



JACOBS  
UNIVERSITY



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# GET READY FOR YOUR FUTURE

STUDY PROGRAMS



**TOP  
RANKING**

### JACOBS UNIVERSITY HAS ACHIEVED TOP RANKINGS IN:

- Times Higher Education World University Rankings 2019: top 300
- Germany's most comprehensive and detailed university ranking by the Center for Higher Education (CHE) since 2005
- International U-Multirank since 2014

## WELCOME TO JACOBS UNIVERSITY

### — YOUR FUTURE STARTS HERE

Located in northern Germany, Jacobs University is **one of the country's most international universities**, characterized by a truly intercultural and close-knit community of students and faculty.

Founded in 2001 as a private English-speaking university, Jacobs attracts highly talented and open-minded students from all over the world, with **more than 1,450 students from over 100 countries** currently living on our residential campus.

### — WELL-ROUNDED EDUCATION

An **interdisciplinary approach** is one of the core elements of a Jacobs University education. Study modules cover various aspects of academic fields, reflecting the

complex nature of interconnected topics and global challenges.

Students are introduced to numerous methodologies and are encouraged to apply a problem-based approach and a **global perspective** to their work.

### — INDIVIDUAL SUPPORT

Instructors support student learning in **small classes** where they can share the latest findings in their academic fields, and by responding to students' particular needs through **personalized academic advising**.

### — RESEARCH EXPERIENCE

The university's research-oriented approach engages students in the research process at an early stage in their academic career, while providing them access to modern facilities and **state-of-the-art technology**.



# ACCOMMODATION

## YOUR HOME AWAY FROM HOME

Jacobs University is a residential university, which means students do not only study on campus but also live and learn in a social setting. Our residential colleges are comprised of two-bedroom apartments that include two private, fully furnished rooms and a shared bathroom. Each college has its own study areas, group meeting rooms, and a recreational lounge as well as its own cafeteria, where students enjoy international cuisine together.



## EVERYTHING WITHIN EASY REACH

The colleges are close to the lecture halls and research laboratories, the gym and the indoor rowing tank, the dance room, the Interfaith House, the cinema, the music studio and the theater space. Outdoor and indoor playing fields allow students to engage in all kinds of sports activities, including soccer, basketball, volleyball, cricket, frisbee, and cheerleading to name a few.



## A PLACE TO LIVE, LEARN, AND GROW

At Jacobs University, we are committed to making our campus and the colleges a comfortable and happy “home away from home”. Dedicated resident mentors, who live on campus with their own families, support students in everyday life and create a familiar atmosphere. Every student has an academic advisor who ensures that they receive the best support possible when it comes to academic challenges.



## HOST FAMILY PROGRAM

Jacobs University’s Host Family Program also helps international students feel at home. Every new student has the opportunity to sign up for this great program and be paired with a host family which provides support to adapt to the culture and life in Bremen.



## CAMPUS LIFE

Jacobs University offers many social and cultural activities for students outside of the classroom. The variety of student-driven events during the year such as cultural festivals like the Deepavali Festival of Lights or Lunar New Year, and educational events like Country Information Days, are the hallmarks of our vibrant campus community.

Many student clubs ranging from arts to sports and community groups provide further opportunities to foster our students' development of interpersonal and intercultural competencies and to make new friends from all over the world.

Every day is different at Jacobs University, with countless events on offer to explore cultural diversity and strengthen mutual understanding between our campus and the local community.



## COMMUNITY

Diversity is at the heart of the Jacobs community. Student clubs and societies engage in social, political, academic, and entrepreneurial activities, such as the Amnesty International Club, the Logistics Chain Club, and the Rotaract Club. During annual events such as the Jacobs Startup Competition, the innovation conference TEDx, Jacobs Hacks, and the Bremen International Model United Nations, Jacobs students actively showcase their ideas to university students from around the globe.



## SPORTS

Sports activities are organized into recreational clubs that are 'just for fun', or official university teams that compete in local leagues as well as in national and international tournaments. The most spirited events, however, are on campus, namely the intercollegiate sports competition referred to as Jacobs Games, and the Intercontinental Football Tournament.



## ARTS

The art scene is a vibrant part of student life at Jacobs University. Visual arts are catered for with the Art Club hosting exhibitions such as the Art Fest with live performances and interactive showcases. Musical and performing arts have a large presence on campus too. J-Capella, the university choir group, puts together annual shows, as well as the student-organized music event Piano to Forte, the Oriental Dance show, Dancedstoned, and the Spotlight talent show.



JACOBS CAMPUS TOUR<sup>3</sup> – TAKE A VIRTUAL TOUR VIA:

[WWW.JACOBS-UNIVERSITY.DE/CAMPUSTOUR](http://WWW.JACOBS-UNIVERSITY.DE/CAMPUSTOUR)

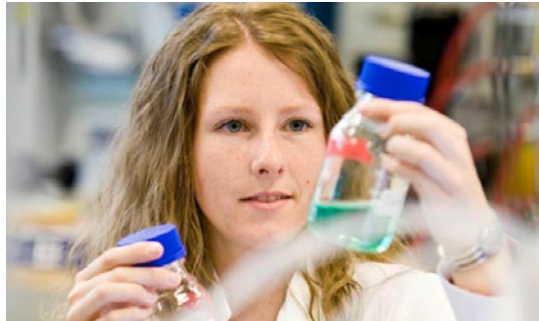
## CAREER OPPORTUNITIES

The educational concept at Jacobs University aims at fostering employability, including the development of skills, capacities, and competencies that go beyond disciplinary knowledge.

### CAREER SERVICE CENTER

The Jacobs University Career Services Center accompanies students through all stages of their career development in order to enable them to become responsible leaders of tomorrow. Services include individual counseling, support with applications, and mock interviews as well as an internship program, professional skills seminars and workshops.

