www.hs-offenburg.de


A PLACE
TO BUILD
YOUR
FUTURE

Studying at Offenburg University means investing in your future. Combined teaching and research in well-known, high-quality programs trains our students for a career in the professional or academic world of specialists and top managers. First-rate faculty and staff guide and support our students throughout their studies, with a particular emphasis on developing and enhancing their management and problem-solving skills.

During the past decades, the University has gained an excellent reputation not only for its innovative research, but for the vibrant social life of its campus community as well. With almost 500 international students from more than 50 countries present on campus, Offenburg University actively promotes educational exchange in a modern world where the mutual understanding of different cultures, political and economic systems is essential. Offenburg is close to France and Switzerland not only on a map - double-degree programs with renowned French and Swiss universities allow for a truly multinational experience.

Prof. Dr. Winfried Lieber
Rector of the Offenburg University of Applied Sciences

INTRODUCTION

Founded in 1964, the Offenburg University of Applied Sciences quickly established itself as an impressive and high-performance educational institution. Originally founded as a "National School of Engineering", the University has developed into a thriving research community, with more than 4,000 students on two campuses. We offer both Bachelor's and Master degrees in four departments:

FOUR DEPARTMENTS FOR BACHELOR AND MASTER DEGREES

BUSINESS ADMINISTRATION AND INDUSTRIAL ENGINEERING

ELECTRICAL ENGINEERING AND INFORMATION TECHNOLOGY

MECHANICAL ENGINEERING AND PROCESS ENGINEERING

MEDIA AND INFORMATION

INTERNATIONAL PROFILE

Offenburg University of Applied Sciences prides itself on the **international orientation** of its programs. In 1998 it was one of the first institutions of higher education in Germany to introduce international Master Degree Programs through its Graduate

School. Today, we offer **five Master programs**, catering especially to international students, who comprise twelve percent of our student body. Moreover, the International Office maintains active exchange programs with more than **75 partner universities worldwide**, providing our students with numerous opportunities for study and internships abroad. Every semester almost 500 young people from all over the world study in Offenburg and Gengenbach. Thanks to our proximity with the French border, we also offer double-degree programs with prestigious French universities.

EXCELLENT STUDY CONDITIONS

Since Offenburg University offers a smaller campus, students benefit from a more **intimate experience,** with smaller classes, individual supervision by teachers, extensive support services, hands-on teaching and close collaboration with the regional economy. Additionally, the University enjoys high rankings and has been awarded by the Association for the Promotion of Science and Humanities in Germany. Especially during the basic study period for engineers, covering the so-called MINT subject spectrum of Mathematics, Informatics, Natural Science and Technology, students receive extensive support and mentoring.

ECONOMIC PARTNERSHIPS

The University maintains **excellent relations** with regional and national businesses, which have also lead to the establishment of five endowed professorships. These **business partnerships** develop into resources for students who would like to gain work experience, or even for future employment. Moreover, there is a constant exchange of information between our professors and engineers in industry, allowing for continuing access to current professional knowledge.

RESEARCH AND TECHNOLOGY

The University offers a combination of **research and technology transfer** through the Institute for Applied Research (IAF). The IAF oversees technology and innovative ideas in the fields of solar energy, medicine, robotics and electrical mobility. Throughout the University, **extensive interdisciplinary collaboration** takes place among experts from different fields. The great variety of application-oriented research activities and practical experience that the University offers together with modern and well-equipped laboratories are a testament to its high performance.

BACHELOR AND MASTER DEGREE PROGRAMS

First-degree studies at the Bachelor level are completed within six to seven semesters. The Bachelor degree is a professional qualification, allowing entry to professional life after a relatively short study period. This is followed by the Master degree, which can be completed within three to four semesters and allows a more thorough specialization in a chosen field of study. A longer or shorter period of professional employment can be undertaken between the Bachelor and the Master degree. Students also receive the "Diploma Supplement", an additional certificate in English which ensures international transparency and is designed to make the assessment of degrees for academic or professional purposes easier.

MORE FLEXIBILITY

At Offenburg University of Applied Sciences, a Master degree can be obtained in two ways:

+ **Consecutive**, meaning that Bachelor and Master degree studies are completed in a same field, devoloping a greater scientific depth.
+ **Non-consecutive**, where the Master degree studies are not directly related to prior Bachelor studies. Work experience of at least one year is a prerequisite for this type of Master studies.

