

Offen im Denken

UNIVERSITY OF DUISBURG-ESSEN: A POWERFUL PARTNER IN RESEARCH AND EDUCATION

Information for Applicants W3 Professorship

General Business Administration and **Mobility**

Faculty of Engineering

Forsthausweg 2. • 47057 Duisburg und Universitätsstraße 2 • 45141 Essen www.uni-due.de

I.	UNIVERSITY OF DUISBURG-ESSEN	3
II.	FACULTY OF ENGINEERING	5
III.	DEPARTMENT OF MECHANICAL AND PROCESS ENGINEERING	7
IV.	REQUIREMENTS FOR THE POSITION "GENERAL BUSINESS ADMINISTRATION AND MOBILITY"	8
	 Research Teaching Importance/time scope of the activities 	
V.	RESOURCES	9
VI.	LEGAL FRAMEWORK	9
VII.	SALARY	9
ΛDDF	ENDLY: IOR ADVERTISEMENT	10

THE UNIVERSITY OF DUISBURG-ESSEN

Broad base, strong peaks

Open-minded

We are one of the youngest universities in Germany
and think in terms of possibilities rather than limitations.

Located in the heart of the Ruhr metropolis, we have 11 faculties working to develop ideas with
a future. We are strong on research and teaching, embrace diversity, promote academic potential and fight for educational equality worthy of the name.

Located in the heart of the Ruhr metropolis, the University of Duisburg-Essen (UDE) is one of the youngest and largest universities in Germany. Its programmes span a broad range from humanities, social sciences, economics and business studies to engineering sciences, natural sciences and medicine. It is also well known for its research in the international academic community.

This is reflected by the top positions the UDE has recently achieved in international rankings. In a global comparison of the performance of the best universities founded since the turn of the millennium, the UDE came third. In the Times Higher Education Ranking, it holds 19th place among the best 150 universities worldwide younger than 50 years old.

The research carried out at the UDE covers a broad spectrum including four cross-disciplinary main research areas: nanosciences, biomedical sciences, urban systems and transformation of contemporary societies. More than 43,000 students from over 130 countries are enrolled at the UDE in a total of over 230 courses of study. An important objective of the UDE's diversity management program is to offer equal opportunities to young people from non-academic backgrounds.

As a global academic player, the UDE cultivates partnerships with more than 100 universities all over the world. It is a member of the University Alliance Ruhr (UA Ruhr), a strategic coalition formed by the three universities in the Ruhr area. The UA Ruhr operates liaison offices in North America, Russia, and Latin America.

More information:

http://www.uni-due.de/imperia/md/content/dokumente/ppt/ppt_praesentation_ude_dt.pdf

II. THE FACULTY OF ENGINEERING

FACULTY OF ENGINEERING ALL ENGINEERING DISCIPLINES UNDER ONE ROOF

The Faculty of Engineering Sciences at the University of Duisburg-Essen has a unique profile. Nowhere else in Germany are engineering sciences so close together as at the University of Duisburg-Essen. Four departments teach and research under one roof: Civil Engineering; Electrical Engineering and Information Technology; Computer Science and Applied Cognitive Science; and Mechanical and Process Engineering, including Industrial Engineering.

In addition, the interdepartmental institute Center Automotive Research (CAR) currently has seven chairs from all departments conducting research and teaching in the field of mobility, automotive technology and automotive economics.

The faculty thus has an integrated spectrum of engineering disciplines that is unique in Germany and meets every requirement for modern, innovative, and interdisciplinary university education and research in the field of engineering sciences.

With about 11,600 students – about one third of them from other countries – the faculty is a strong and in-demand partner for regional and cross-regional industry. Our graduates enjoy a high reputation due not only to their broad professional competence, but also to the special interdisciplinary and international design of our study programmes. Classic courses such as mechanical engineering, electrical engineering, materials technology, civil engineering and informatics are complemented by ultra-modern interdisciplinary programmes such as nanoengineering, applied cognitive and media science, medical engineering or industrial engineering. In addition, social skills are addressed that are particularly trained through teamwork and interaction with international students. Our integrated international bachelor's and master's degree programme "International Studies in Engineering (ISE)" should be particularly highlighted: with 50% English lectures, its global character and versatility makes it popular not only with international students but also with German speaking students.

