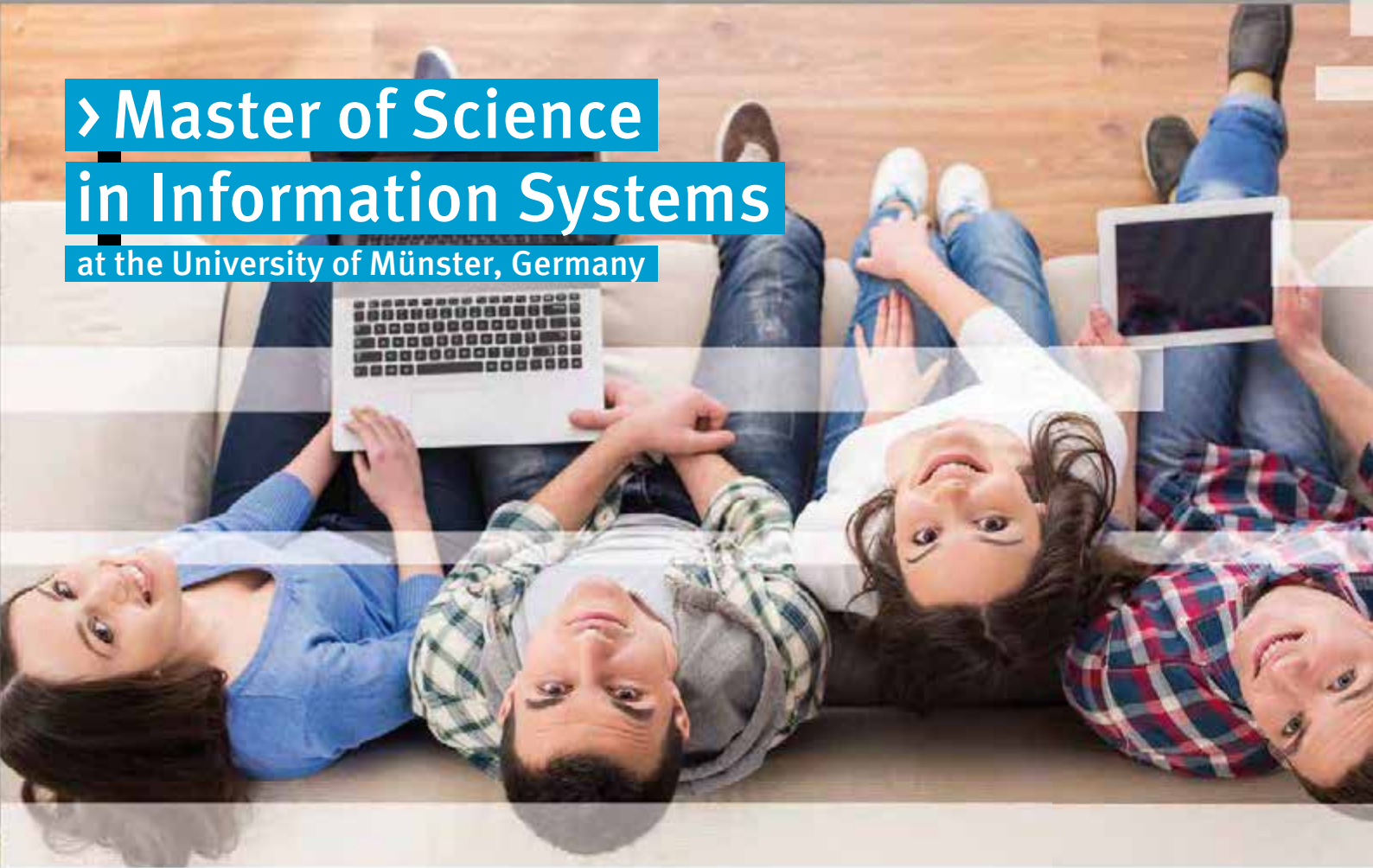


# › Master of Science in Information Systems

at the University of Münster, Germany



# MSC IN INFORMATION SYSTEMS AT THE WWU MÜNSTER

## Welcome

The Department of Information Systems is part of the University of Münster School of Business and Economics (SBE). It is one of the oldest Schools of Business and Economics in Germany with a long research and teaching tradition.