ADVANTAGES FOR STUDENTS AND FUTURE EMPLOYERS

The Bachelor and Master system offers a range of advantages for students as well as employers:

+ shorter study periods
+ individual and flexible learning programs
+ more applied orientation
+ facilitated transfer to foreign universities
+ international employability of graduates

STUDY PROGRAMS

Pre-Semester startING

BACHELOR

Applied Computer Science DE
Business Administration DE
Business Informatics DE
Business Informatics^{plus} DE
Electrical Engineering/Information Technology DE
Electrical Engineering/Information Technology^{plus} DE
Electrical Engineering/Information Technology^{3nat} DE FR
Electrical Energy Technology/Physics^{plus} DE
Energy System Technology DE
Industrial Engineering and Management DE
IT Security and Corporate Security DE
Logistics and Trade
Mechanical Engineering
Mechanical Engineering/Material Engineering
Mechatronics DE
Mechatronics^{plus} DE
Media and Information DE
Media, Design and Production DE
Media Technology/Economics^{plus} DE
Medical Engineering DE
Process Engineering DE

MASTER

Business Administration DE
Vocational Education Mechatronics DE
Vocational Education Electrical Engineering/
Information Technology DE
Communication and Media Engineering EN
Energy Conversion and Management EN
Electrical Engineering/Information Technology DE FR
General Management (part-time) DE
Informatics DE
International Business Consulting EN
Mechanical Engineering DE
MBA part-time DE
Media and Communication DE
Media and Education DE
Process Engineering EN
Industrial Engineering and Management DE

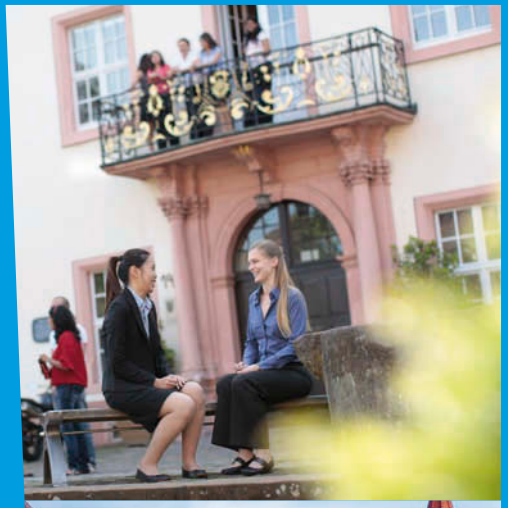
DE German
FR French
EN English

DEPARTMENTS

BUSINESS ADMINISTRATION AND INDUSTRIAL ENGINEERING

The Department of Business Administration and Industrial Engineering, located at the Gengenbach campus, was founded in 1978. One reason for the success of its degree programs is the realization that leadership in industry requires not only economic competence, but sound technical knowledge and excellent computing skills as well. Consequently, all program offerings are interdisciplinary in nature, providing a well-balanced and coordinated combination of subjects in the areas of business, technology and information technology. The proportion within the different subject areas depends on the chosen degree program and study focus. An interdisciplinary education ensures an overall understanding of the technical and economic aspects governing business. The various areas of specialization allow consolidation of specific areas such as e-commerce, lean manufacturing or business administration for small and medium sized companies.

For more information: www.hs-offenburg.de/bw

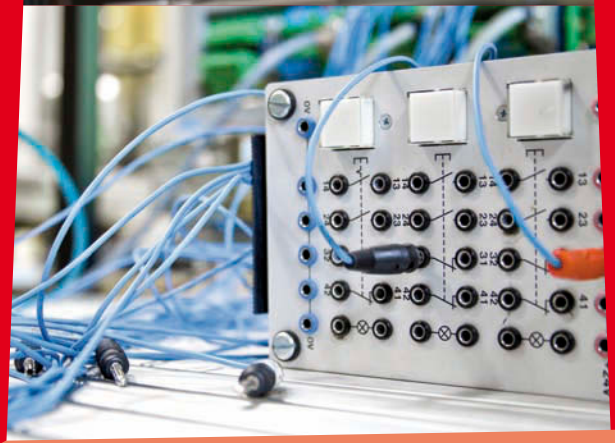


ELECTRICAL ENGINEERING AND INFORMATION TECHNOLOGY

The Department of Electrical Engineering and Information Technology (E+I) is one of the two original departments of the University at its foundation in 1964. The department has always seen itself as an especially innovative part of the University, dynamically adapting the range of degree programs to the needs of the training and employment market. These efforts have been successful; beginning with the earliest university rankings, the E+I Department has consistently been at the top of its field.

