Information Systems
Master of Science

Deine FH, dein Style

Hol dir dein Stück FH Aachen

You can find all information about the degree program on the internet. Simply scan the QR code with a suitable reader.

www.fh-aachen.de/en/studies/degree-programmes/information-systems-msc

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Economy meets Informatics

The Master of Information Systems is a consecutive master's degree in the field of business informatics.

What is Information Systems?

Why are the shelves in the supermarket full every day? How do search engines remember which websites you visit? And how can computers make your life easier?

Business informatics deals with these questions at the intersection between computer science and business administration (BWL). In companies, these two fields typically come together in the IT department. As a business informatics specialist, you might work on topics related to operations management, cost management, or corporate communications. To do this, you use IT systems. You organize processes and ensure that they are optimally supported by computers and software. You should enjoy solving both technical and business-related tasks, and be able to engage with your conversation partners effectively.

Business informatics specialists combine knowledge from two fields. The interface between computer science and business is a typical workplace for them. An example: a sportswear manufacturer wants to set up an online shop. This requires both technical expertise in building shop systems and a business background in market sales figures. This is where business informatics specialists come into play. With their expertise in both areas and strong communication skills, they can mediate between the purchasing department and the IT department. For instance, they assist with analyzing figures, designing the product range, and developing the shop system so that the online shop can be launched.

What can I expect from the Master's program in Information Systems?

The Master's program in Information Systems offers an exciting specialization in business informatics for graduates with an initial professional qualification. Our program is designed to equip you with dynamic skills in the field of business informatics and is flexible enough to meet your individual interests.

Whether you're interested in International Business and Management, Information Systems Engineering, Data Science, or Digital Business, we offer suitable modules, available in both English and German. This allows you to deepen your language skills and prepare for global challenges. From your first course to your thesis, you can complete the entire Master's program in Information Systems in English.

This approach provides an international focus with a wide range of elective modules, fostering a inclusive learning environment where you'll collaborate with classmates from various countries, growing both personally and professionally. We believe that the digital transformation requires dynamic competencies that are relevant across national borders.

When you study with us, you will not only learn how to design and use information systems but also how to drive digital transformation in companies. Our goal is for you, as a graduate, to work as a specialist or leader in intercultural and interdisciplinary teams. Additionally, we place great emphasis on ensuring that you understand and ethically reflect on the practical implications of digital transformation for businesses and society. This includes mastering scientific methods to develop and apply new insights.

In summary, our Master's program in Information Systems offers you a top-tier education that will prepare you optimally for the challenges of the digital world and open up diverse career opportunities. So, if you're ready to grow in a dynamic environment and help shape the future, you're in the right place with us!

What do I need to bring?

For the Master's program in Information Systems, you should have an interest in business and technology, strong analytical skills, good communication abilities, a solid technical understanding,

Mathematical understanding

Interest in computers and software

Logical-analytical understanding

Team spirit

Good English skills

Your bachelor's degree will have already provided you with a solid foundation that will benefit you in the Master's program in Information Systems. With an understanding of mathematics, an interest in computers and software, and the ability to think logically and analytically, you are wellprepared. In the master's program, you will further develop these skills or build them up if your bachelor's degree had a different focus. It is important that you have basic English skills at a B2 level and the willingness to grow both professionally and personally.

The admission requirements on the following pages offer a detailed overview of the prerequisites for the Master's program in Information Systems.

Where will I work after graduation?

Graduates of the Information Systems Master's program develop and maintain information and communication systems in order to structure, improve or even enable processes. You will mostly work at a desk. However, meetings with colleagues and business partners are also on your daily schedule. After all, it's not just the technical processes, but also the interaction between the employees of a company. You will work for companies in almost all sectors of the economy and in public.

If you are interested, it is also possible to find a career in one of the two core areas, i.e. either in IT or business administration.

Are you already employed and looking to further your education? Perfect! Then you've come to the right place! We also offer the program part-time, allowing you to seamlessly balance your career and studies.