[www.wi.uni-muenster.de](http://www.wi.uni-muenster.de)



### What are the core elements of SBE's mission?

We are familiar with the complexity of modern economies and societies. Our dedication to study these areas is based on comprehensive methodological and theoretical training, combined with an interdisciplinary orientation. We see ourselves as

members of the global society and live our obligation to act responsibly and educate our students accordingly.

### How does SBE differ from other Business Schools?

Our teaching is based on our research insights. We introduce these into the classrooms to make our students reflective and responsible individuals prepared for the demanding tasks in business, politics, and research.

*Prof. Dr. Theresia Theurl*

*Dean, School of Business and Economics*



### What is the philosophy of the IS Master curriculum in Münster?

We provide our students with a thorough education in Information Systems. Besides the basics, our students can choose from a variety of different tracks for their distinct specialization according to their interests. We offer practice-oriented

seminars as well as lectures, influenced by the latest research.

### What is unique about your graduates?

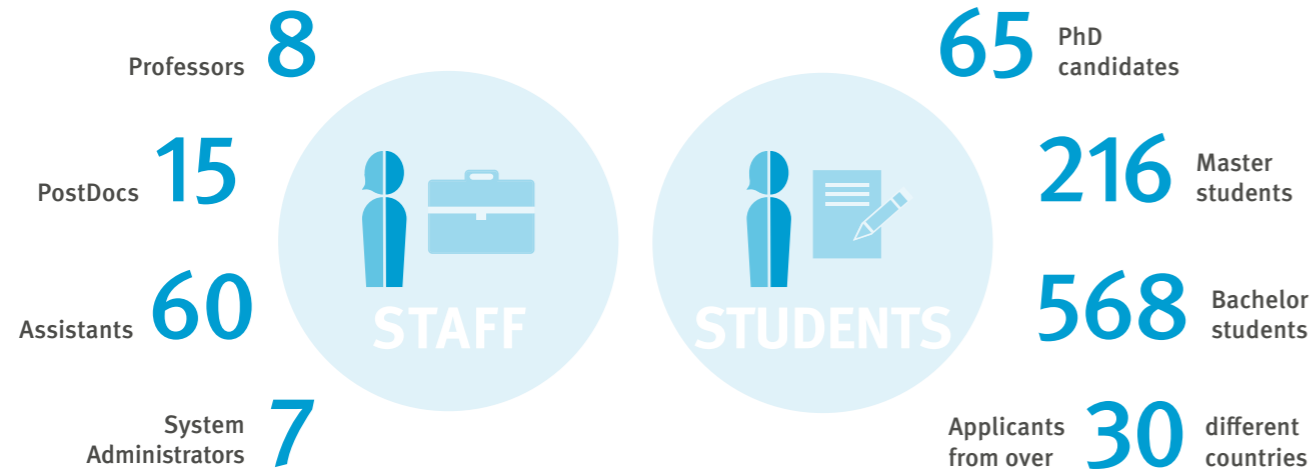
Our graduates leave our university with a skill set that qualifies them for a multitude of different career options. There is a particularly strong demand by companies for graduates from our IS Master since they learn structured thinking and serve as qualified mediators between IT departments and different business sectors. Graduating from our Master's program also offers various opportunities for a career in academia.

