

## AIS Collection of IS Institutions and Educational Resources

Institution Name	College/School	Department
University of Münster	School of Business & Economics	Department of Information Systems
Country	AIS Region	Full Postal Address
Germany	Region 2: Europe, Africa, The Middle East	Leonardo Campus 3, Department of Information Systems Münster, North Rhine-Westphalia, 48149 Germany
Web Link:	Contact	
<a href="https://www.wi.uni-muenster.de/">https://www.wi.uni-muenster.de/</a>	Lena Clever  info.master@wi.uni-muenster.de	

### Institution Summary

The University of Münster was founded in 1780 and is now one of the largest universities in Germany. Around 45,700 students and 5,300 academics appreciate the University's excellent research opportunities, high-quality teaching, promotion of junior researchers, and the advantages of living in the "college town" of Münster. The department of Information Systems is part of the School of Business and Economics (SBE) which is the largest of 15 Schools at the University of Münster. The SBE has been accredited by the Association to Advanced Collegiate Schools of Business (AACSB) for its quality-oriented and international standards – an accreditation that has been awarded to only about 5% of all business schools worldwide. The School's research inspires and substantiates the education of tomorrow's business leaders pursuing careers in academia or practice. In the spirit of engaged scholarship, the School is committed to transfer of knowledge into practice and society at large. Therefore, it is involved in REACH EUREGIO, the Start-up Center of the University of Münster, for example, and supports students and young researchers in realizing their start-up ideas.

The Department of Information Systems at the University Münster is one of the biggest and most prestigious Information Systems departments in Germany. Periodic national rankings attest to its excellent reputation. The aim of the Department is to offer a broad business and IT education with an international focus. With its 12 professors, 13 postdoctoral researchers and about 50 doctoral candidates, the Department of Information Systems at the University Münster covers the wide range of information systems research. It maintains close ties with colleagues in Business Administration and Computer Science.

Furthermore, the Department of Information Systems is the headquarters of the European Research Center for Information Systems (ERCIS), a network of about 30 Information Systems Institutions and about 15 renowned researchers as personal members, mainly from Europe and beyond. Within this vibrant network, ERCIS is closely collaborating with associated partners from business.

## **Programs and Courses Summary**

As part of the School of Business and Economics, the Department of Information Systems offers a first-class portfolio with an undergraduate Bachelor's (Bachelor of Science) degree program in Information Systems, and a consecutive Master's degree (Master of Science) program. Each program covers the diverse topics of information systems and offers students a comprehensive basic education as well as the opportunity for individual specialization. In addition, the Institute of Information Systems offers the Erasmus Mundus Master of Science in Public Sector Innovation and eGovernance (PIONEER), a unique programme delivering experts for the future public sector who combine knowledge in public administration and public management on the one hand, and information systems and eGovernance on the other hand.

Information Systems Programs

Program Name	Bachelor of Science in Information Systems	Master of Science Information Systems	ERASMUS Mundus Master of Science in Public Sector Innovation and E-Governance (PIONEER)
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Program Description

The Bachelor's program in information systems with a Bachelor of Science degree conveys not only the content of traditional economics and computer science, but the core content of information systems. Graduates are enabled to evaluate and appropriately design the use of information technology in companies and administrations in a professional manner. With this, the course is e.g., professional qualification for management consultancies that support their client companies with the use of information technology, for manufacturers of business standard software, or industry-specific software, e.g., in the areas of trade, banking and insurance.

Since information technology is subject to rapid change, the program on the one hand put foundational concepts in the foreground and on the other hand lay the foundations for lifelong learning and thus give graduates the opportunity to familiarize themselves quickly and competently with them in technical innovations. The curriculum therefore includes basic courses from the fields of business administration, computer science, quantitative methods and business informatics, as well as the opportunity to learn more in-depth content through selected chapters, seminars and practical courses.

Specifically, students learn about business processes, information and communication technology in relation to the software as well as the hardware, statistics, digital business, IT-driven innovation, as well as data management, ethics and IT-law. To prepare students for the international character and job market of their subject, some of the courses in the bachelor's program are offered in English.

The bachelor's degree in information systems in Münster is based on the framework of recommendations for bachelor's degree programs in information systems, as formulated by the German Chapter of the ACM (Gesellschaft für Informatik e.V.). It thus offers the basis for consecutive master's courses in information systems and the English-language master's course Information Systems in Münster.

The English-language master's program Information Systems with the Master of Science degree combines the strengths of Münster's information systems training by combining the core content of information systems in an internationally oriented research environment through the European Research Center for Information Systems (ERCIS).

