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INFORMATION SYSTEMS

DOUBLE QUALIFICATION IN BUSINESS STUDIES AND COMPUTER SCIENCE

Master of Science

Faculty of Management, Economics and Social Sciences
University of Cologne



UNIVERSITY OF COLOGNE

The Faculty of Management, Economics and Social Sciences

The **University of Cologne** is one of the oldest and most prestigious European universities. It has produced several Nobel and Leibniz Prize winners and is part of the only economic cluster of excellence in Germany. Founded in 1388, the University of Cologne is a leader in many disciplines and a member of many international networks as well as a founding member of the CEMS global alliance.

The **Faculty of Management, Economics and Social Sciences** (also known as "WiSo Faculty") is part of the University of Cologne and has over a century of experience in educating new generations of business professionals, economists, social analysts and political experts. As one of Germany's largest educational institutions, the WiSo Faculty regularly ranks among the top providers of management and business education.

As a student of the WiSo Faculty, you benefit from a teaching approach based on theory and methods in combination with research and applications.

The traditional diversity of subjects, top-level research, practical relevance and internationality allow the WiSo Faculty to stand up to national and international comparison and to achieve top positions in international research rankings. Through its interdisciplinary research approach, the Faculty's seminars and institutes make a major contribution to the excellent research at the University of Cologne.

The education provided at our Faculty has benefited from many years of experience in working with companies and visiting lecturers from different professional fields. Several faculty members are professionals and managers who bring important industry experience to the programmes, resulting in sector-specific, up-to-date programme content for our students. True to our motto "Today's ideas. Tomorrow's impact.", this ensures that our interdisciplinary programme reflects the real world and ideally combines practice and theory, while also promoting knowledge sharing.

Global markets have fundamentally changed the situation of economic and political action. It will only be possible to meet the global challenge of society through a change in attitudes and organisations. To achieve this, however, the underlying global interrelationships must be investigated, understood, and considered by decision makers.

By pursuing a degree through this programme at the WiSo Faculty, you will deal intensively with related core issues such as digital transformation, digital innovation, data analytics, technology solutions for a sustainable society, information management, integrated information systems, systems engineering, and IT-enabled innovative products, processes and business models. The programme enables you to become an information systems specialist with a highly sought-after double qualification rooted in business studies and computer science. Making it the ideal basis for a leading role as an expert within the field.



"Our study programmes in Information Systems offer both theory and methods for dealing with key issues such as big data, digital transformation, and innovation in IT products, processes and business models. Our students will not only gain an understanding of these issues but also develop the skills to find and shape business solutions."

Prof. Dr. Detlef Schoder, Director Cologne Institute for Information Systems (CIIS) and Academic Director of the M.Sc. Information Systems

FACTS AND FIGURES ABOUT THE WISO-FACULTY

Studies at the WiSo Faculty of Cologne University help to establish an excellent basis for your further professional and personal career paths. With nearly 8,000 students and a host of departments and academic staff, the WiSo Faculty is one of the largest and most renowned schools of management, economics and social sciences in Europe.

- ▶ **7,901** national and international students
- ▶ **149** partner universities worldwide*
- ▶ **91** professors
- ▶ More than **200** research and teaching assistants

Enrolling in a programme at the WiSo Faculty will give you everything you need to take the next step in furthering your career. One of Germany's most prestigious educational institutions, the school regularly ranks among the top providers of management and business education. The following is an overview of current rankings:

1st	In the current Academic Ranking of World Universities ("Shanghai Ranking") by Subject, the University of Cologne ranks first in the national evaluation for "Management", "Business Administration" and "Sociology", as it did last year.	2nd	According to the WirtschaftsWoche research ranking, the University of Cologne is one of the most research-intensive German-speaking universities. In business administration, it ranks second within Germany.
1st	The Supply Chain Management (SCM) Journal List Ranking places the University of Cologne in first place in Germany.	3rd	According to the WirtschaftsWoche personnel ranking, which asks HR managers in German companies which universities train students best for their needs, the University of Cologne is currently in third place.
1st	In the AIS 8 Information Systems Ranking in the field of Business Information Systems, the University of Cologne is top of the list in Germany.	3rd	Prof. Dr. Erik Hornung is the third best researcher at a German university in the Handelsblatt economist ranking "Researchers under 40 (overall research performance)".

As of Jan 22

* The WiSo Faculty maintains excellent partnerships with 149 leading institutions of higher education across the world on different levels of study, enabling its students to spend time abroad within a range of study and exchange programmes. Students can choose from an attractive range of partner universities, depending on their chosen path of study.

INFOMATION SYSTEMS (M.SC.)

Key Facts



Degree:
Master of Science



Duration:
4 Semesters



Language:
English and
German



Credits:
120 ECTS



Content:
Interdisciplinary discipline of business studies and computer science, which deals with the conception, development, and application of information systems in business, administration and increasingly in our private lives




International:
1 Optional Semester Abroad

This programme provides you with:

- theoretical and methodological basis for dealing with key issues such as data science, digital transformation and innovation, processes and business models as well as solutions for a sustainable society.
- education in the interdisciplinary field of information systems, which has its roots in computer science, economics, and business management.
- the key capability to bridge business management and computer science that is often required in the labour market.