Events such as the annual Career Fair, and the Homecoming Career Symposium offer networking opportunities to students by bringing global, national, and local companies and institutions to Jacobs University. In addition, multinational players such as



Facebook, Microsoft, AB InBev, EON, McKinsey, Accenture, and Roche conduct special recruiting events directly on campus.

### SUCCESS AFTER JACOBS

Graduates of Jacobs University follow a variety of professional and academic career paths all over the world. Our alumni are working in fields such as IT and telecommunications, consulting, higher education, research, finance, engineering, logistics, or health.

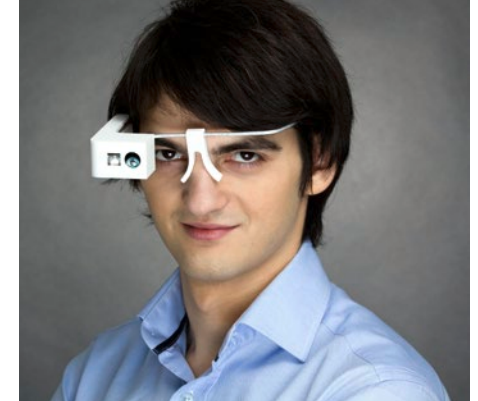
Some students have made a leap into entrepreneurship and launched their own businesses. 40 start-ups founded by Jacobs alumni are active on the market worldwide. Many students also choose to pursue further graduate or professional studies at some of the world's most prestigious universities.

### The top ten employers of Jacobs alumni:

Google Inc., Microsoft, Roche Diagnostics, KPMG AG, Accenture, Daimler - Mercedes Benz, Barry Callebaut, SAP AG, Amazon, McKinsey & Company

### Top graduate study destinations for Jacobs alumni:

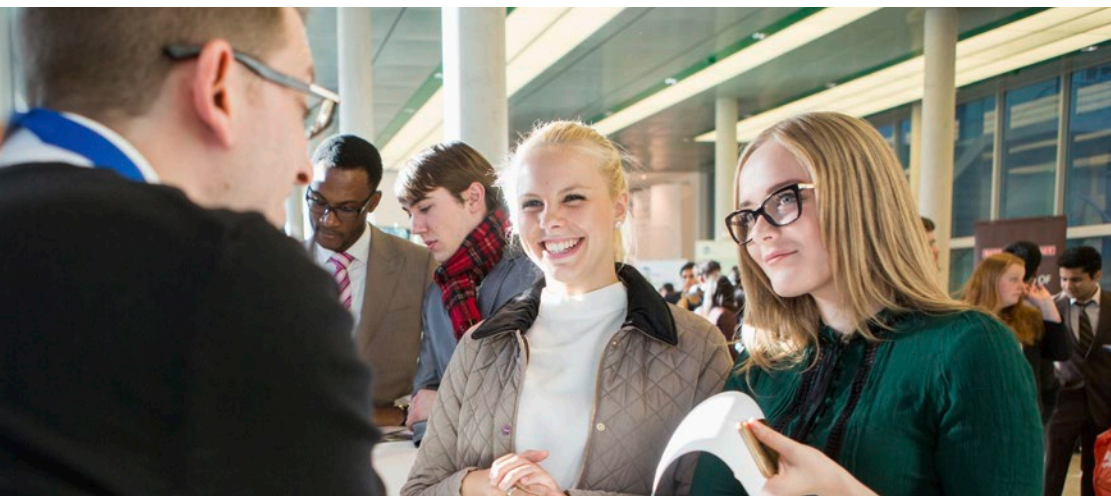
Columbia University, Harvard University, Humboldt-Universität, Massachusetts Institute of Technology, Rotterdam School of Management, Stanford University, ETH Zürich, London School of Economics, University of Oxford, University of Cambridge



### AN OUTSTANDING ALUMNI STORY

Cornel Amariei, Electrical Engineering and Computer Science, Class of 2015:

The invention of the ".lumen" glasses for the visually impaired has put him on the Forbes "30 under 30" list in Europe. He is also the Head of Innovation at Continental in Munich, where he leads projects surrounding eMobility, automated driving, sensors, vehicle architecture, and smart connectivity.



## ALUMNI FACTS

- 77% live in Europe (41% in Germany)
- 95% are in employment or pursuing graduate studies
- 84% would recommend studying at Jacobs University
- 96% are still in touch with people they met at Jacobs University

## STUDYING AT JACOBS UNIVERSITY

Jacobs University offers a broad spectrum of attractive study programs ranging from the natural sciences, mathematics and engineering, to the social sciences and economics. We divide these programs into three Focus Areas:



### MOBILITY – OF PEOPLE, GOODS, AND INFORMATION

Understanding the worldwide flow of people, goods, and information is important in today's globalized world. Expertise in different disciplines, such as computer science, communication technology, logistics, and mathematics are brought together in the development of new solutions.

### HEALTH – FOCUS ON BIOACTIVE SUBSTANCES

Designing solutions for a healthier world has always been one of the great challenges of science. Food, plants, and marine algae can have a positive effect on health similar to that of conventional medicine. However, scientists first have to identify and isolate bioactive substances and explore their safe application through transdisciplinary cooperation between geo science, life sciences, physics, and chemistry.

### DIVERSITY – IN MODERN SOCIETIES

This area includes topics such as social cohesion, state systems, the preservation of social welfare, and the effects of regulatory systems on the individual, such as their impact on human rights. Diversity is thus regarded a driving force behind development and progress.

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“Jacobs University helps you to find yourself since you get in touch with people from all kinds of different cultures.”

