies I

module	course	1st semester hours	2nd semester hours
Basics of Mathematics	Algebra	4	
	Calculus 1	4	
	Calculus 2		6
introduction to Electrical Engineering	introduction Electrical Engineering 1	5 + 1 Lab	
	introduction Electrical Engineering 2		1 + 1 Lab
	Electronics 1		3 + 1 Lab
	Digital Circuits		3 + 1 Lab
Software Construction	Software Construction 1	3 + 1 Lab	
	Software Construction 2		3 + 1 Lab
	Algorithms and data structures	3 + 1 Lab	
non-technical module	German		2
	Technical English	2	
	Methods for learning and studying		2
Total		24	24

Basic Studies II

module	course	3rd semester hours	4th semester hours
Mathematic extensions	Signals und Systems 1	4	
	Signals und Systems 2		3 + 1 Lab
Electrical Engineering	Electronics 2	3 + 1 Lab	
	Electronics 3	3 + 1 Lab	
Electrical Engineering Applications	Computer architecture	3 + 1 Lab	
	Digital Systems 1		3 + 1 Lab
	Microcontroller		3 + 1 Lab
Computer Science	Software Construction 3	3 + 1 Lab	
	Software Engineering 1		3 + 1 Lab
	Data Bases		3 + 1 Lab
Non-technical modules	Communication and presentation	4	
	Business studies		4
Total		24	24

Industrial Placement & Major Studies

module	lecture	5th semester hours	6th semester hours	7th semester hours
Practice in industry	Industrial Placement 20 Weeks			
non-technical module	Scientific Methodes	4		
Computer Science	Software Engineering 2		2 + 2 Project	
	Operating Systems		3 + 1 Lab	
Computer Engineering	Digital Systems Project		4 Project	
	Bus Systems and Sensors laboratory		3 + 1 Lab	
Information Engineering	Digital Signal processing		3 + 1 Lab	
	Digital Communication Systems		3 + 1 Lab	
Compulsory modules	Compulsory module 1			3 + 1 Lab
	Compulsory module 2			3 + 1 Lab
	Compulsory Project			4 Project
	Bachelor Project and Report			12

total	4	24	24
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Studiengang Information Engineering (Bachelor)



HAW Hamburg

Fakultät Technik und Informatik

Studiendepartment Informations- und Elektrotechnik

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