*Prof. Dr. Jörg Becker*

*Director, Department of Information Systems*

## KEY FACTS ABOUT OUR PROGRAM

- › International: All courses taught in English
- › Quality-approved: Accredited by AACSB
- › Free of charge: No tuition fees
- › Thorough: Four terms
- › Practice-oriented
- › Seven specialization possibilities
- › Flexible: Customizable track structure and a broad scope of electives, ranging from business administration to computer science



## DID YOU KNOW?

- › Our department is part of the SBE with 40 full professors
- › We enjoy close ties to various other applied informatics departments in Münster
- › We are one of the first dedicated research institutions for Information Systems in Germany
- › Our department is the headquarters of ERCIS, a large international network dedicated to Information Systems research

## EDUCATION FOR THE DIGITAL FUTURE

Digitalization affects us all. The public discourse is buzzing with a plethora of concepts: digital transformation, data science, and mobile computing are but a few trending topics. Together they represent the many facets of our digital future. We may not yet know its exact form, but digitalization sets out to transform every fabric of how we conduct business, and how we communicate and collaborate. In short, the very way we live together in a globalized, digitalized society.

This program is designed for those who want to participate in the shaping of that digital future. It is geared towards those who want to know more than a buzzword but also want to understand the underlying mechanisms. It is a program that grants students the freedom to actively compose their own, individual curriculum.

**CONVERGENCE**

**BIG DATA**

**DIGITAL TRANSFORMATION**

**future of work**

**DATA ANALYTICS**

**DISRUPTION**

**SMART MARKETPLACES**

**business intelligence**

**DIGITAL INFRASTRUCTURE**

**STRATEGY**

**humanitarian logistics**

**logistics**

**data integration**

**workflow management**

**PREDICTIVE MODELLING**

**INTELLIGENCE**

**DIGITAL STRATEGY**

**creative destruction**

**digital infrastructure**

**DATA INTEGRATION**

**internet of things**

**future of work**

**digital transformation**

**MARKETPLACES**

**creative convergence**

**destruction**

**subjective modelling**

**humanitarian logistics**

**SMART**

**BUSINESS INTELLIGENCE**

**data integration**

**workflow management**

**PREDICTIVE MODELLING**

**SMART MARKETPLACES**

**BUSINESS INTELLIGENCE**

**creative destruction**

**DIGITALIZATION**

**destruction**

**data**

**integration**

**predictive modelling**

**DIGITAL STRATEGY**

**BIG DATA**

**DISRUPTION**

**workflow management**

**HUMANITARIAN LOGISTICS**

Your education with us can be broad, or specialized. It can prepare you for starting your own business, for a job in a specific industry or an academic career. In short, this program puts you in the driver's seat because it is your journey into the digital future.

## Your Study Program

Our program focuses on an interactive teaching approach, building on **four different kinds of modules: interactive lectures, seminars, a project seminar, and your Master Thesis.**

Once students graduate they will have earned 120 Credit Points (ECTS), and will have specialized in two tracks. Each track is composed of three interactive lectures. The program is organized as a full-time structure, running for a total of 4 semesters. It gives students a deeper understanding into specialized themes in IS, while still giving them the choice to determine what to do and in which semester.

### Interactive Lecture – Choose 2 Tracks + Choose 5 additional modules

Our department alone offers 18 modules on different topics. A track is a specialization that combines three modules over the course of two semesters. In your studies you need to choose two tracks. In addition, you combine them with 5 additional other IS modules or offerings from Computer Science or Business Administration.

### Seminar – Choose 2

Seminars deal with the latest topics in research and practice. Thus, each term a new selection of seminars is proposed to students.

### Project Seminar – Choose 1

In a project seminar teams of students learn how to turn a problem into a solution. It requires a group to start from scratch and develop a solution from a first idea into a full prototypical implementation.

### Master Thesis

This will be your individual masterpiece: You develop the topic jointly with your academic supervisor and then embark on a research journey.

$$\begin{array}{r}
 66 \\
 \text{Credit Points} \\
 + \\
 12 \\
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 + \\
 12 \\
 \text{Credit Points} \\
 + \\
 30 \\
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 = \\
 120 \\
 \text{Credit Points}
 \end{array}$$

## Track Overview

One of the hallmarks of our program is the diversity of subjects you can choose from. You will select two of the following tracks to specialize in areas and methods relevant to Information Systems. You may choose two method tracks or combine one method and one domain track which emphasizes a specific domain.