FRANCESCA KLEIN, GERMANY

# 01

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## PRE-DEGREE PROGRAMS

## ACHIEVE YOUR FULL POTENTIAL

Planning and preparing for university studies is a challenge. Jacobs University has designed two pre-degree programs, providing students with the opportunity to boost their academic skills and to explore various fields of study before pursuing a university degree. Each program addresses a student's specific needs: for the aspiring engineers who strive to improve their math skills; for the future medical students who need support in getting a study place; or for those who are in search of their ideal major. Students choose from various preparatory, orientation, and career modules to design their individual study plan, enabling them to grow personally and academically.

### — PREMIUM EDUCATION

Academic advisors and experienced instructors provide professional guidance in the transition to undergraduate studies. Students benefit from small class sizes, individualized support, and state-of-the-art facilities while gaining their first practical experience in a lab environment.

### — PERSONALIZED APPROACH

Students select study modules according to their own needs and attend classes from those fields of study that interest them most. Students receive personal career counseling and benefit from a customized academic and professional skills workshop program.

### — ADMISSION TO JACOBS UNIVERSITY

Students who successfully complete one of Jacobs University's pre-degree programs receive guaranteed admission to the university's renowned undergraduate programs. Those intending to continue their education at a medical school or university abroad will receive personal counseling and professional guidance during the application process.

### — CERTIFIED KNOWLEDGE

Our certified programs enable students to collect ECTS credit points which can be transferred to future university programs.

### — CAMPUS LIFE

Students enrolled in a pre-degree program live and learn on campus. They are part of the vibrant international community and establish lifelong networks.



## AT A GLANCE

- Sharpen your academic skills and explore different fields of study
- Perfect your academic English and improve your math and science skills
- Prepare for university entrance examinations (SAT, TMS, HAM-Nat, MedAT)
- Earn ECTS credit points that are transferable to future undergraduate studies



## FOUNDATION YEAR

### PROGRAM OVERVIEW

Jacobs University's Foundation Year program allows students to explore different fields of study and equips them with academic skills before starting a university degree. The two-semester program is tailored to students' individual academic interests and offers orientation possibilities in engineering, computer science, natural sciences, social sciences, economics, and management.

Students are introduced to scientific methods and can take preparatory courses in English, mathematics, science, and technology based on their preferences. Foundation Year students also enroll in regular undergraduate classes and earn ECTS credit points that can be transferred to their future study program. Interdisciplinary courses, which are designed especially for Foundation Year students, allow even more intensive orientation possibilities during the spring semester.

Triangular supervision offered through our experienced faculty and staff, a personal academic advisor, and a senior student mentor, helps Foundation Year students to know their stage of development at all times while offering support for further progress. The program fosters academic, social, and intercultural skills, and equips students with the academic prerequisites for pursuing successful careers in a wide range of fields.

The program is taught in English.

### WHY FOUNDATION YEAR

- **GET READY FOR UNIVERSITY:** Sharpen your academic skills and explore different fields of study.
- **CAMPUS LIFE:** Spend a year on a campus in Germany that is home to students from over 100 countries.
- **ACADEMIC SKILLS:** Perfect your academic English and improve your math and science skills. In the course of the program, all students can take the SAT (standardized university admission test) on campus and profit from intensive training.
- **ORIENTATION:** Choose between orientation opportunities in economics and management, social sciences and history, natural and life sciences, and engineering and computer sciences.
- **TRANSFERABLE KNOWLEDGE:** Earn transferable ECTS credit points and, upon successful completion of the Foundation Year, receive guaranteed admission to our undergraduate programs.

For more information, see:

[www.jacobs-university.de/foundation-year](http://www.jacobs-university.de/foundation-year)

or contact us:

**E-mail:** [foundationyear@jacobs-university.de](mailto:foundationyear@jacobs-university.de)

**Phone:** + 49 421 200-4314

## MEDPREP (BILINGUAL)

### PROGRAM OVERVIEW

The MedPrep program is designed for students who are passionate about medicine and wish to improve their prospects of getting into medical school.

In two semesters, MedPrep students acquire and reinforce fundamental knowledge in medical and natural sciences, gain hands-on experience in laboratory courses, and prepare for university entrance exams. The curriculum includes individual application counseling and training as well as professional preparation for medical school entry test formats, such as TMS, HAM-Nat, MedAT.

Internships and practical seminars provide an insight into the practical aspects of the medical profession: MedPrep students are familiarized with medical care, everyday medical routines, and patient communication. Furthermore, students benefit from our network of medical institutions and universities in Germany, Austria, and other European destinations.

The program is taught in German and English.

### WHY MEDPREP

- **CAREER COUNSELING:** We determine an individual application strategy and accompany your application process.
- **MEDICAL NATURAL SCIENCES:** You acquire or deepen theoretical and practical knowledge in biology, chemistry, physics, while earning transferable ECTS Credits.
- **TEST PREPARATION:** We prepare you for medical school entry tests, especially TMS, HAM-Nat, MedAT.
- **MEDICAL UNIVERSITY NETWORK:** Various medical schools in Europe consider MedPrep equivalent to certain entry requirements, such as high school biology and proof of English language proficiency. You can take some medical school entry tests on our campus.
- **PRACTICAL EXPERIENCE:** You get to know the profession of an MD through hands-on experience in internships and practical seminars.
- **INTERCULTURAL SKILLS:** Studying in German and English while living on an international campus prepares you for medical studies in Germany and abroad.


For more information, see:

[www.jacobs-university.de/medprep](http://www.jacobs-university.de/medprep)

or contact us:

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“I chose Jacobs University because it is international but small at the same time. Coming to Germany from abroad, the family atmosphere and close proximity to professors and fellow students was so welcoming and made me feel right at home.”