We have developed a sustainable support system for our new students that ensures a seamless transition from school to university education. They have the opportunity to assimilate the contents of their studies in small groups alongside lectures in the first three semesters, enabling them to complete the demanding engineering programme quickly to a high standard. In addition, intensive laboratory practicals teach the use of the technologies of the future right from the start. The conversion of all diploma degree programmes into consecutive bachelor's and master's degree programmes was completed in the winter semester 2007/2008, while maintaining the internationally respected quality of the German diploma degree.

On the research side, with an investment volume of more than 60 million euros for equipment infrastructure the Faculty of Engineering has excellent opportunities to develop cutting-edge technologies and conduct basic research. With seven DFG Collaborative Research Centers completed and one ongoing, as well as a DFG Research Training Group and six DFG-funded research units, the faculty is one of the best addresses in Germany and internationally for research in the fields of nanotechnology and material sciences. Further focal research areas are

- Nanotechnology,
- Combustion research,
- Mechatronics.
- Automotive Technology and Economy,
- Energy and Environmental Technology,
- Communication Systems,
- Microelectronics and Medical Technology,
- Information Technology
- Product Engineering and Materials Technology.
- Civil Engineering,
- Computational and Applied Cognitive Sciences,

- Industrial Engineering,
- Logistics.

By concentrating on these areas, the faculty has achieved a high international reputation which is documented in numerous research projects. In addition, there are affiliated institutes and other associated Institutes which collaborate closely with the faculty and have an annual total research turnover of more than 35 million euros:

- Development Centre for Ship Technology and Transport Systems (DST),
- Institute for Mobile and Satellite Communication (IMST),
- Institute for Energy and Environmental Technology (IUTA),
- IWW Water Center (IWW),
- Center for Fuel Cell Technology (ZBT),
- Fraunhofer Institute for Microelectronic Circuits and Systems (Fraunhofer IMS),
- Gas-und Wärme-Institut (Gas and Heat Institute) (GWI),
- Center of Rotating Equipment (CoRE),

_

The faculty and the affiliated and associated institutes have proven to be excellent partners for complex technological solutions and for the recruitment of excellently trained engineers.

In order to promote cooperation between the departments and institutes and to increase external visibility, the faculty has established the four research profiles Tailored Materials, Human-Centered Cyber-Physical Systems, Smart Engineering and Energy and Resource Engineering.

III. DEPARTMENT OF MECHANICAL AND PROCESS ENGINEERING

From classic mechanical engineering to the automotive industry

Approximately 5,000 students are enrolled in the study programmes of the Department of Mechanical and Process Engineering. The attractive range of subjects covers the "classical" topics of mechanical engineering, enables interdisciplinary studies in industrial engineering and automotive engineering and management and also offers the international studies in engineering programme. Participation in other interdisciplinary study programmes rounds off the offering. Following the complete conversion to consecutive Bachelor's and Master's degrees, the department is ideally equipped for the future in the area of teaching and the promotion of young talent. The above-average proportion of female students – currently more than 18 percent - proves that the department's offerings are also attractive to women. Partly due to the excellent reputation of Duisburg as a centre for research and study, the student intake (of both genders) has risen sharply in recent years. The steadily growing interest of Bachelor's graduates from other universities throughout Germany also demonstrates that our Master's programmes are highly attractive.

The work of the Department of Mechanical and Process Engineering, with its two units Mechanical and Process Engineering and Industrial Engineering, is shared by 29 professors in seven institutes - highly motivated scientists, most of whom have only been appointed in the last 10 years.

The Department of Mechanical Engineering of the Faculty of Engineering is very well prepared for the future technological challenges of national and international industry. The breadth of subjects represented is also reflected in the diversity of the main teaching and research areas: energy and process engineering, product engineering and logistics, mechatronics, ship technology and nanotechnology. The department's internal institutes work closely together with four affiliated institutes and emphasise the application-oriented character of engineering research.