Education at this department without close contact to industry and commerce would be unthinkable: Mandatory internships during the Bachelor program and graduate theses completed in companies optimally prepare students for their professional life. Continuous exchange of information and constant feedback between university and companies, between faculty members and engineers in industry and busines, is the key to a curriculum in line with the latest developments in technology and beyond.

For more information: www.hs-offenburg.de/ei



MECHANICAL ENGINEERING AND PROCESS ENGINEERING

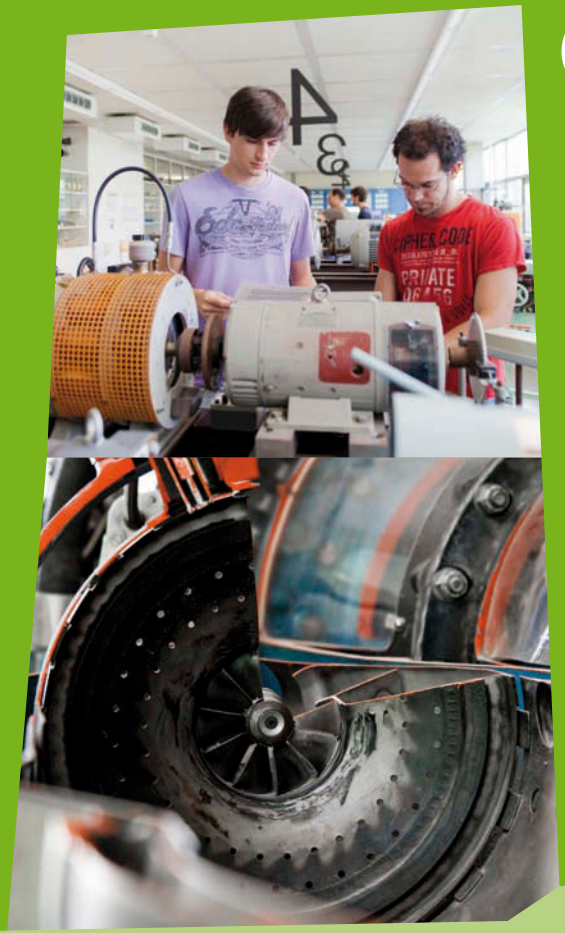
The study programs Mechanical Engineering and Process Engineering integrate different systems of classical Mechanical Engineering and Electrical and Process Engineering, aiming at the production of competitive products. The study courses cover a broad spectrum of engineering subjects; apart from the technical know-how, economic, ecological and social competencies are also taught.

After completion of stage I studies, students in the degree program Process Engineering can decide between one of three key areas in the fields of Energy, Environment or Biotechnology.

In Mechanical Engineering, students in the first three semesters mainly acquire mathematical and natural science basics, followed by the main semester with three focal points in Development, Construction and Production.

Experimental pilot plants allow technological research for industry. Plants featuring first class facilities are available. This includes material testing, CAD, production, measuring and control engineering, power engines and machines, wind tunnels, automotive engineering as well as thermal and mechanical processing and biotechnology.

For more information: www.hs-offenburg.de/mv



MEDIA AND INFORMATION

The Department of Media and Information (M+I) offers programs in the areas of media technology, media management and media production. Interdisciplinary media-systems competency prepares graduates for taking on leadership positions, making essential contributions to the scientific development of media systems and manufacturing innovative media productions.

Successful media technology is based on a synthesis of technology, computer science, contents, business management and design. Basic analytic skills in media design and media productions are communicated by teaching audiovisual design principles, psychology of perception, communications and media, communications analysis. Differentiation is achieved by portraying different formal principles of digital media and their application in the studio.

Using "digital media" as a focal point, media-technology know-how ensures that graduates are able to make qualified judgements on technical aspects.

For more information: www.hs-offenburg.de/mi

GRADUATE SCHOOL

ENGLISH LANGUAGE MASTER DEGREE COURSES FOR A GLOBAL EMPLOYMENT MARKET

One of the core qualities of Offenburg University of Applied Sciences is its international orientation. A look around campus makes it evident that globalization is not just an idea, but a reality. More than 13 percent of students come from all over the world.