HE XU, CHINA

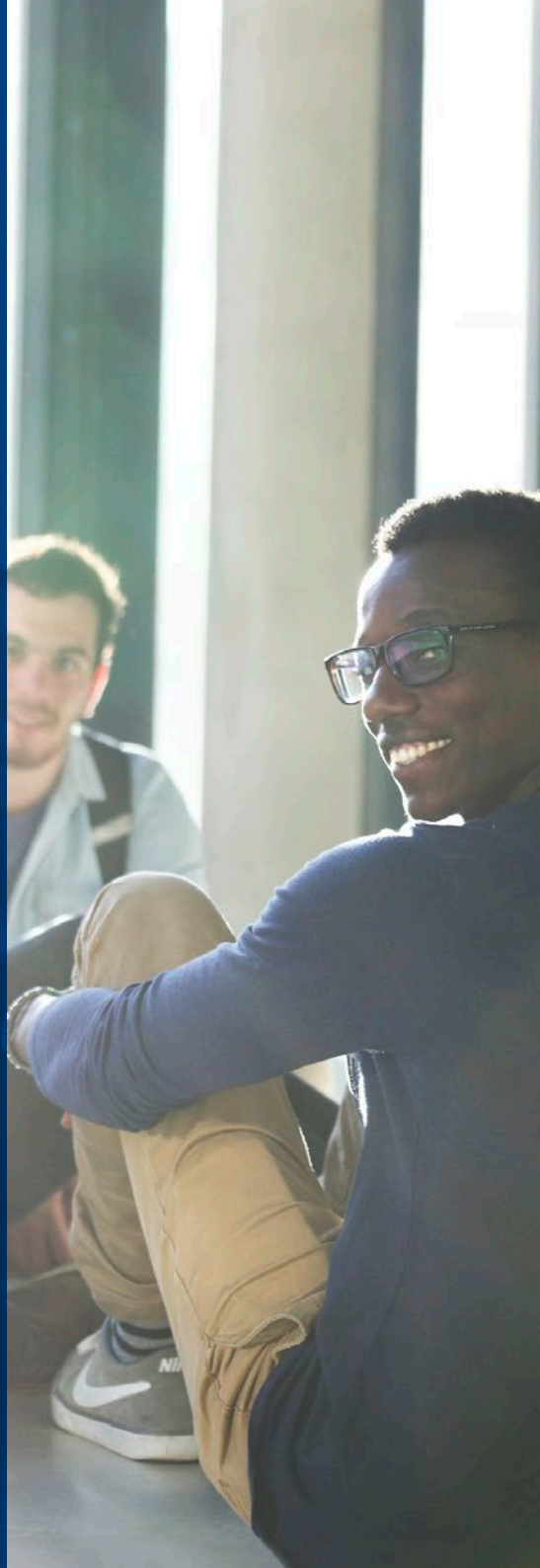
# 02

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**UNDER-  
GRADUATE  
PROGRAMS**

## AT A GLANCE

- Declare your major after your first year of studies
- Study abroad or complete an internship as an integral part of your studies
- Take advantage of the Jacobs Track, which includes valuable modules in methods, languages, and skills.



## PURSUE YOUR CALLING

UNDERGRADUATE PROGRAMS

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### STUDY PROGRAM STRUCTURE

An undergraduate degree program at Jacobs University equips students with the necessary qualifications for a successful academic and professional career. Our programs' **modularized 3C structure** allows students to choose from several course electives, in effect tailoring their degree to best suit their interests. The unique **Jacobs Track** runs parallel to all of our three-year bachelor programs.

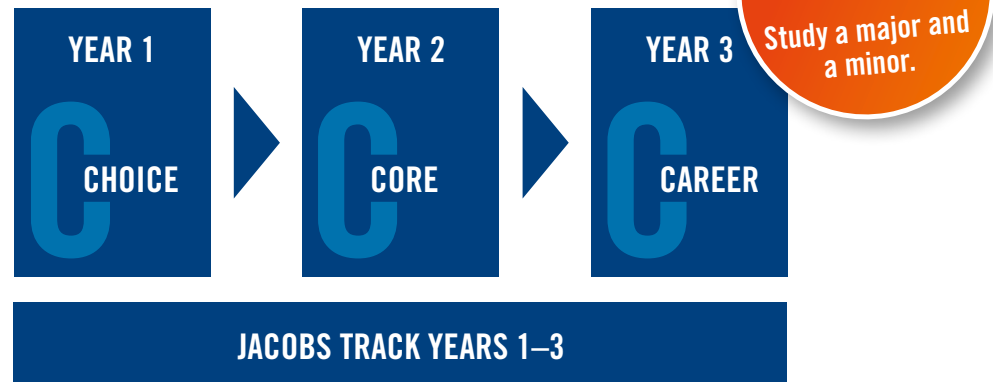
This provides students with a broad range of tailor-made courses designed to foster career competencies. These include courses that promote communication, technology, business, (German) language, and management skills.

As part of our focus on career preparedness, students have the opportunity to complete an internship, to found a start-up, or to study abroad. Thus, students are able to get on-the-job training and prepare for their professional career or gain additional intercultural experience.

**All undergraduate programs are taught in English and offer students a flexible and broad choice of core curriculum and electives to help them fulfill their academic goals.**



## THE 3C PROGRAM STRUCTURE



Jacobs University study programs are based on European Higher Education Area regulations. All study programs adhere to the European Credit Transfer System (ECTS), which facilitates credit transfer between academic institutions. The three-year undergraduate program involves six semesters of study worth a total of 180 ECTS credits. The curricular structure follows an innovative and student-centered module scheme – the 3C Model – which groups the curriculum into three overarching themes:

### — YEAR 1 – CHOICE

As part of the first year, students select three CHOICE modules from the various degree programs offered. The combination of CHOICE modules is flexible and allows students to decide on their major after the first year of study.