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Overview of the degree program

Information Systems with practical semester or semester abroad

1st to 2nd semester	**Core studies**
3rd semester	**Practical semester or semester abroad**
4th semester	**Master thesis**

4 semesters = 120 LP

The duration of study is 4 semesters (under certain conditions, the practical semester can be recognized, reducing the duration of study to 3 semesters).

Curriculum

Description	W/P	LP	V	Ü	Pr	SU	Σ
1. Semester							
Digital Transformation Management	P	**6**	2	1	1	0	**4**
Systems Integration I	P	**6**	4	0	0	0	**4**
Elective course 1	W	**6**					
Elective course 2	W	**6**					
Interdisciplinary Project Seminar	P	**6**	4	0	0	0	**4**
Sum		**30**					
2. Semester							
Enterprise Modeling and Organization	P	**6**	2	1	1	0	**4**
Process Analytics and Automation	P	**6**	4	0	0	0	**4**
Elective course 3	W	**6**					
Elective course 4	W	**6**					
Information Systems Research Methods	P	**6**	4	0	0	0	**4**
Sum		**30**					
3. Semester							
Practical semester or semester abroad		**30**					
Sum		**30**					
4. Semester							
Master thesis	P	**27**					
Kolloquium	P	**3**					
Sum		**30**					

Semester hours per week

The study plan helps you to select modules and shows you when it is best to take which modules. It helps you identify compulsory modules and elective options. The student advisory service is there to support you. If you follow the plan, you will graduate within the standard period of study, but you can also be flexible.

You can also find the content description of every study module online.

LP: Credit points   P: Mandatory   W: Choice   SU: seminar, seminar-style teaching
V: Lecture   Ü: Exercise   Pr: Internship

Schedule of elective modules

Your future, your choice!

On the Master's degree program in Information Systems, you have the opportunity to focus on a specific subject are that matches your interests and career goals. Whether you are interested in Data Science, Digital Business, Information Systems Engineering or International Business - the choice is yours. Design your studies according to your ideas and prepare yourself optimally for your professional future.

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Description	W/P	LP	Semester hours per week				
			V	Ü	Pr	SU	Σ
Elective modules (Exemplary list)							
Data Science							
Business Intelligence	W	6	2			2	4
Data Science and Machine Learning 1	W	6	2	1	1	0	4
Data Science and Machine Learning 2	W	6	2	1	1	0	4
Mathematical algorithms and programming	W	6	2	1	1	0	4
Digital Business							
Business Models und Systems Development	W	6	2	1	1	0	4
Digital Business Transformation	W	6	1	1	2	0	4
Innovation, Marketing and Sales	W	6	2	1	1	0	4
Information Systems Engineering							
Efficient IT operation	W	6	2	1	1	0	4
Embedded Systems	W	6	2	1	1	0	4
Information Systems Quality Management	W	6	2	1	1	0	4
Information security and Data protection	W	6	2	1	1	0	4
Virtualization and cloud computing	W	6	2	1	1	0	4
International Business							
Cross-Cultural Competencies	W	6					4
Finance for Global Managers	W	6			1	3	
Governance and Responsibility	W	6					4
International Economics	W	6					4
International Supply Chain Management	W	6					4
International Management	W	6					4
International and digital Controlling	W	6					4

You can also find the content descriptions of the study modules online.

LP: Credit points P: Mandatory W: Choice SU: Seminar, seminar-style teaching
V: Lecture Ü: Exercise Pr: Internship

Admission requirements for the degree program

In addition to the general admission requirements for the Information Systems M.Sc. program, you must also have the following requirements:

Application deadlines Please submit your complete application for participation in the application procedure within the specified deadlines via the FH Aachen application portal. Please note that the application deadlines for applicants within Europe (no visa required) end at a later date than those for applicants outside Europe (visa required?). To find the current application deadline for your application, visit our website:
https://www.fh-aachen.de/en/studies/degree-programmes/information-systems-msc/application-and-approval

Required language skills All applicants must prove their knowledge of English by means of a Test of English as a Foreign Language (TOEFL), the International English Language Testing System (IELTS) or the Cambridge Certificate in English (FCE). The following minimum scores are required:
IELTS 6.5 (min. 6.0 per subtest)TOEFL paper based 580+ with TWE 4.5 or internet based overall score 92 (min. 20 per subtest)Cambridge Certificate in English (FCE), Grade B2 English language skills can also be recognized by submitting an equivalent certificate. The selection committee will decide on equivalence.