BUILDING D
CAMPUS OFFENBURG

The Graduate School of Offenburg University offers four English-language Master degree programs:

+ Communication and Media Engineering (M.Sc.)
+ Energy Conversion and Management (M.Sc.)
+ International Business Consulting (MBA)
+ Master of Process Engineering (M.Sc.)

Bilateral degree programs with France and Switzerland are also offered. All Master degree programs are geared towards German and international students with excellent first degrees and above-average qualifications in their respective fields of study.

Students receive a first class education preparing them for the global market as engineers and business managers in their chosen field of study. Today, many graduates work in positions of high responsibility, both in Germany and abroad. *Intercultural competence* at our university is not just a catchphrase, but a real skill that our students acquire in the course of their education.

Studying at the Graduate School has many advantages: highly recognized and award-winning degree programs, small classes and highly personalized learning, emphasis on practical skills, cutting-edge research, excellently equipped laboratories; and not least a safe and scenic location that makes studying here a highly enjoyable experience.

ADMINISTRATION AND SERVICE IN COMPETENT HANDS

A motivated team offers individual consultation and supports students in the process of settling into their new home. Accommodation services, orientation events, German summer language courses, mentoring programs and organized cultural activities and excursions contribute to the fact that in the "International Student Barometer 2011" (the largest annual survey of students around the globe, with feedback from over 1.3 million respondents), Offenburg University achieved the best assessment of all participating German universities on "Arrival Assistance". Clearly, Offfenburg University of Applied Sciences has become one of the most popular universities for international students in Germany.

The large number of projects supported and awarded by the German Academic Exchange Service (DAAD) also verifies this. The Master degree program "Communication and Media Engineering", for example, has been recognized as one of the top ten most innovative programs in Germany by the DAAD and the Foundation for German Sciences (Stifterverband für die Deutsche Wissenschaft).

INTERNATIONAL MASTER PROGRAMS

1. CME – COMMUNICATION AND MEDIA ENGINEERING

Information at your fingertips, mobile computing, "Internet of Things", multimedia networks - many trends accelerate today's life. The dynamic and economic role of knowledge and information is identified as a key success factor and driving force behind the global market of telecommunication, computer science and media technology.

The international Master degree program Communication and Media Engineering (CME) is tailored to meet the challenges of the multimedia age. The curriculum of the program was developed in 1998 by the departments of "Electrical Engineering and Information Technology" and "Media and Information Engineering". To our knowledge, it was the first postgraduate program which combined essential elements of communication engineering with innovative multimedia issues. The program has been continuously updated to modern needs and continues to successfully combine the two aspects.

PROGRAM AT A GLANCE

DEGREE	Master of Science (M.Sc.)
LANGUAGE OF INSTRUCTION	English
DURATION OF PROGRAM	4 terms
BEGIN OF STUDIES	Winter term (October)
APPLICATION DEADLINE	March 31
FEES	226 € (student service and administration fees)
APPLICATION PREREQUISITES	Bachelor degree in the field of media and communication, TOEFL iBT 79 or IELTS 6.0
INTERNSHIP	not required
SELECTION PROCEDURE	Yes
ACCREDITATION	Yes
ECTS	120 credits

2. ENERGY CONVERSION AND MANAGEMENT

Solar energy, bioenergy, hydro and wind power, power generation, energy management ... and the list goes on. Regardless of the energy topic, the professors at Offenburg University of Applied Sciences have it covered. Many of our lecturers work for global energy companies, engineering services or consulting firms. Through lectures and discussions, students learn all about the current hot topics in the energy sector.

The development of a comprehensive knowledge of energy systems and their management that considers relevant business, social, and political environments is the focal point of Energy Conversion Management studies. Graduates of the program will be well prepared for leadership positions on an international level.

PROGRAM AT A GLANCE

DEGREE	Master of Science (M.Sc.)
LANGUAGE OF INSTRUCTION	English (first term), English and German (from the second term on)
DURATION OF PROGRAM	3-4 terms (one term internship)
BEGIN OF STUDIES	Winter term (October)
APPLICATION DEADLINE	April 30
FEES	226 € (administration fees and service contribution)
APPLICATION PREREQUISITES	Bachelor degree in mechanical engineering, process engineering or comparable, TOEFL iBT 79 or IELTS 6.0, German A2
INTERNSHIP	not required
SELECTION PROCEDURE	Yes
ACCREDITATION	Yes
ECTS	180 / 210 credits

3. INTERNATIONAL BUSINESS ADMINISTRATION

The MBA in International Business Consulting (IBC) at the Offenburg University of Applied Sciences is the right program for you if your are aspiring for a career in human resources, logistics, IT or in management. The program accepts professionals with at least one year of experience and who have a first degree in Business, Engineering, Computer Science, or a similar field.