### — YEAR 2 – CORE

Students take three in-depth, discipline-specific CORE modules in their second year of study. Students may also choose to incorporate a minor study track into their undergraduate education.

### — YEAR 3 – CAREER

In their third year, students may do an internship, found a start-up, study abroad, or dedicate themselves to personal and professional development on campus. In addition, students choose specialization courses within their study program and pursue a project/research module that includes their bachelor thesis.

## THE JACOBS TRACK

Studying is not only about academic skills. Successful professionals know to think beyond disciplines and with a global mindset. That is why the Jacobs Track

is an integral part of all study programs. Students take modules that foster employability as well as a transdisciplinary and international outlook.

### — TRANSDISCIPLINARY TRIANGLE MODULE

The Transdisciplinary Triangle module transcends the boundaries of traditional disciplines by offering courses in business, technology, and societal contexts.

### — METHODS MODULE

Mathematics and statistics courses are offered within the methods module, providing students with the general foundations and methods that are relevant for their studies.

### — LANGUAGE MODULE

Foreign languages are taught as part of the language module, with an emphasis on German language skills for international students, in order to support their successful integration into a new culture.

### — SKILLS MODULE

The skills module equips students with academic and professional competencies, including self-management, applying for jobs, giving presentations, and written communication.



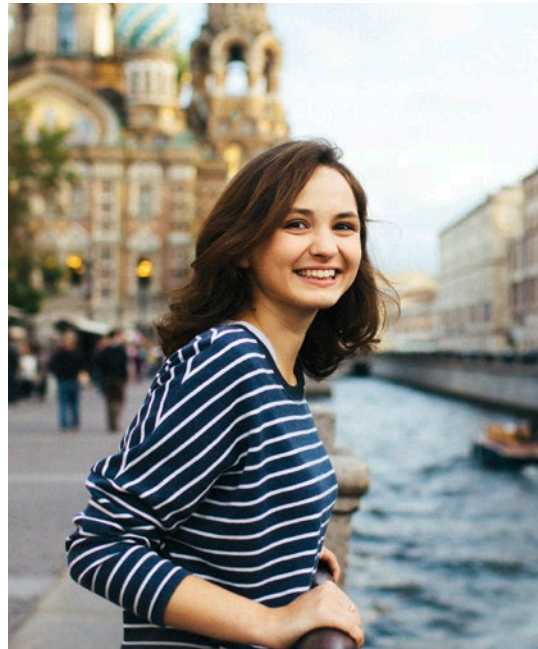
# EXCHANGE OPPORTUNITIES

## STUDY ABROAD

In the fifth semester, students have the chance to spend one semester abroad at one of our many partner universities worldwide. This is a fantastic opportunity to enhance linguistic, cultural, and social skills as well as excel in a new professional or academic environment.

## INTERCULTURAL. INTERDISCIPLINARY. INDIVIDUALIZED.

During an exchange semester students have the chance to attend major-related courses beyond Jacobs University's offer as well as cultural trainings, language courses or interdisciplinary classes. Students are free to choose a destination that best suits their academic and personal preferences. For more information, see: [jacobs-university.de/international](http://jacobs-university.de/international)



# OUR 35 EXCHANGE PARTNERS

- **Argentina**
- Universidad de San Andres
- **China**
- Capital Normal University
- Fudan University
- University of Nottingham Ningbo
- **Israel**
- Interdisciplinary Center Herzliya
- Technion – Israel Institute of Technology
- The Hebrew University of Jerusalem
- The University of Haifa
- **France**
- Sciences Po
- **Japan**
- iCLA of Yamanashi Gakuin University
- Ritsumeikan University
- **Norway**
- University of Agder
- University of Oslo
- **Republic of Korea**
- Underwood – International College of Yonsei University
- UNIST – Ulsan National Institute of Science and Technology
- **Russia**
- St. Petersburg State University
- **Spain**
- Instituto de Empresa
- **Sweden**
- Uppsala University
- **Thailand**
- Thammasat University
- **The Netherlands**
- Amsterdam University College
- Rijksuniversiteit Groningen
- University College Utrecht
- **Turkey**
- Kadir Has University
- **United Kingdom**
- University of Aberdeen / Scotland
- University of Edinburgh / Scotland
- University of Warwick / England
- **USA**
- Carnegie Mellon University / Pennsylvania
- Cornell University / New York
- Drexel University / Pennsylvania
- Rice University / Texas
- Texas Tech University / Texas
- University of Miami / Florida
- University of Pennsylvania
- Washington State University



## BIOCHEMISTRY AND CELL BIOLOGY (BSc)



“I can’t thank the BCCB faculty enough for the great preparation they gave me for my scientific career! I am currently in a molecular and cell biology PhD program and all of my professors have been thoroughly impressed with my background and experience; I have twice been asked to bring more students from Jacobs here.” **GENO VILLAFANO, UNITED STATES**

### PROGRAM OVERVIEW

Biochemistry is the study of molecules and chemical processes in living organisms, while cell biology covers the structure and physiology of cells, their components, and the interactions with their environment. The two fields are combined in one comprehensive degree program to give students a broad understanding of the molecular and cellular mechanisms that form the basis of life. Students not only become familiar with the theoretical background of these core areas, but are also involved in hands-on research right from the start of their studies.

### CAREER OPTIONS

BCCB graduates have joined international companies in the pharmaceutical, biochemical, and biomedical industries. They hold positions as toxicologists, forensic scientists, consultants operating in the public sector, and as university lecturers or professors. After graduating, BCCB students have also been admitted to excellent universities worldwide for graduate studies (MSc or PhD) such as the universities of Oxford and Cambridge, Harvard University, ETH Zurich, European Molecular Laboratories (EMBL), and International Max-Planck Research Schools (IMPRS).