Exceptions and German language skills:
Applicants whose native language is English or who have completed their first professionally qualifying university degree at an English-speaking university or in an English-language degree program are exempt from providing proof of English language proficiency. German language skills do not have to be proven, but are recommended. As part of the curriculum, some compulsory elective modules are only available in German. Students without knowledge of German therefore have a limited choice of elective modules. Nevertheless, the entire structure of the study program is designed in such a way that it is possible to study the entire program in English without any further restrictions.

Relevant degree In addition to the general admission requirements, admission to the Master's degree programs in Information Systems and Information Systems (part-time) requires the completion of a relevant degree program with a standard period of study of at least six semesters and at least 180 credit points according to the European Credit Transfer and Accumulation System (ETCS), which was successfully completed with a Bachelor's degree or another professionally qualifying degree (diploma, etc.). Relevant within the meaning of sentence 1 is a degree in business informatics, computer science, business administration or in the field of digital economy from a German or foreign university.
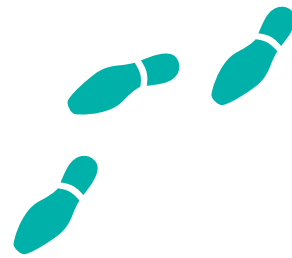
GRE test The GRE (Graduate Record Examination) is a standardized test that is used by numerous graduate programs worldwide as part of the admission process. All applicants who have not obtained their educational qualifications in Europe must take this test. It assesses candidates' abilities in the areas of verbal reasoning, quantitative reasoning and analytical writing. The 70th percentile must be achieved in at least one of the three areas. The specific requirements for the GRE test result can be found in the admission regulations.
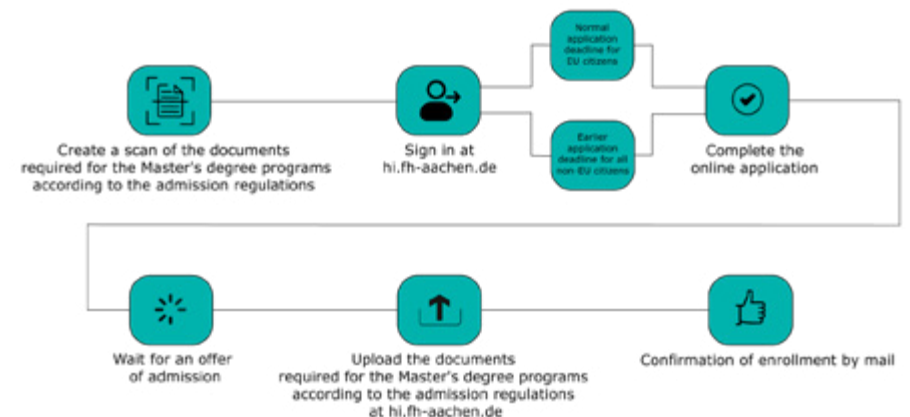
Application documents

The following documents must be attached to your online application:

- ☐ Curriculum vitae in tabular form, showing the sequence of the relevant training periods.

- ☐ Certificates or transcripts previous university education, issued by the respective examination office, with provisional average grade or final grade and a complete overview of subjects and grades (Transcript of Records).

- ☐ Module descriptions of the relevant modules completed for the first professionally qualifying degree.

- ☐ Certificate Graduate Record Examination Test (GRE) the results achieved for applicants who have not obtained their degree in a member state of the European Higher Education Area EHEA.