The Department of Mechanical and Process Engineering at the University of Duisburg-Essen is excellently positioned with regard to both increasing competition and cooperation among universities and colleges and future cooperation with national and international partners from science and industry. The region's national and international industrial companies also offer numerous opportunities for tackling and implementing applied and basic research topics.

IV. REQUIREMENTS FOR THE PROFESSORSHIP "General Business Administration and Mobility"

The successful candidate should represent at least one of the areas of marketing or innovation management with a focus on mobility in research and teaching in the Industrial Engineering unit of the Faculty of Engineering - succeeding Professor Dudenhöffer as a member of the CAR Institute.

1. Research

The successful candidate should have proven abilities in at least one of the areas of marketing or innovation management with a focus on mobility. Preference will be given to applicants with international experience in the research field of mobility and in digital transformation.

We expect publications in peer-reviewed German and international journals as well as experience in the implementation of self-acquired relevant competitive third-party funded projects, in particular DFG-funded projects.

The successful candidate is expected to contribute to and be willing to cooperate in the interdisciplinary fields of research of the Faculty of Engineering, in particular the Department of Mechanical and Process Engineering. It is desired that the content will be close to at least one of the faculty's main research areas:

- Tailored Materials: with topics such as smart materials, material damping, material health monitoring, material optimisation to reduce ship vibrations, new prosthesis surfaces to avoid slip-stick vibrations in artificial joints of endoprosthetics,
- (2) Human-centered Cyber Physical Systems: with topics such as nonlinear vibrations in neuromotor functions, stability criteria for haptic feedback systems,
- (3) Smart Engineering: with topics such as vibroacoustics, mechatronic vibration compensation in machines, high-performance robots,
- (4) Energy and Resource Engineering: with topics such as rotor dynamics in flow machines, dynamics of wind turbines, energy harvesters.

The ability to cooperate particularly in the areas of mobility, transport and logistics is also desirable.

2. Teaching

General business administration and the topic of mobility should also be covered broadly in teaching. The successful candidate should above all offer classes in the Bachelor's and Master's degree programmes in Industrial Engineering and also in the Master's degree programme Automotive Engineering & Management. In addition to the basic subjects of marketing and investment and finance, in-depth lectures on at least the marketing or innovation management of mobility should be offered in the Bachelor's and Master's programmes. Participation in the further development of the study courses as well as on the self-administration committees of the university is a requirement.

3. Importance/time scope of the activities

The teaching load is 9 lessons of 45 minutes per week.

V. RESOURCES

Details will be agreed in the course of the appointment procedure.

VI. LEGAL FRAMEWORK

With the Act on Higher Education in North Rhine-Westphalia (Hochschulgesetz - HG) of 10 September 2014, the university system was amended with effect from 1 October 2014.

Since then, the universities have been legally responsible corporations under public law that are supported by the region. State funding is based on their tasks, the agreed objectives and the services provided. Universities have a general budget and are not subject to orders from the Ministry for Innovation, Science, Research and Technology of the region of North Rhine-Westphalia.

Official status of university teaching staff

If the legal requirements are met, professors are generally employed as civil servants for life. Professors can also be engaged in an employment relationship based on private law.

Further information (laws, ordinances, etc.) is available at

http://www.uni-due.de/zentralverwaltung/peo_links.shtml.

VII. SALARY

As of 1 January 2005, the C salary system formerly applying in Germany to all newly appointed professors was superseded by a performance-oriented salary system. This new salary system is part of a recent condition-of-service reform ("Dienstrechtsreform"). The formerly standard seniority grades were replaced in the W salary system (W stands for the German "Wissenschaft", meaning "Science") by a system of fixed basic salaries (W2 or W3) and "performance bonuses". From 1 January 2005, the W salary system applies to all newly recruited professors and to those who change to the W salary system.

Performance-related salary components may also be awarded, on the occasion of appointment and tenure negotiations (appointment and tenure bonuses), for special achievements in research, teaching, art, further training and development of young academics (special performance bonuses) and for carrying out functions or special duties within the framework of university self-management or university administration (functional performance bonuses). Under certain circumstances, research and teaching allowances may be paid out of funds provided by private third parties.