#### YEAR 1 — CHOICE

- Biochemistry and Molecular Biology
- Cell Biology

#### YEAR 2 — CORE

- Biomedicine
- Infection and Immunity
- Molecular Biology

#### YEAR 3 — CAREER

(Exemplary course offerings for program-specific Specialization Module)

- Experimental Strategy Design
- Research Approaches in Molecular Life Science I/II
- Current Topics in Molecular Life Sciences
- Ribogenetics
- Microbial Pathogenicity

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## CHEMISTRY (BSc)

“Germany for me is the country of chemistry, and therefore the great companies and brands that involve chemistry – it seems like pharmaceutical products, cosmetics, and chemical equipment are all made in Germany. So, why not study chemistry where it’s most advanced?”

**ELIAS HALABI, VENEZUELA**

### PROGRAM OVERVIEW

Chemistry relates to nearly every aspect of our lives. It lies at the heart of some of the world’s most advanced industries, for example those focusing on pharmaceuticals, sustainable energy development, and even the food and beverage industry. The transdisciplinary bachelor degree in chemistry offers modules that include courses in organic, inorganic, analytical, and physical chemistry, as well as chemical biotechnology. Students are also taught the relevant aspects of mathematics, engineering, and industrial priorities. Over the course of the three-year study program, you will take extensive laboratory courses and carry out research projects independently during your third year of study. Undergraduate students are also strongly encouraged to engage in research projects with graduate students as early as their first or second semester.

### CAREER OPTIONS

Chemistry graduates undertake careers in the areas of pharmaceuticals, nanotechnology, materials, and energy in environmental monitoring and in forensic science. Most students continue their education with a Master of Science or enter medical school. This leads to careers not just as chemists but also, for example, as production managers, business consultants, medical doctors, patent attorneys, marketers, and even as politicians.

#### YEAR 1 — CHOICE

- Organic Chemistry
- Principals of Chemistry and Physics

#### YEAR 2 — CORE

- Physical and Analytical Chemistry
- Inorganic and Supramolecular Chemistry
- Chemical Biotechnology

#### YEAR 3 — CAREER

(Exemplary course offerings for program-specific Specialization Module)

- Advanced Synthesis
- Organometallic Chemistry
- Methods for Bioconjugation
- Structure Elucidation of Biomolecules

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## COMPUTER SCIENCE (BSc)



“I chose Jacobs University because it is international but small at the same time. It is easy to get in touch with the professors here. I meet with my academic advisor once a week, and I very much appreciate the help and support I get from him.”

HE XU, CHINA

### PROGRAM OVERVIEW

Computer science lies at the core of all modern industries, as computer systems and information technology are the basis for almost all of today's production processes. Computer technology changes constantly but there are a number of fundamental principles underlying these technologies. The Computer Science program at Jacobs University focuses on understanding these principles and their application in practice. In addition to courses dealing with core competencies (programming, software engineering, and the foundations of computer science), students will take courses in mathematics (calculus, linear algebra, and statistics) and engineering and sciences, while also carrying out guided research.

### CAREER OPTIONS

The job market for computer scientists has been very good in the last few years, and there is no indication that this will change soon. Graduates can consider careers in a wide range of industries such as Internet and mobile technology, software and classic IT consultancy services, as a games developer, multimedia programmer, computer graphics designer, software engineer, or systems analyst. Graduates have started successful careers in both academia and with global industrial players such as Google, Microsoft, and Facebook.

#### YEAR 1 — CHOICE

- General Computer Science

#### YEAR 2 — CORE

- Applied Computer Science
- Technical Computer Science
- Theoretical Computer Science

#### YEAR 3 — CAREER

(Exemplary course offerings for program-specific Specialization Module)

- Programming in Java
- Distributed Algorithms
- Data Technologies
- Image Processing
- Visualization

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## EARTH AND ENVIRONMENTAL SCIENCES (BSc)



UNDERGRADUATE PROGRAMS

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“I can say that there is no other university that I would have preferred to have studied at. Jacobs is a fantastic project – a real gateway to the world.”

SEINAB BOHSUNG, GERMANY

### PROGRAM OVERVIEW

The Earth and Environmental Sciences (EES) program is an interdisciplinary science major which provides a holistic understanding of the natural functioning of planet Earth and the consequences of human impact. The program is ranked as Germany's No. 1 Geoscience BSc program. Based on a sound introduction to fundamental chemistry and physics, it combines disciplines such as geology, geochemistry, geophysics, and oceanography with environmental sciences and social sciences (optional). EES prepares students for topical challenges and research questions such as the management and sustainable exploration of natural resources (including freshwater) and the study of the Earth's climate and oceans. Participation in excursions and laboratory work as well as teamwork in multidisciplinary and multicultural groups are an important part of the studies. Students may participate in ongoing research projects as early as the second semester.

### CAREER OPTIONS

EES graduates have a broad range of career opportunities in the private sector, with government institutions, and nongovernmental organizations that focus on the environment, resources, development, or energy. Graduates can also pursue academic careers in the areas of geosciences, ocean sciences, environmental sciences, and resource exploration.

#### YEAR 1 — CHOICE

- General Earth and Environmental Science

#### YEAR 2 — CORE

- Fundamental Earth and Environmental Sciences
- Earth, Ocean and Environmental Geochemistry
- Earth, Ocean and Environmental Geophysics

#### YEAR 3 — CAREER

(Exemplary course offerings for program-specific Specialization Module)

- 7- to 12-day Ocean and Field Labs in Europe
- Resources and Environmental Behaviour of Critical High-Technology Metals
- Current Topics in Earth and Marine Sciences
- Current Topics in Resource and Environmental Sciences
- Theoretical and Computational Physical Oceanography

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Phone: + 49 421 200-3102  
[www.jacobs-university.de/ees](http://www.jacobs-university.de/ees)

## ELECTRICAL AND COMPUTER ENGINEERING (BSc)

“Smaller classes and the interactive teaching style keep students focused throughout the lecture. We have tutorials, which help a lot to go into depth if for some reason there was not enough time in class.”