The IBC Master is a compact, hands-on, full-time program preparing you in only 15 months for a leading position in in-house and external consulting e.g. controlling, project management and management consulting.

CHARACTERISTICS OF THE PROGRAM

+ Small groups (15-20 students) guaranteeing individualized attention,
+ Personal career counseling,
+ A highly interactive environment to facilitate maximum sharing of knowledge and experience,
+ Continuous loop of quality management

PROGRAM AT A GLANCE

DEGREE	Master of Business Administration MBA
LANGUAGE OF INSTRUCTION	English
DURATION OF PROGRAM	15 months
BEGIN OF STUDIES	Winter term (October)
APPLICATION DEADLINE	June 30
FEES	7,343 EUR (tuition and fees for the entire program)
APPLICATION PREREQUISITES	Bachelor degree and 1 year of professional experience, TOEFL iBT 79 or IELTS 6.0, German A2
SELECTION PROCEDURE	Yes
ACCREDITATION	Yes
ECTS	90 credits

4. MPE – PROCESS ENGINEERING

The Master program Process Engineering (MPE) is a double-degree program organized jointly by Offenburg University of Applied Sciences and the University of Warmia and Mazury (UWM) in Olsztyn, Poland.

In three semesters the MPE program equips students with advanced knowledge in chemical and thermal process engineering and biotechnology. They receive extensive intercultural training, which ist an essential competency in process engineering's increasingly multicultural environment. The winter semester take place in Germany and the summer semester in Poland. The thesis can be written at either university or another institution (a research institute or industrial enterprise) of your choice.

UWM in Olsztyn is a traditional university with a strong focus on research. In 2005 the Department of Environmental Biotechnology opened new laboratories to investigate environmental impacts, toxicology, (especially with regard to the fishing industry and landfills), water and sludge treatment, genetic engineering, biopolymers and biofuels.

Students gain experience in the following fields: industrial Microbiology (biopolymers, biofuel cells), gasification, pyrolysis and combustion of biomass, production, purification and storage of biogas, increasing the stability of microbiological processes in biogas plants, effect-related environmental analysis.

PROGRAM AT A GLANCE

DEGREE	Master of Science (M.Sc.)
LANGUAGE OF INSTRUCTION	English
DURATION OF PROGRAM	3 terms
BEGIN OF STUDIES	Winter term (summer term only for students not requiring visa)
APPLICATION DEADLINE	March 31
FEES	226 € (administration fees and service contribution)
APPLICATION PREREQUISITES	Bachelor degree
INTERNSHIP	not required
SELECTION PROCEDURE	Yes
ACCREDITATION	Yes
ECTS	90 credits

INTERNATIONAL OFFICE

The main purpose of the International Office (IO) is to foster and enhance the international orientation of Offenburg University of Applied Sciences. A united Europe and increasing globalization inevitably lead to exchanges of students and academic personnel on an international level. Building and maintaining international cooperation agreements, therefore, constitutes one of the most important responsibilities of the International Office.

PARTNER UNIVERSITIES

The departments of Offenburg University of Applied Sciences maintain agreements with partner institutions in all corners of the globe. Currently, there are more than 75 active exchange programs. Within the framework of these programs, students may study a semester at one of these universities, perform practical lab work, complete a graduate thesis, or obtain a double degree from both universities. In some cases it is possible to write a doctoral thesis at the partner institution. Thus, graduates are optimally prepared for international employment. Countries linked by partnership agreements with the International Office include Brazil, Bulgaria, Chile, China, the UK, India, Japan, Mexico, Poland, Sweden, Spain, Thailand and the USA.