The program provides both technical (data science, IT security, application development) and economic (business models and strategies) in-depth knowledge for a digital economy. As a consecutive course, the master's degree builds on the teaching content of the bachelor's degree to deepen and expand it at a higher level. In this way, the students not only expand their knowledge base, but also improve their problem-solving skills and communication skills in a foreign-language learning environment. The increased level of demand is particularly accentuated by independent academic work and research.

The program is professional qualification for numerous areas. The program offers courses within the fields of economics, computer science - and mathematical-quantitative methods. Due to the structure of the program, there are extensive options for students to develop their own, individualized profiles to recommend themselves for certain positions or areas in companies. Within the program, students can choose a focus, but due to the high proportion of elective courses, they are also free to design their individual program. The diverse specialization options have been recognized as one of the strengths and specifics of the information systems curriculum in Münster. In addition, students can immerse themselves in current topics of research and practice via the seminars and the project seminars. These courses offer an easy introduction to academic work

The Erasmus Mundus Master of Science in Public Sector Innovation and E-Governance (PIONEER) is a joint master's program, totaling 120 ECTS credits, organized by KU Leuven, the University of Münster, and Tallinn University of Technology.

This Master's program is founded on the principle that the public sector requires interdisciplinary expertise to fully harness the potential of information and communication technology (ICT) and technological innovations. In an era where ICT plays a crucial role in the modernization and innovation of the public sector, there is a need for experts who can (1) translate technological proficiency into efficiency, effectiveness, performance, and user needs, and (2) consider the organizational, cultural, social, and structural nuances of the public sector when implementing new technologies.

Consequently, interdisciplinary education has become imperative, and this is the core focus of PIONEER. PIONEER aims to equip students with specialized competencies related to public sector innovation and the role of ICT and technological advancements in the innovation process. This interdisciplinary and international program seamlessly integrates academic expertise with insights derived from professional cases and national experiences. The program operates on three key principles: the provision of on-site expertise, allowing students to learn and draw from local

		<p>and can pave the way for an academic career.</p> <p>The aim of the Master's degree in information systems is job-related training that enables graduates to work on the user side as well as on the development side or in an intermediary role in the field of corporate information processing. Business IT specialists work, for example, as information managers, systems analysts, IT organizers, software developers or database specialists. They are increasingly in demand in operational functional areas such as marketing, production, accounting, or materials management. Another focus of possible employment is business consulting.</p> <p>In addition to the diverse job entry opportunities in the economy, the degree enables graduates for a career in research and teaching. The Master of Science in Information Systems qualifies for admission to the doctoral program.</p>	<p>contexts at three different locations; a balanced curriculum that combines academic knowledge with professional expertise; and an emphasis on interdisciplinarity, affording students the opportunity to integrate diverse theoretical frameworks, competencies, and skills into a comprehensive set that is essential for the future public sector.</p>
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Level	BA	MA	MA
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Teaching Mode	On campus	On campus	On campus
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Semester duration of program	6	4	1
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Learning objectives	<p>Graduate students can understand and integrate the four main areas of information systems, "information systems", "computer science", "quantitative methods" and "business administration" with their different approaches and methods. Specifically, our Bachelor graduates are experts about concepts, theories, institutions, and trends in their respective field. Further, our Bachelor graduates can apply, analyze, and discuss a wide range of scientific methods, both theoretical, conceptual, and empirical, in their respective field.</p> <p>Graduates know how to present scientific research/insights and make valuable contributions to a debate in both academic and non-academic environments. This effective communication also includes listening to and understanding the perspective and needs of others, especially customers. Within seminar and project modules, students learn to</p>	<p>Graduates possess extensive proficiency in employing methods and tools systematically to comprehend and address challenges specific to their respective specializations. They are adept at delivering economically viable and technically feasible solutions.</p> <p>Our Master's graduates emerge as experts in their fields, demonstrating profound knowledge of concepts, theories, institutions, and emerging trends. They excel in contextualizing problems within a scientific framework and exhibit the ability to understand and critically evaluate relevant academic literature.</p> <p>These graduates demonstrate a mastery of applying,</p>	<p>Our graduates have an advanced understanding of and insight into the scientific disciplinary knowledge specific to public management, administration and eGovernance and how ICT can be used in these domains. They have specialized knowledge in public administration processes and will have developed analytical competencies and problem-solving strategies to improve organizational efficiency and effectiveness. Our graduates learned how to build rapid proof of concepts, how to reflect on their approaches and how to assess their ideas. They will be able to implement and define</p>
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present concepts and methods of information systems in writing as well as defend and convince your own ideas with coherent arguments. Students can work effectively with other team members or outsiders. By studying information systems, every graduate has developed an understanding of questions of moral, ethical, and social responsibility as well as the sustainability of economic activity. Our graduates can scientifically assess the effects of digitization on companies and society and identify initial options for action. The students have learned to consider the ethical and the social dimension when developing technical solutions.

analyzing, and discussing a diverse array of scientific methods, encompassing both theoretical and empirical approaches within their specialized domains.