This programme is right for you if you:

- have a bachelor degree in computer science, information systems, economics, business administration or related areas.
- provide technical skills related to mathematics and statistics, computer science, especially programming and coding.
- are interested to study in an international and intercultural environment.
- work as a team player, because working in groups is often practiced in seminars and is an important key factor for later work in companies.
- are ready to take the next step in your career as a broad-based information systems specialist in the corporate world.

A close-up portrait of a young man with short brown hair, wearing a dark blue polo shirt with white stripes on the collar and sleeves. He is looking slightly to the right of the camera with a neutral expression. The background is a blurred green, suggesting an outdoor setting with trees.

"The study of information system is characterised by a huge interdisciplinarity throughout economics, management, and information systems. What this programme makes unique is the combination between these two fields."

Patrick,
Student of Master Information Systems at the WiSo-Faculty

PROGRAMME OVERVIEW

Preparing you for future challenges

The programme is hosted by the Cologne Institute for Information Systems (CIIS). Members of the CIIS and the CIIS on an institutional level have achieved remarkable recognitions in most recent ranking surveys; e.g., according to WirtschaftsWoche (WIWO) Ranking, a leading German business magazine, professors Wolf Ketter, Christoph Rosenkranz, and Detlef Schoder all rank among the top 5 % of all business researchers in German-speaking countries. In addition, the CIIS is one of the best ranked information systems research institutions worldwide according to the recently released 2021 ranking by the Association of Information Systems (top 50 worldwide, top 10 in Europe and 2nd in Germany).

The CIIS is formed by the research teams at the chairs for:

- Digital Transformation and Analytics
- Information Systems and Information Management
- Information Systems and Integrated Information Systems
- Information Systems and Systems Development
- Information Systems for Sustainable Society

Through your direct contact with the institute's professors, you will receive an excellent education, as professors in the CIIS rank among the top scholars within their fields. Many of our graduates have developed business contacts even before completing their studies.

For detailed information please go to ciis.uni-koeln.de

Link to the practical world

Our faculty has benefited from many years of experience working with companies and with visiting lecturers from a variety of professional fields. These professionals and managers bring highly relevant industry experience to the programme, resulting in sector-specific, up-to-date programme content that combines practice and theory and reflects the real world.



CURRICULUM

<p style="text-align: center;">Core Section</p> <ul style="list-style-type: none"> ■ Information Systems I ■ Information Systems II ■ Digital Transformation <p style="text-align: center;">18 ECTS</p>	
<p>Specialisation Section 48 ECTS</p>	<p>(Choice of 1) Supplementary Section 24 ECTS</p>
<p>Information Systems 18 ECTS</p>	Accounting and Taxation
	Corporate Development
	Finance
	Marketing
<p>Computer Science 18 ECTS</p>	Supply Chain Management
	Economics
	Media & Technology Management
	Political Science
<p>Seminars 12 ECTS</p>	Sociology
	Tax Law
	Economic Psychology
	Optional Semester abroad
<p>Master Thesis 30 ECTS</p>	

From basic knowledge to your personal expert know-how

- Within this programme, the **Core Section** covers the theoretical and methodological basis. You can select between two major groups by choosing the modules *Information Systems I & II and Digital Transformation* or *Information Systems and Environmental Sustainability, Analytics and Applications, and Digital Transformation and Innovation*.
- The **Specialisation Section** teaches major-specific basics and, in addition, advanced skills within the same area. While Computer Science is compulsory, you can also choose another from three areas.
- The **Supplementary Section** serves as an additional section for developing a more specific profile—either by deepening and specialising or by diversifying knowledge. According to our interdisciplinary approach further modules from business administration as well as from social sciences or economics are available to students.
- With the **Master's Thesis** required for the successful completion of your studies, you underline the knowledge and skills you have personally acquired throughout the programme and are ready to continue your career as an expert in your field.

INTERNATIONAL

International Orientation

As Information Systems is an international and interdisciplinary subject, an open and international mind is required; courses are taught and literature is almost exclusively in English.

Students from numerous countries apply for admission to our Master of Science in Information Systems programme, so you can be sure of an international and intercultural work and study environment. For instance, within our Advanced Seminar Information Systems, you can choose a course in collaboration with students from several countries as China, Norway, Finland, the U.S., etc. and work on international projects.

Optional semester abroad

Our cooperation agreements with an extensive number of excellent partner universities worldwide provide you with attractive options for your term abroad. In addition, you may enrich your studies through our short programmes in New York and Hong Kong or through a summer school. For more information, offers and advice please contact our International Relations Center (ZIB WiSo).