	Tracks	Winter Term Modules	Summer Term Modules
Method Tracks	Business Intelligence	› MIS & Data Warehousing › Data Analytics 1	› Data Analytics 2
	Information Management	› Information Management Task & Techniques › Managing the Information Age Organization	› Information Management Theories
	Process Management	› Information Modelling	› Workflow Management › Enterprise Architecture Management
	Information System Development	› Logic Specification and Logic Programming › Data Integration	› Advanced Concepts in Software Engineering
Domain Tracks	Business Networks	› Interorganizational Systems	› Information Security › Network Economics
	Logistics, Production & Retail	› Supply Chain Management & Logistics › Production Planning and Control	› Retail
	Marketing	› Innovation Management › Customer Relationship Management & Direct Marketing	› Channel Management

# DIGITAL STRATEGY

Digitalization and digital transformation are among the “hot topics” of business and organizations. IT has continued to alter and change the operations of markets as well as individual institutions. Our graduates possess the skills to adapt to changing environments and harness the potentials of ICT.

## › TRACKS

### › Process Management

Students are exposed to advanced topics of this methodological approach. Successful business transformation builds on a sound understanding of an organization’s core processes.

### › Information Management

This track introduces the students to managing IT in light of the challenges and opportunities digitalization poses to incumbents and start-ups alike.

### Why this particular program?

The Münster IS Master is one of the most renowned in Germany. It offers a large variety of tracks, allowing me to focus on what is relevant for me.

### My professional experience

I work as a research assistant beside my studies and have interned with several management consultancies.

### My Studies

The notion of digital strategy intrigued me early on and led me to choose the tracks Information and Process Management. In addition, I did seminars on Information Management topics. My Master thesis will investigate the concept of Digital Strategy from the practitioner point of view.



Matthias  
27, Germany

### My international experience

I attended an international business program in the USA. Furthermore, I worked with various international student teams throughout my studies.

### Why Münster?

Münster was a perfect fit. It’s a not too crowded yet is still a lively city with an excellent public infrastructure.

### My life in Münster

My fiancée and I share a flat. We work out in a local gym and regularly meet up with friends to explore the city’s many leisure offerings.

# DATA ANALYTICS

Big Data, a key enabler of digital transformation, is one of the hot topics of the future, as it affects everyone doing business. From the manufacturing industry to the public sector or life sciences, data analytics helps to manage masses of information in various forms.

## › TRACKS

### › Business Intelligence

The track Business Intelligence (BI) conveys a set of strategies, processes, applications, and technologies to understand and support the collection and analysis of business information.

### › Information Systems Development

Students are exposed to advanced knowledge on data integration, data visualization as well as data mining and data exploration.

### Why this particular program?

The whole program is in English and quite practice-oriented. The lectures and seminars are often organized in collaboration with industry partners.

### My professional experience

Back in Russia, I worked in quality assurance and project management for IT companies. After graduation I will stay in Germany as a software developer.

### My Studies

Since I have a computer science background, data analytics and software development are the areas where I wanted to enhance my knowledge and competencies. In this program I got a unique combination of deep technical skills and business-oriented thinking.



Alexandra,  
28, Russia

### My international experience

To be honest, before coming to Münster, I did not participate in any exchange programs abroad. I chose Münster to gain international experience.

### Why Münster?

Münster is a very dynamic, student city. There are always some parties and social events going on.

### My life in Münster

During the week, I spend most of my time on campus either going to lectures or studying in the library. In the evening, I like to go dancing or practice sports.

# NETWORKED SOCIETY

In a networked society new technologies and services change industries and society, providing the ground for entirely new ideas like smart city solutions, autonomous cars, and other disruptive innovations.

## › TRACKS

### › Business Networks

This track introduces students to the complexity of networks of companies working together, especially in the context of interorganizational systems and security issues.

### › Logistics Production, and Retail

Due to rapid technological advancement, supply chains evolve to supply networks. Students get in-depth knowledge on the growing complexity in logistics, production, and retail processes.

### Why this particular program?

The program in Münster is one of the top programs in Germany. I liked the fact that I could choose different tracks and customize my education.