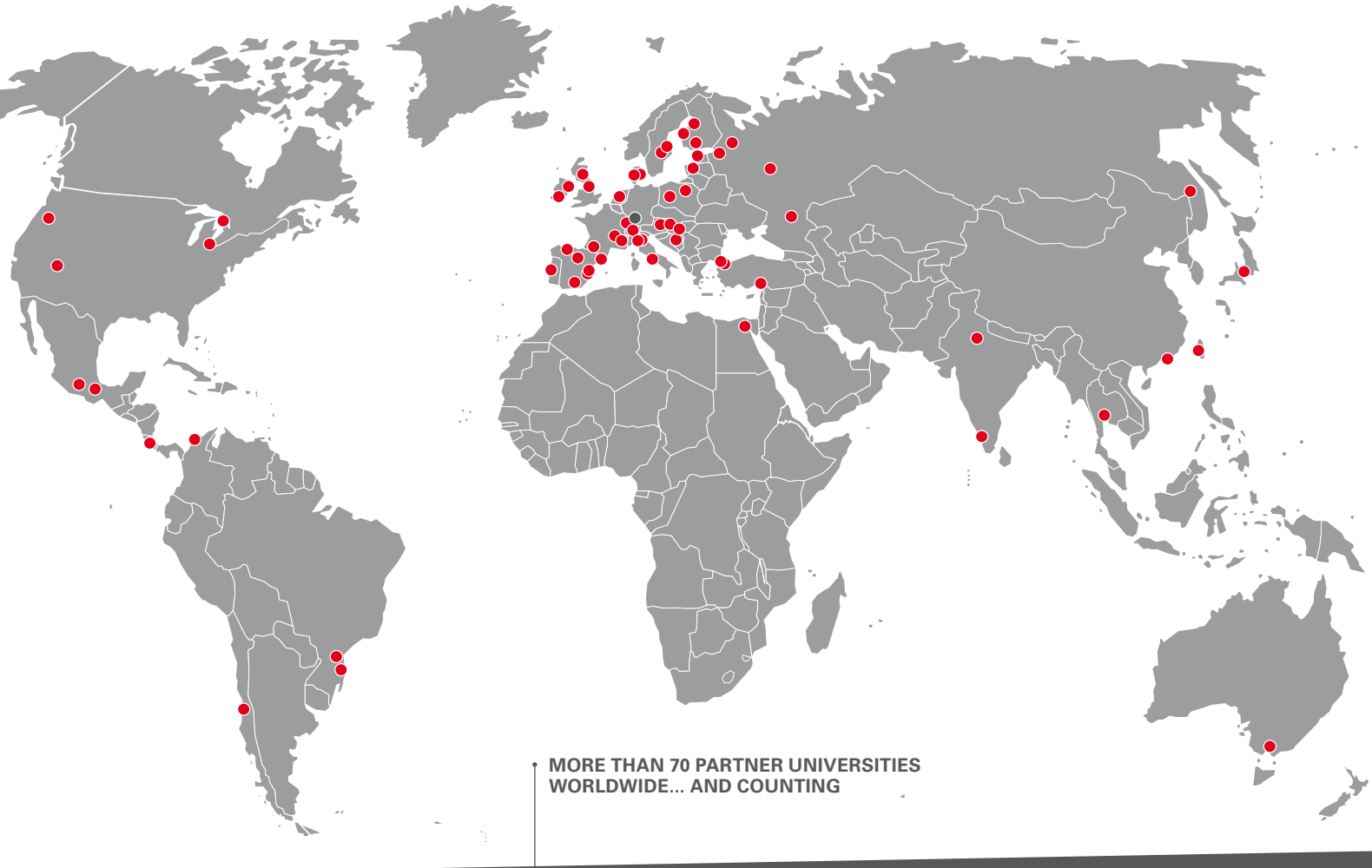
RESPONSIBILITIES

The International Office advises German students on studying at partner universities and finding companies for internships abroad. Likewise, the welfare of international students coming to Offenburg is a key responsibility of the IO. In addition, it maintains links with a great number of institutions, for example the DAAD (Deutscher Akademischer Austauschdienst), to administer European scholarship programs such as ERASMUS.

OFFERINGS

The International Office has a number of attractive offers for international students designed to make settling into a new experience easier. In cooperation with the Graduate School, these include a variety of cultural events as well as company visits in the region. The IO is also responsible for the summer language course "Deutsch als Fremdsprache" (German as a foreign language). The Senior Service, a cooperation between the city of Offenburg and the University, is another project which has made invaluable contributions to the integration of international students. In this program senior-citizen volunteers help international students in all aspects of settling into their new environment.

www.hs-offenburg.de/io



MORE THAN 70 PARTNER UNIVERSITIES WORLDWIDE... AND COUNTING

RESEARCH AND DEVELOPMENT

INSTITUTE FOR APPLIED RESEARCH (IAF)

Research and Development is a key component of Offenburg University of Applied Sciences. To strengthen and support the research activities of the departments, the Institute for Applied Research (IAF) acts as an umbrella organization and advises their members on issues of interest to them. The IAF oversees internal affairs and is responsible for the unified external representation of the various research projects. In research and development projects, technological and innovative outcomes are passed on to industry, thus supporting economic utilization. The practical orientation guarantees constant updating and improvement of the education sector. At the same time, applied research projects are proof of the capabilities of Offenburg University.

