International Programmes in Germany 2018

Information Engineering and Computer Science, MSc • Rhine-Waal University of Applied Sciences • Kamp-Lintfort

Degree
Master of Science in Information Engineering and Computer Science

Course language(s)
Courses are held entirely in English.

Admission semester
Summer and winter semester

Beginning
Winter semester - September
Summer semester - March

Programme duration
Three semesters (one and a half years)

Application deadline
All applicants: 15 July for the following winter semester
All applicants: 15 January for the following summer semester

Course content
Mainstream terms like "Information Society" or "Information Era" illustrate quite clearly that information is one of the most valuable goods in today's economy. In times of global networking and dynamically changing economic and working environments, success increasingly depends on effective information and knowledge management. Efficient information processing or good information logistics is essential when data have to be acquired and information has to be delivered in the right format, at the right place, at the right time and to the right people. At the same time, data acquisition, validation, presentation, and security have to adhere to very high standards. A dynamic environment like this needs individuals with a broad range of skills and knowledge who are able to understand and realise the requirements of information management, from design and development up to the implementation of suitable IT solutions.

Our unique Master's degree programme has been designed to meet those needs. It provides a deep insight into the acquisition, processing, and handling of data while giving you the chance to exploit the power of distributed networks and computing units. At the same time, this Master's programme will give you the opportunity to expand your knowledge in programming, web engineering, and information management.

CONTACT

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distributed network and computing units. At the same time, you will be able to acquire the knowledge needed to analyse and process large amounts of data. To cover all these different aspects and to give you the chance to specialise in a field that fits your interests and career plans, the programme offers four different tracks from which to choose:

- Computer Science
- Environmental Analysis
- Logistics
- Cyber-Physical Systems Engineering

Educational organisation
This course is a three-semester follow-on Master's degree programme, building on the knowledge you have acquired in your undergraduate degree programme.

The first two semesters provide you with the theoretical and practical foundation vital to your professional career while the third semester is devoted to your Master's thesis and colloquium. All courses have been designed to offer you not just factual knowledge but also various chances to apply what you have learned. You will be given the opportunity to enhance your knowledge through lectures and deepen it in advanced seminars and exercises. Practical training is integrated into every module.

In your first two semesters, you will develop substantial skills in areas such as "System Simulation", "Data Mining", "Data Analysis", "Statistics" and "Geoinformatics". At the same time, you will gain important key competencies in the fields of "Scientific and Technical Communication", "Intercultural Management and Intercultural Competence" as well as "Innovation Management" and will have the chance to specialise by choosing lectures and modules out of the four tracks previously mentioned. Each semester also includes an applied research project, giving you the opportunity to put theory into practice on a larger scale.

In your third semester, you will develop your Master's thesis. Again, a high academic standard as well as the real-world relevance of your topic are of major importance.

Study abroad unit(s)
None

Internships
None

Forms of assessment
Written and oral examinations, projects
Master's thesis

ECTS credits
90
Diploma supplement
Yes

Course-related German language courses
Yes

Course-related English language courses
Yes

Course objectives
Our degree programme aims to equip you for a career that matches future labour market needs and trends by putting a special emphasis on innovative problem solving methods with respect to interdisciplinary and international approaches. Complementing the individual skills you have gained in your undergraduate degree, our Master's degree will strengthen your employability and make you an ideal candidate for all international companies and research institutes operating in the following fields:
- information and data management
- development and operation of large web-based and cloud-like storage and computing facilities
- simulation of complex systems
- development of decision support systems
- hardware and software development for automated systems in the field of logistics and embedded systems

Tuition fees
Rhine-Waal University of Applied Sciences does not charge tuition fees.

Enrolment fees
Enrolment fees amount to approx. 280 EUR per semester. This covers nominal administrative fees and a public transport ticket valid for the entire state of North Rhine-Westphalia.

Costs of living
The average cost of living for students in Germany is around 700-800 EUR per month. This includes rent, utilities, personal expenses, and general expenses. See our website for details:
http://www.hochschule-rhein-waal.de/en/academics/students/costs-scholarships-and-grants

Job opportunities
Non-EU students can work up to 120 full days or 240
half days per year without requiring an additional visa. Student jobs within the university are often in English, but the vast majority of off-campus jobs will require at least basic proficiency in German. German courses are available for students through our Language Centre. First-year students are strongly advised to focus first on their studies and begin learning German. This will open up many more part-time job opportunities in later semesters.

**Funding opportunities within the university**

The university offers a limited number of merit-based scholarships ("Deutschlandstipendium") to current students and soon-to-be enrolled students with excellent marks. This scholarship consists of a monthly stipend of 300 EUR and applies to international students as well. Other scholarships, grants, and fellowships are available through regional and national organisations in Germany. See the DAAD scholarship finder or our website for details. [http://www.hochschule-rhein-waal.de/en/academics/students/costs-scholarships-and-grants/scholarships-and-grants](http://www.hochschule-rhein-waal.de/en/academics/students/costs-scholarships-and-grants/scholarships-and-grants)

**Language requirements**

Please note that for Bachelor's degree programmes, English language skills at level B2 according to the Common European Framework of Reference are required. Please be aware that all applicants' test report form numbers will be checked. The following certificates are accepted:

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

The TOEFL code of our university is: 6962. The only exceptions of these language requirements are a secondary school certificate or a Bachelor's degree achieved in the following countries: USA, Canada, UK, Ireland, Australia, New Zealand.