### My professional experience

Apart from guest speakers from industry, the program offers many opportunities to get involved in different projects on campus by becoming a student assistant.

### My Studies

I've chosen courses from Business Networks and Logistics, Production, and Retail because I find that they complement each other well. The former takes a theoretical approach to business issues, while the latter looks at things through a more practical oriented lens.



Lindsey  
24, USA

### My international experience

I enjoyed the opportunity to meet students from many different backgrounds, and guest lecturers come visit the department from all over the globe.

### Why Münster?

Münster is a vibrant student city offering all the amenities of a large city while still having a small-town feel. It is a great choice with a more relaxed atmosphere.

### My life in Münster

I live in a shared flat with other students and regularly make plans to go out and explore the city with friends.

### Whom are we looking for?

Our department researches and teaches on a wide range of current, socially relevant topics: Crisis Management, Electro Mobility, Propaganda Detection, Mobile Computing, Sustainable Smarter Work, and Big Data Integration feature prominently in research and teaching.

We seek applicants that can contribute to and benefit from such a rich multi-disciplinary environment:

### GLOBAL MINDSET

You look forward to studying in an international, multi-cultural environment. Of course, English will be your language of choice in class and in the many group activities.

### CRITICAL THINKER

You challenge conventional wisdom. You cannot help but want to make this world a better place.

### INQUISITIVE NATURE

For you, education is more than just learning facts. You want to push boundaries and advance academic discussions.

### IT ENTHUSIAST

New technologies excite you. You cannot resist the urge to try things out. You do not stop until you see the first “hello world” on the screen.

### Our Requirements

#### › BACHELOR DEGREE

(min. 3 years or six semesters at intersection of IT and Economics)

#### › CERTIFICATE OF ENGLISH LANGUAGE PROFICIENCY

(C1 acc. to CEFR)

#### › BASIC KNOWLEDGE IN:

##### › INFORMATION SYSTEMS

(i.e. data modeling, eBusiness)

##### › COMPUTER SCIENCE

(i.e. programming, algorithms)

##### › BUSINESS ADMINISTRATION

(i.e. accounting, marketing)

##### › QUANTITATIVE METHODS

(i.e. operations research, statistics)

### Admission Process





## International Experience

The Department of Information Systems provides you with many opportunities to spend part of your studies abroad. You can benefit from well-established partnerships with more than 100 distinguished academic institutions world-wide. As we have exchange agreements with most of them, doing a semester abroad is easy. In addition, there is also the opportunity to write your Bachelor's or Master's thesis abroad at some of our partner universities.

In Münster, internationality can be seen through international students, courses led by international guest lecturers, or joint courses with different universities within the European Research Center for Information Systems (ERCIS), an international research network with its headquarters in Münster. For several years, we have also offered a "virtual seminar", where students from different universities world-wide, work together and e.g. write a scientific paper, completely as a virtual, international team.

## THESIS ABROAD

Writing your thesis in e.g. Australia or the USA sounds good to you? This is easily possible within the Master program in Münster.

## JOINT TEACHING

Together with other universities we offer joint seminars or lectures, either classes in Münster, at the other universities or as virtual seminars.

## INTERNSHIPS ABROAD

If you are interested in an internship abroad, the Career Development Center (CDC) offers support and gives helpful advice on the whole application process.

## INTERNATIONAL STAFF AND STUDENTS

We regularly welcome guest researchers and guest lecturers from all over the world. As our Master program is fully taught in English, it attracts students from many different countries.