COOPERATION WITH INDUSTRY

As far as high-quality research projects are concerned, the University of Applied Sciences has a great interest in cooperating with industry companies. This interdisciplinary approach is a special hallmark of the University. Outstanding experts from a large number of fields offer their expertise. The laboratory facilities are state-of-the-art. Not least, there are six transfer centers of the Steinbeis GmbH within the economic and research environment of the university, supporting research and development efforts.

The IAF concentrates on the following research areas:

SYSTEMS AND CONTROL ENGINEERING

+ Image Processing for Object Identification
+ Micro Positioning Systems
+ Microelectronics and Application
+ Specific Integrated Circuit Design (ASIC)

PHYSICAL SENSOR TECHNOLOGY

+ Optical Transmission Systems
+ Fiber Optic Gyro Development
+ Fiber Optics
+ Spectrometry

PROCESS ENGINEERING AND ENVIRONMENTAL ENGINEERING

+ Thermal Process Engineering
+ Solar Technology
+ Environmental Analysis Technology
+ Biomedical Technology, Bio Mechanics

MEDIA

+ Multimedia, Web Production
+ Film, TV Production
+ E-Learning

ECONOMICS

+ Business Administration, Marketing, Logistics

For more information: www.hs-offenburg.de/iaf

ADDITIONAL RESEARCH UNITS I

PETER OSYPKA INSTITUTE FOR PACING AND ABLATION (POI)

The POI was founded in June 2011 following an initiative by Prof. Dr. Ing. Peter Osypka, the pioneer of radiofrequency catheter ablation. Research and development are the main tasks of the Institute, particularly in the field of cardiology (electrophysiology, electrical stimulation, cardiac pacing and ablation). In addition, the institute offers training courses with different ablation systems in cardiology, including pacemakers, defibrillation therapy and cardiac radiofrequency ablation. With the principle "Learning by watching, touching and adjusting", the POI offers training courses and continuing-education events, giving special emphasis to the different procedures which provide practical experience for students.

For more information: www.hs-offenburg.de/poi

ADDITIONAL RESEARCH UNITS II

INSTITUTE FOR UNMANNED AERIAL SYSTEMS (IUAS)

Unmanned Aerial Systems are the main research topic of the IUAS. Since June 2011 the IUAS has developed an autonomic helicopter (ALF) and a light-weight and low-power flight control system for the helicopter. The self-developed attitude heading reference system (AHRS) and the self-developed flight control are the core of the helicopter. The autonomous helicopter can be used, for example, for the inspection of bridges or power lines. Thus research at the IUAS is closely connected to technologies like aerodynamics, light weight construction, power electronics, control engineering and navigation.

www.hs-offenburg.de/iuas

INSTITUTE FOR ENERGY SYSTEM ENGINEERING (INES)

The Institute for Energy System Engineering at Offenburg University of Applied Sciences offers services in applied energy research. With a large-scale technical center, INES provides space for pilot-plant testing. The INES facilities with open air grounds have a smart-grid infrastructure, including a hydrogen compound system with PV and wind generators for analyzing smart-grid systems in practice.

Additionally a climate testing laboratory offers various options for testing of energy different converter prototypes. Hence INES also provides scientific service, pilot plant analyses, and seminary rooms for workshops and trainings for energy system engineering.

www.hs-offenburg.de/ines

CAREER CENTER

The Career Center helps to develop a personal and professional profile and facilitates entry into professional life. It offers individual counseling, a wide variety of seminars, workshops and presentations as well as contacts to employers. International students can attend workshops such as "Applying in Germany: Job interview" and "Applying in Germany: Cover letter and CV", where they learn all about the characteristics of German application portfolios.

For more information:
www.hs-offenburg.de/career-center

www.hs-offenburg.de

Campus Gengenbach / Cover: Campus Offenburg