Your way to us

1 Scan — Create scans of the following documents: Bachelor's degree certificate, CV, employer's referene (if available)

2 Registration — Register in the FH Aachen portal. If you are already studying at FH Aachen, log in with your FH ID to apply.

3 Online application — Go through the FH Aachen online portal application and click on „Submit application".

4 Wait — Wait for an offer of admission and then complete the online application for enrollment in the FH Aachen portal.

5 Upload — To do this, upload the documents listed in the letter of admission. The letter of admission can be downloaded from the FH Aachen portal.

6 Confirmation — After your documents have been checked by the Registrar's office, you wil receive confirmation of your enrollment by e-mail.

Create a scan of the documents required for the Master's degree programs according to the admission regulations

Sign in at hi.fh-aachen.de

Normal application deadline for EU citizens

Earlier application deadline for all non EU citizens

Complete the online application

Wait for an offer of admission

Upload the documents required for the Master's degree programs according to the admission regulations at hi.fh-aachen.de

Confirmation of enrollment by mail

Student service

Would you like to study at FH Aachen, are you already enrolled or have you already completed your studies? Then Student Services is the first central point of contact for you. We offer information and advice on all aspects of your studies. If you have further questions that cannot be answered by Student Services, we will refer you to the relevant colleagues in the relevant departments.

You will find us in the main building of FH Aachen, Bayernallee 11 in Aachen, on the second floor. We are also happy to answer your questions by phone on 0241 6009 51616 or by email at stu@fh-aachen.de.
On our website *fhac.de/stu* you will find lots of useful information and our current opening hours. We look forward to seeing you!

Department profile

The Business Informatics degree program is offered is offered as a joint degree course by the Department of Economics and the Department of Electrical Engineering and Information Technology. Two departments thus contribute their expertise so that you are optimally prepared for responsible tasks and nothing stands in the way of a successful career start. The Department of Electrical Engineering and Information Technology at FH Aachen coordinates the Business Informatics course. The department offers you a scientifically sound and practice-oriented education in four futureoriented Bachelor's degree courses:

> Electrical Engineering
> Informatics
> Business Informatics
> Smart Building Engineering
> Digital Innovation and Business (DIB)

The degree programs regularly occupy top positions in nationwide university rankings: in the Wirtschaftswoche 2023 ranking, we achieved first place in Electrical Engineering and Computer Science, we achieved first place among all German universities of applied sciences. In the CHE University Ranking 2021 and 2022, we reached the top group for Computer Science and Electrical Engineering respectively.

The close exchange with companies is reflected in a practice-oriented curriculum that is constantly adapted to new findings.

Your advantages are:
> Direct entry into the degree program without pre-study internship
> Individual student support
> Very well-equipped, modern laboratories
> Participation in Attractive research and development projects
> Practive-oriented degree program with close contacts to industry
> Attractive international university partnerships

So, start your career with topics that inspire.
We look forward to hearing from you!

More about the department: *www.etechnik.fh-aachen.de*

Spitzengruppe im

CHE Ranking

2022 Elektrotechnik

2024 Informatik

ZEIT Studienführer

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Contact persons

Student advisory service Information Systems
Clemens Treuling M.A.
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fachstudienberatung.winf@fh-aachen.de

Do you have questions about the structure of the computer science modules, the content or about the recognition of modules from a previous studies? Then the academic advisor from the Informatics is the right person to contact.

Student service
Bayernallee 11
52066 Aachen
T +49.241.6009 51616
stu@fh-aachen.de

Our colleagues will help you with questions about application, enrollment, changing universities and much more.

Further addresses

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T +49.241.6009 52110
www.etechnik.fh-aachen.de

Dekan
Prof. Dr.-Ing. Michael Bragard

Student Service
The student service is the first point of contact for students and prospective students for all questions relating to studying.
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stu@fh-aachen.de

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Student secretariat
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