## Our International Partners

- › **Australia** (University of Melbourne, Queensland University of Technology, University of Sydney, Griffith University)
- › **China** (Dalian University of Technology)
- › **Czech Republic** (Masaryk University)
- › **Denmark** (Aarhus School of Business/Campus Herning)
- › **Finland** (Turku School of Economics and Business Administration)
- › **Hungaria** (Corvinus University Budapest)
- › **Iceland** (Reykjavik University)
- › **India** (IIM Ahmedabad, IIM Calcutta)
- › **Italy** (Università degli Studi di Trento)
- › **Liechtenstein** (University of Liechtenstein)
- › **Lithuania** (Kaunas University of Technology)
- › **Netherlands** (University of Twente)
- › **Norway** (University of Agder)
- › **Russia** (St. Petersburg State Polytechnical University, Higher School of Economics/Moscow, St. Petersburg State University of Economics and Finance)
- › **South Korea** (UNIST Ulsan, Seoul National University/Graduate School of International Studies)
- › **Spain** (Universidad Politécnica de Madrid)
- › **Sweden** (Karlstad University)
- › **Switzerland** (Universität Zurich)
- › **Taiwan** (Tunghai University)
- › **Turkey** (Marmara University)
- › **USA** (American University/Washington, California State University/Fresno)



In addition the School maintains over 80 partnerships with a focus on Business Administration and Economics.

## International Relations Center

Olga Lunina, M. A.  
Telefon: +49 251 83-22784  
eMail: [Olga.Lunina@wiwi.uni-muenster.de](mailto:Olga.Lunina@wiwi.uni-muenster.de)  
[www.wiwi.uni-muenster.de/fakultaet/international](http://www.wiwi.uni-muenster.de/fakultaet/international)

## Professional Experience

Our program offers students constant exposure to practice. Already in their studies we offer students the possibility to get to know different companies from a range of different industries. This opens up new opportunities for a future career.

In addition, the School's Career Development Center (CDC) is your point of contact to help you start your career. Its services range from organizing trainings and checking your application documents, to establishing contact with future

employers. Once a year the CDC hosts a career fair exclusively for Münster students. A unique chance to have a more personal interaction with interesting companies.

## Career Development Center

Jana Mattern, M. Sc. | Tel.: +49 251 83-22913  
eMail: [Jana.Mattern@wiwi.uni-muenster.de](mailto:Jana.Mattern@wiwi.uni-muenster.de)  
[www.wiwi.uni-muenster.de](http://www.wiwi.uni-muenster.de)

## PRACTICE-BASED TEACHING

We cherish a steady input from industry in our teaching. Guest lectures, excursions as well as joint problem-solving in our project seminars are but a few examples of how students can benefit from our contacts.

## WINet

The WINet, our alumni network, organizes for its student members seminars and workshops with companies. It serves as an additional gateway to business contacts. Thus, being a member pays off long before you become an alumni.

## ERCIS ADVISORY BOARD

The ERCIS advisory board is a consortium of companies, working with us on a regular basis in research and teaching. Oftentimes new ideas for student projects (i.e. Theses, project seminars) are born out of this cooperation.

## ERCIS LAUNCHPAD

The ERCIS Launchpad is our own competition for start-ups. Students and young entrepreneurs present their ideas for new IT-based products and services, expand their network, and secure funding.

## One program – different careers

While many of our graduates aspire for jobs in consulting and technical positions, there are various other career opportunities that may interest you:



Jan Betzing, M.Sc.,  
Research Assistant,  
Board Member of the WINet

### Jan Betzing – pursuing his PhD in Münster

“The Master of Information Systems program in Münster was a valuable part of my career path. I received deep insights into the research being conducted at the Department of Information Systems as the teaching often reflects the latest research results. This led me to the decision to stay after graduation and work as a research assistant. Apart from working on my Ph.D. thesis, I also enjoy being a board member of our alumni network WINet. We support our Bachelor and Master students with workshops, financial aid, contacts with our alumni, and pave their ways to a good start in the job market.”



Stephan Freitag,  
Founder and Manager  
of stressfrei UG

### Stephan Freitag – start-up made in Münster

“The Master of Information Systems at the University of Münster was a very important time of my life. First of all I got detailed insights into IT processes and was able to establish an interdisciplinary understanding, but most importantly, because I was able to connect with many other professionals and also met David Schuffla the Co-Founder of our business stressfrei. During this time we came up with the idea of starting our own business. The program allowed me to satisfy all my needs and wishes by giving me the freedom to compose my own, specific curriculum. The skills I have learned during my Masters were necessary and extremely helpful in the process of starting and leading our business stressfrei.”