NAZIA SARAH ISLAM, BANGLADESH

### PROGRAM OVERVIEW

The extensive developments in microelectronics over recent decades have triggered a digital revolution with computers as the driving force. While we still think of a computer as a desktop or a laptop, digital computing and digital signal processing have become vital for many of the products in our everyday lives, such as cars, mobile phones, tablets, cameras, and household appliances. The Electrical and Computer Engineering program focuses on the areas of communications and digital signal processing, including the enabling of digital processing elements and their programming.

### CAREER OPTIONS

Electrical and Computer Engineering graduates start their careers in very diverse companies, successfully continue at renowned universities, or stay with Jacobs University for graduate education. Potential career fields include the aerospace industry, telecommunications, the automotive and energy sector, information technology, and in academia, management, and consultancy.

#### YEAR 1 — CHOICE

- Introduction to Electrical Engineering

#### YEAR 2 — CORE

- Communications
- Electronics and Noise
- Signal Processing

#### YEAR 3 — CAREER

(Exemplary course offerings for program-specific Specialization Module)

- Coding Theory
- Wireless Communications II
- Advanced Digital Design

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## GLOBAL ECONOMICS AND MANAGEMENT (BA)



UNDERGRADUATE PROGRAMS

02

“A degree from Jacobs University opens doors to many different opportunities and really prepares us well for our future. The fact that I am studying in English was also important to me, because I can choose to go to any English-speaking institution in the world.”

JESSICA GEIGER, GERMANY

### PROGRAM OVERVIEW

A multitude of political, social, and cultural forces drive economic decisions in our globalized world. To understand these forces, students need to learn about the many challenges facing today's companies and economies. These include resource depletion, financial crises, ethical questions, and social exclusion. The Global Economics and Management program explores the classical studies of business administration and economics within a global context, and combines them with knowledge from fields such as political science, psychology, communication, and engineering – depending on the specializations and minors the students choose. The program teaches a transdisciplinary understanding of global economic challenges with an emphasis on sustainable development and responsible leadership.

### CAREER OPTIONS

Completion of a BA in Global Economics and Management allows graduates to seek employment in the private sector, government, international organizations, business associations, the media, diplomatic services, and consulting.

#### YEAR 1 — CHOICE

- General Economics
- General Management

#### YEAR 2 — CORE

- Economic Policy Challenges
- Economic Institutions and Organization
- Managing Diversity

#### YEAR 3 — CAREER

(Exemplary course offerings for program-specific Specialization Module)

- Country Seminar
- Econometrics Seminar
- Development Seminar
- Environment and Resource Seminar
- Innovation Seminar

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## INDUSTRIAL ENGINEERING AND MANAGEMENT (BSc)



“Due to the transdisciplinarity of the program, the knowledge gained can be applied in production, consulting, humanitarian aid, etc. The biggest advantage was learning directly from the leaders in the industry, who created an environment which was always challenging us to aspire for more and better!” **ELENA ISAC, MOLDOVA**

### PROGRAM OVERVIEW

Industrial engineering is one of the most versatile and flexible branches of engineering. It has been said that engineers make things, whereas industrial engineers make things better. The Industrial Engineering and Management (IEM) program deals with both the creation and the management of systems that integrate people, materials, and energy in productive ways. It covers topics such as process engineering, operations research, supply chain management, engineering design, logistics, and project management. Students are equipped with the essentials of both the management and the engineering business functions and are thus prepared for successful careers in industry.

### CAREER OPTIONS

IEM prepares graduates for a career at the interface between management and engineering. This can be the start of a career in industrial and trade enterprises from different industries, as well as in research and education. The wide range of career paths that open up for graduates include specializations in production and logistics areas, project management, and strategic and corporate management. Close cooperation and contacts are established with companies such as Airbus, Daimler, Porsche, Mondelez, ArcelorMittal, Barry Callebaut, Deutsche Bahn, KPMG, and more.

#### YEAR 1 — CHOICE

- General Industrial Engineering and Management

#### YEAR 2 — CORE

- Production and Engineering
- Process Engineering

#### YEAR 3 — CAREER

(Exemplary course offerings for program-specific Specialization Module)

- Nonlinear Dynamics for Industrial Engineering
- Industry 4.0 Technologies
- Distribution & E-Commerce
- Integrated Decision Making in Supply Chain Management
- Supply Chain Design

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## INTEGRATED SOCIAL SCIENCES (BA)



UNDERGRADUATE PROGRAMS

02

“Instructors in ISS not only taught me extensive research skills, but they also instilled a passion to look beyond disciplinary boundaries. The problem-solving approach in ISS has also led me to work with partners outside of academia.”

**JAN EICHHORN, GERMANY**

### PROGRAM OVERVIEW

The Integrated Social Sciences (ISS) program provides a unique integrated approach to the social sciences, including three disciplines and their interfaces: media / communication science, political science, and sociology. They focus on highly relevant and very current issues, topics, and problems that need to be solved. The range of problems addressed is broad and includes war and conflict, environmental concerns, and the role of the state. A special feature is the intensive methods training – both quantitative and qualitative approaches are taught in advanced methods labs and integrated into the program structure. Students are trained in the analysis of pressing problems, as well as developing potential solutions. The program is research-based and familiarizes students with the development of empirical research questions and research designs.

### CAREER OPTIONS

Graduates will be in an excellent position to pursue careers in governmental and nongovernmental organizations, public administration, international organizations, private and public media, as well as in private-sector enterprises with strategic planning and public relations components. Alumni have been very successful in securing funded graduate positions at prestigious universities such as Oxford, Harvard, Columbia University, and MIT.