**Academic requirements**

Admission to our Master's degree programme is subject to an application process. The formal entry requirements for the Information Engineering and Computer Science MSc programme include the following:

- proof of a completed undergraduate degree (BSc, BA, German "Diplom" or equivalent), which included subjects in the fields of practical computer science and computer engineering as well as fundamentals in mathematics, natural sciences, and engineering. In individual cases, missing subjects can be compensated by proof of other related academic
Compensated by proof of other related academic training or qualifications. Please outline your additional knowledge and experience in an essay of no more than 1,000 words.

- an overall mark of at least 2.3 in your undergraduate degree
- a sufficient level of English language proficiency (level CEFR B2 or better)

Please find more information on our website.

Where to apply

Arrival support
Rhine-Waal University of Applied Sciences is easily accessible by public transport from three international airports: Amsterdam (AMS), Düsseldorf (DUS), and Weeze (NRN). No pick-up service is available. The university can provide helpful advice to help you navigate through Germany or the Netherlands after your arrival.

Services and support for international students
Our Welcome Centre supports international students during their first few weeks in Germany. The Welcome Centre provides helpful advice and guidance on understanding German documents, opening a bank account, registering your place of residence, applying for a student visa, setting up health insurance, and more.

The student mentors at the Welcome Centre know first-hand what it is like adjusting to life as a student in Germany. They are also an important first contact point for students with public or private issues, as they can direct students to the right specialists for their specific needs. The Welcome Centre offers different events and programmes to help you adjust to a new language and culture in Germany and to find new friends. The Welcome Centre also promotes campus culture by organising trips to destinations all around the region as well as a range of social events for students like the annual "Freshtival", the university's orientation week for new students in the winter semester.

Accommodation
Rhine-Waal University of Applied Sciences strongly urges you to arrange your accommodation before arrival. One option is accommodation at the residence halls run by student services ("Studierendenwerk Düsseldorf") with one-, two-, or three-room flats and
Düsseldorf) with one-, two- or three-room flats and rent starting around 220 EUR per month (with a security deposit equivalent to three months' rent). Availability is limited, so register online as soon as possible. See our website for details. Most students live in private flats shared with other students. There are a number of popular online portals for finding a flat in Germany, for example http://www.wg-gesucht.de. The university also maintains a list of available flats and rooms for students on its website. For details, visit: http://www.hochschule-rhein-waal.de/en/academics/prospective-students/housing.

Course website
www.hochschule-rhein-waal.de

About the university
Rhine-Waal University of Applied Sciences, with two campus locations in Kleve and Kamp-Lintfort and over 6,750 students, is an innovative, interdisciplinary, and international university of applied sciences. The university currently offers over 36 undergraduate and postgraduate degree programmes in engineering, the natural and social sciences, technology, design, and more. Our programmes are geared towards your employability, addressing current and future needs of industry by giving you valuable expertise and experience in your field of study. We are unique in that some 75% of our programmes are taught exclusively in English, resulting in a vibrant campus culture and a rich, intercultural exchange of ideas, experience, and knowledge.

Rhine-Waal University of Applied Sciences prides itself in top-notch teaching, excellent research, and a strong network of international partnerships with research institutions and industry. Our team of professors bring a fresh, dynamic approach to teaching and continuously support, encourage, guide, and inspire students. Professors are often on a first-name basis with their students. Teaching takes place in a range of cutting edge facilities, laboratories, work spaces, smart classrooms, and auditoriums - all within walking distance.

The result is a memorable and valuable university experience, which will help you grow as a person and set you on the path to your chosen career. We look forward to welcoming you!

Total number of students
6,800

Total percentage of international students
About the city

Rhine-Waal University of Applied Sciences is centrally and conveniently located on the Lower Rhine between the Netherlands and the Rhine-Ruhr metropolis. Kleve, the main campus, is a city rich in tradition and history with 50,000 current residents. It offers residents the best of both worlds: the bustle and excitement of nearby cities like Nijmegen, Düsseldorf, and Cologne, with the safety, comfort, and ambience of a smaller town. The flat landscapes, mild climate and good infrastructure of the Lower Rhine make it ideal for getting around by bicycle. Noteworthy sights include the Swan Castle, Baroque-style botanical gardens, museums, and art galleries. The town is home to large department stores and smaller boutiques, pubs, cafés, and more. Students can also participate in a range of sports offered both by the university and local clubs.

Kamp-Lintfort, our campus for the Faculty of Communication and Environment, has a current population of around 38,000 and is located 60 km (37 miles) south of Kleve. Kamp-Lintfort takes its name from a nearly 900-year-old monastery, maintained in its original style to this day. The city's proximity to the Rhine-Ruhr metropolis made it an integral part of post-WW II coal production in Germany. In recent years, Kamp-Lintfort has redefined itself as a hub of technology, innovation, and higher education. The Kamp-Lintfort campus is centrally and conveniently located in the centre of town. In addition to its historical sights, Kamp-Lintfort offers a welcoming and safe atmosphere for students, with numerous shops, pubs, cafés, and sports.