## University of Münster

The “Westfälische Wilhelms-Universität (WWU) Münster” was founded in 1780 and is one of the largest and long-standing universities in Germany. Münster University is committed to offering excellent research opportunities, high-quality teaching and strong support to its junior researchers. With close regional ties and a cosmopolitan attitude, WWU promotes international exchange, interdisciplinary cooperation, and knowledge transfer in the professional and public sectors.

Some 44,000 students and 5,600 academics from Germany and around the world appreciate the University’s extensive range of courses and diverse research profile. The teaching offered by its 15 Schools comprises over 280 courses in 120 subjects from practically every field of the Humanities, Social Sciences, Medicine and Natural Sciences. International and interdisciplinary cooperations are a prerequisite for top-level research and innovation and are embedded in the University’s overall strategy.

However, there is more to student life than just lectures and research. Students in Münster enjoy a variety of extra-curricular activities. At the Münster School of Business and Economics, we have our annual soccer tournament, where students, lectures, alumni and professors fight for the trophy. In addition, we host one of the biggest music festivals on campus, organized by students for students. Apart from that, a student initiative, Symposium Oeconomicum, organizes an annual economic conference for students to connect theory and practice.



## Central Services

### Student Admissions Office / Studierendensekretariat

For specific questions about the application, admission and enrolment you can contact the Student Admissions Office.

Tel.: +49 251 83-20001

eMail: [masterbuero@uni-muenster.de](mailto:masterbuero@uni-muenster.de)

Web: <http://go.wwu.de/7zrjw>

### International Office

The International Office advises students who are planning a stay abroad or, vice-versa, would like to stay at Münster University.

Tel.: +49 251 83-22254

eMail: [study@wwu.de](mailto:study@wwu.de)

Web: <http://go.wwu.de/tfizu> &

<http://go.wwu.de/getreadynow>

### Language Centre / Sprachenzentrum

The Language Centre offers a wide range of language courses.

eMail: [spzmail@wwu.de](mailto:spzmail@wwu.de)

Web: <http://go.wwu.de/17psv>

### University Sports / Hochschulsport

The wide range of sporting activities offered by the university is a visible symbol of the countless opportunities for leisure activities to be found at WWU.

Tel.: +49 251 83-38390

eMail: [hochschulsport@uni-muenster.de](mailto:hochschulsport@uni-muenster.de)

Web: <http://go.wwu.de/d96lf>



## Münster ...



### ... is young

Every 5<sup>th</sup> person you meet on the street is a student of one of the 9 different schools of higher education located here. Over 60% of its population is younger than 50. Münster is one of the fastest growing cities in Germany.

### ... is Germany's capital of cycling

You will live in a city that has twice as many bicycles as inhabitants. Together they account for more than 100,000 bike rides a day.

### ... is well-located

In a train ride of under 3 hours you can reach Berlin, Cologne, Hamburg, and Amsterdam. A few hours more and you'd arrive in Paris or Munich. The city is a perfect gateway to Germany and other parts of Europe.

### ... has Culture

27 museums and exhibition halls, public and private theatres, and three cinemas offer everything from opera to blockbuster movies.

### ... is international

Münster is home to people of more than 160 different nationalities. Our university hosts more than 3,300 international students.



*„In Münster I had the special opportunity to encounter a remarkable piece of history and take part in it.“*

*Henry Kissinger, former US Secretary of State*

### ... has a long history

Looking back over 1,200 years of history, Münster has a rich heritage to explore: It was a member of the powerful Hanseatic league. In 1648 the Westfalian Peace Treaty was signed in Münster, ending the Thirty Years' War. After World War II about 90% of Münster's historic center was destroyed and needed to be rebuilt.

## Study Coordination



**Dr. Stefan Schellhammer**  
Study Coordinator

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WWU Münster



**LOOKING FORWARD  
TO MEETING YOU  
IN MÜNSTER**



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