Moreover, our Master's graduates are skilled presenters of scientific research, capable of making meaningful contributions to academic and non-academic discussions. They are responsible and informed citizens who recognize the societal implications of economic and business-related decision-making. Their ability to identify, analyze, and discuss social dilemmas and ethical tradeoffs underscores their commitment to ethical considerations in their professional endeavors.

new methods and techniques for the benefit of the public sector. They have a profound level of methodological and research skills to start a PhD in the domains of public management, information systems administration and eGovernance. Our graduates will be able to translate new techniques successfully given their profound knowledge of the public sector. They have excellent communication and project management skills and can work in different fields in terms of culture and work context. Our graduates have developed skills in writing professional and scientific documents in English. Our graduates can adequately consider ethical or sustainability issues in their research. They also know the rules of good scientific practice and how to correctly replicate knowledge of others in their own research. They can critically reflect the own findings in a general fashion.

Highlights of the program

As part of their studies, students can take part in exchange programs that allow them to spend study semesters at universities across the world. These include institutions across Europe, as well as in the USA, Australia, Brazil, Argentina, China, India, Japan, South Korea, Taiwan and South Africa. The partnerships offer an interesting educational curriculum within the framework of the Erasmus program. Within the interactive project seminar module, students can gain practical insights into the field of information systems. Furthermore, the program offers a wide range of seminars, allowing students to specialize and dive deeper into highly topical issues of practice and research. In addition, students can integrate a scientifically supervised internship into their studies.

The Master's program information systems, offers a broad range of customization options for students. Within the elective course area, students can choose modules from the complete curriculum and thus tailor their professional profile to their needs. In addition to courses from the institute of information systems, students are also free to take courses from the faculty of mathematics and computer science as well as business administration related courses from the school of business and economics of the University of Münster. In line with our Bachelor's program, students can take part in exchange programs that allow them to spend study semesters at universities across the world. These include institutions across Europe, as well as in the USA, Australia, Brazil, Argentina,

Experience our excellent research-based education in an international student group, providing all the opportunities for a rich learning experience. A specific focus is placed on the use of case studies; the emphasis is placed on how new problems in the field of public administration and public policy can be solved using (technological) innovations. Moreover, specific courses are built to help increasing international experience and interdisciplinary expertise. Added value is created by giving attention to the practical challenges of professionals in policy, administrative and consultative functions. Through close

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## Information Systems Courses

<b>Course Name</b>	Project Seminar
<b>Course Description</b>	<p>The "Project Seminar," is an integral component of both our Bachelor's and Master's programs. This specialized course is designed to provide students with a comprehensive educational experience, emphasizing not only academic knowledge but also fostering essential communication, presentation, and project management skills. The knowledge and methodologies acquired in previous courses find practical application in a project with a focus on real-world scenarios. These project seminars often take place in the context of a company. Students not only gain exciting insights into the company's processes, but also make valuable contacts. It is not uncommon for project seminars to lead to further activities in the context of practical graduate theses or working (student) positions.</p>
<b>Learning objectives</b>	<p>The Project Seminar places a strong emphasis on developing students' communication and presentation skills, ensuring they can articulate and convey their ideas with precision and effectiveness.</p> <p>A central focus of the course is the cultivation of project management competencies. Participants are equipped with the skills necessary to plan, organize, and execute projects proficiently, preparing them for the demands of professional environments.</p> <p>Notably, the Project Seminar provides students with an opportunity to explore and develop entrepreneurial ideas. The course serves as a platform for nurturing an entrepreneurial mindset and encourages the pursuit of innovative business concepts.</p> <p>An added advantage of the Project Seminar is a possible collaboration with the REACH Startup Center. Students can develop their business idea during their studies and receive support in cooperation with the REACH Startup Center. This partnership facilitates valuable guidance and support for students seeking to refine and implement their entrepreneurial ideas. The REACH Startup Center offers indispensable resources, including infrastructure and expertise, to assist students in transforming their entrepreneurial visions into tangible ventures.</p>
<b>Level</b>	
<b>Teaching Mode</b>	On campus