Any temporary appointment-related performance bonuses agreed in the context of appointment negotiations will be linked to agreements on goals and performance.

Appointment-related performance bonuses agreed in the context of appointment negotiations will be negotiated individually with the Rector of the University of Duisburg-Essen.

Information on the legal basis for the W salary system can be found in on the internet at the following addresses:

http://www.uni-due.de/zentralverwaltung/peo_links.shtml

http://www.hochschulverband.de/cms/index.php?id=296

APPENDIX: JOB ADVERTISEMENT

We are one of the youngest universities in Germany and think in terms of unlimited possibilities instead of possible limitations. Located in the heart of the Ruhr metropolis, our 11 faculties develop ideas with a future. We are strong on research and teaching, embrace diversity, promote academic potential and commit ourselves to educational equality.

The Faculty of Engineering, with the four departments Civil Engineering, Electrical Engineering and Information Technology, Computer Science and Applied Cognitive Science, and Mechanical and Process Engineering, conducts high level basic and applications research at a high, internationally recognised standard. With around 80 professorships and chairs and around 12,000 students, the faculty is one of the largest in Germany.

We are currently in search of eligible candidates for the following Professorship in the Faculty of Physics so that we may fill the position from 1.3.2019:

University Professor in "General Business Administration and Mobility" (Salary Scale W3 LBesO W)

The successful candidate should represent at least one of the areas of marketing or innovation management with a focus on mobility in the Industrial Engineering unit. Preference will be given to applicants with international experience in the research field of mobility and in the field of digital transformation. The successful candidate is expected to contribute to and be willing to cooperate in the interdisciplinary research fields of the Faculty of Engineering, in particular in the Department of Mechanical and Process Engineering and in the cross-faculty "Zentrum für Mobilität und Logistik" (ZLV). It is desired that the content will be close to at least one of the faculty's main research areas in addition to the ability to cooperate, particularly in the areas of mobility, transport and logistics.

The successful candidate should primarily offer courses on the Bachelor's and Master's degree programmes in Industrial Engineering. In addition to the basic subjects of "marketing", "investment and finance", in-depth lectures at least on the marketing or innovation management of mobility in the Bachelor's and Master's programmes should be offered. Participation in the further development of the study courses as well as on the self-administration committees of the university is a requirement.

The applicant is expected to have publications in high-ranking, peer-reviewed journals as well as experience with the acquisition and management of competitive projects financed by third-party funds, preferably projects funded by the German Research Foundation (DFG).

The University of Duisburg-Essen places great emphasis on the quality of teaching. Candidates must present didactical concepts for teaching - with consideration of the profile of the University of Duisburg-Essen.

The hiring requirements comply with § 36 of the Higher Education Act of North Rhine-Westphalia (Hochschulgesetz NRW).

The University of Duisburg-Essen promotes the diversity of its members (https://www.uni-due.de/diversity). It strives to increase the percentage of women on its academic staff and therefore emphatically invites qualified women to apply. In case of equal qualification, female candidates will be given preferential consideration (Equal Opportunities Act). As per § 2 Sect. 3 of the social code (SGB IX), applications from candidates with a disability or equivalent status are especially welcome.

Applications with the usual documents (CV, list of publications, documentation of academic and professional development, copies of relevant certificates, an exposé of the applicant's research profile with reference to its relevance for the University of Duisburg-Essen, lists of successful external grant applications, experience in academic administration and courses taught plus a teaching concept) as well as a completed application sheet should be sent to the **Dean of the Faculty of Engineering of the University of Duisburg-Essen, Univ.-Prof. Dr Dieter Schramm, Forsthausweg 2, 47057 Duisburg, Germany, dekanat@iw.uni-due.de. (application deadline: XX/XX/2018).**

For more information on the job and its integration into the University of Duisburg-Essen as well as in the Faculty of Engineering, Department of Mechanical and Process Engineering, see https://www.uni-due.de/iw/de/stellen.shtml