Broad international network

This internationally-focused master's programme prepares you with its balanced theory and practice approach to start your career in international-related jobs and enables you to work for internationalised companies.

Additionally, the WiSo Faculty has a broad Alumni network of former students who work across all business segments around the globe.



CAREER OPPORTUNITIES

As a graduate in the interdisciplinary field of information systems, you will find attractive positions that call for your skills as a broad-based specialist. Many of our graduates have developed good business contacts even before completing their studies. Because of their broad-based, specialised education, you as a graduate will be able to work in any field and in any position related to IT and economics, including IT consultancies.

Exemplary job opportunities are:

- IS Project Management and Systems Engineering
- Data Analytics and Data Science
- Digital Transformation and Innovation
- Green IS, Smart Energy and Sustainability
- Trainee Programmes
- Consulting
- Academic Research
- Start-ups and Entrepreneurs

Some of our graduates choose to specialise further and work as, for instance, data analysts, data scientists, or entrepreneurs. Our leading partners in industry, ranging from large insurance companies to mid-sized software-development companies, value our graduates as they are ready for action. Our graduates are also involved in start-ups, so if you are interested in setting up your own enterprise, you can count on the university's support.

For all those who are interested in academic research after finishing their master studies, the CIIS and the University of Cologne Graduate School (CGS) provides students with competitive master results the possibility for a postgraduate programme (Ph.D.).

At the same time, the M.Sc. degree is, of course, an excellent base for applying for graduate degree programmes at other national and international universities.

"Professors were always happy to provide feedback and offered their support when needed. During my studies, I could see how elements such as coursework, research, and impact worked together to guide my personal development and to improve the overall experience of the students."

Prof. Dr. Julian Lehmann, Assistant Professor of Digital Innovation and Entrepreneurship at KIN Center for Digital Innovation and Alumnus of the Faculty of Management, Economics and Social Sciences, University of Cologne



COLOGNE

An open minded and science-centred city!

Cologne is located within a metropolitan area of about 13 million people in the heart of Germany's economy which makes it easy for students and faculty to collaborate with great companies. It is one of Germany's most attractive locations and offers a vibrant student life.

With around 103,000 students and a lively start-up culture, Cologne is the economic and scientific centre of the Rhineland region. In addition to 17 universities and business schools, the area is also home to numerous internationally renowned research institutions as ESA European Space Agency or Gesis – Leibniz Institute for Social Sciences, with knowledge transfer to industry and society playing a key role. Successful transfer structures include the university's Excellence Start-Up Center GATEWAY start-up service, the start-up network cologne e.V. and the Digital Hub Cologne.

Cologne is also proud of its reputation as a vibrant and tolerant city and at the same time being both multicultural – with almost 25 % non-German citizens from 183 different nations – and strong in its local identity. Karneval, Cologne's famous carnival season every February, and the popular local beer "Kölsch", brewed exclusively in Cologne, are only two examples of the vivid cultivation of the city's traditions.

- ▶ Over **1 million** inhabitants in the city of Cologne
- ▶ **13 million** inhabitants in the metropolitan area of Cologne
- ▶ More than **100,000** students in Cologne
- ▶ Over **one third** of Cologne's total area is covered by public parks, sports grounds and nature areas
- ▶ **1** famous Gothic cathedral, the "Kölner Dom"
- ▶ **Unlimited** opportunities to fall in love with the city

Official Cologne Facts & Figures 2019 by City of Cologne



Liebe deine Stadt



INFORMATION

Online Application:



Application information and requirements

Application process and deadline:

- Applicants with a German bachelor degree apply via KLIPS
- Applicants with a non-German bachelor degree apply with their VPD document issued by uni-assist via KLIPS
- Application deadline is **June 15th**

Requirements and selection procedure:

A Bachelor degree or equivalent in the respective field (worth at least 180 ECTS credits).

Applicants must meet the following requirements:

- At least 20 ECTS credits in Information Systems
- At least 30 ECTS credits in Business Administration and/or Economics
- At least 30 ECTS credits in Informatics and/or Mathematics and/or Statistics
- English language skills level B2 CEFR
- German language skills level C1 CEFR

The Admissions Board will communicate its decision by the end of July. Enrolment usually takes place in August.

Detailed information and contact

We are happy to support you in your ambitions: for students the WiSo Student Service Point offers not only advice on studying but also support on all aspects of career choice, career planning and the application process:



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WiSo Student Service Point
Phone: +49 (0) 221/470-8818
wiso-studentservice.uni-koeln.de





"Being one of the worldwide largest Faculties of Business, Economics, and Social Sciences, we bring together excellent researchers, students, alumni, and organizations in a friendly and stimulating environment to jointly address today's grand challenges. Our Faculty is part of an outstanding network of universities and cooperates with leading organizations. This leads into a great reputation in teaching, research and transfer activities, which is reflected in excellent rankings."

Prof. Ulrich W. Thonemann, PhD
Dean



Today's ideas.
Tomorrow's impact.

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PRME

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