#### YEAR 1 — CHOICE

- Introduction to the Social Sciences

#### YEAR 2 — CORE

- International Politics and Policy
- Communication, Culture and Consumption
- Crisis and Conflict Management

#### YEAR 3 — CAREER

(Exemplary course offerings for program-specific Specialization Module)

- Advanced Methods in the Social Sciences
- From Theory to Practice: Sociological Theory and its Application to Reality
- Democracy and Pluralism
- Cooperation and Conflict: Russo-European Social, Economic and Political Relations

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**[www.jacobs-university.de/iss](http://www.jacobs-university.de/iss)**

## INTELLIGENT MOBILE SYSTEMS (BSc)

“I chose Jacobs University because of its flexible course selection policy. Although IMS is similar to mechatronics programs available in other universities, it is unique due to its emphasis on intelligence and the autonomy of mobile systems.”

RUI CAO, CHINA

### PROGRAM OVERVIEW

This program covers engineering methods and technologies relevant in making artificial mobile systems independent of permanent human supervision, i.e. that enable mobile systems to carry out autonomous intelligent operations. Study areas include the automotive and transportation industries, robotics and automation, communication technologies, marine technology, and logistics. Hands-on experience with technical systems and methods in state-of-the-art labs are part of the program.

### CAREER OPTIONS

Graduates pursue careers in research and development, or management tracks in automotive and transportation, robotics and automation, communication technologies, marine technology and logistics industries. Given the increasing need for the automation of daily tasks using intelligent mobile systems, there are a significant number of career options in addition to the core options covered in the program.

#### YEAR 1 — CHOICE

- Introduction to Intelligent Mobile Systems

#### YEAR 2 — CORE

- Intelligent Systems
- Automation and Control
- Planning and Optimization

#### YEAR 3 — CAREER

(Exemplary course offerings for program-specific Specialization Module)

- Marine Robotics
- Dynamical Systems and Control
- Applied Nonlinear Control

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## INTERNATIONAL BUSINESS ADMINISTRATION (BA)



UNDERGRADUATE PROGRAMS

02

“Classes at Jacobs are very transdisciplinary and diverse. It’s interesting to see how the students all have different perspectives on the subject and approaches to learning.”

PATIENCE VIMBAYI MUSHAMIRI, ZIMBABWE

### PROGRAM OVERVIEW

The International Business Administration program covers all the essential areas of business and management with an international outlook. Students will develop strategic and practical perspectives on value creation in a globalized, culturally diverse, and technology-driven world. Topics that are emphasized include the management of international firms, the integration of information technology in all business areas, and the influence of the economic and cultural context on business activities. The program teaches an informed, comparative, and critical understanding of common business practices, problems, and values in a diverse and international context. Students will develop the analytical and social skills required to succeed as effective and responsible managers.

### CAREER OPTIONS

Graduates pursue careers in a broad range of businesses, especially international and internationalizing firms with a focus on future-oriented industries, e.g. renewable energy, health, information technology, automotive, and aerospace industries.

#### YEAR 1 — CHOICE

- General Management
- General Economics

#### YEAR 2 — CORE

- Strategy and Management
- Finance and Project Management
- Managing Diversity

#### YEAR 3 — CAREER

(Exemplary course offerings for program-specific Specialization Module)

- Contemporary Research Issues in Marketing
- Current Issues of International Organizations
- Contemporary Issues in Finance and Accounting
- Managerial Accounting
- Design Thinking

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## INTERNATIONAL RELATIONS: POLITICS AND HISTORY (BA)



“I chose International Politics and History because I am really interested in both disciplines, and I think it’s going to give me good background knowledge to go into a career related to law or mediation. I find the issues of human rights and mediation particularly interesting.”

SAVANNAH CARR-WILSON, CANADA

### PROGRAM OVERVIEW

The program International Relations: Politics and History offers an analytical approach to past and current international problems. It introduces students to the evolution of international politics, international economics, and domestic political systems. Students gain knowledge of international law, diplomacy, governance, globalization processes, security issues, and intercultural exchange. They acquire a critical understanding of present issues, and learn about the political and social developments that have shaped today’s world over the past two centuries.

### CAREER OPTIONS

By acquiring an in-depth understanding of international relations and history from both an empirical and theoretical perspective, students gain the knowledge and the analytical tools needed in fields such as politics and diplomacy, private-sector management, public administration, governmental organizations, and nongovernmental organizations. They also acquire the skills to continue in graduate and postgraduate research. IRPH has an excellent track record of placing students in top graduate schools.

#### YEAR 1 — CHOICE

- Introduction to International Relations

#### YEAR 2 — CORE

- International Politics and Policy
- Global Dynamics in Historical Perspective
- Arenas of Political Life

#### YEAR 3 — CAREER

(Exemplary course offerings for program-specific Specialization Module)

- Women in History and International Politics
- Oppression, Conformity and Resistance under Dictatorships
- The Problem of Power: An Introduction to Modern Political Philosophy
- Plural Perspectives on Public Policy

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## MATHEMATICS (BSc)



UNDERGRADUATE PROGRAMS

02

“The Mathematics major at Jacobs allows you to choose courses which are suitable for you individually. Students are optimally supported in challenging courses with small classes and close collaboration with professors.”

MARVIN SECKER, GERMANY

### PROGRAM OVERVIEW

Mathematics as a fundamental science ranges from algebra, analysis, geometry, and topology to applications of immediate practical importance, for example modeling fluids using partial differential equations. Mathematics often finds intriguing practical applications in surprising areas: number theory is used in cryptography, dynamic systems and wavelets are successfully employed in engineering, and mathematical game theory was the basis for research in economics that has been awarded a Nobel Prize.

The Bachelor of Mathematics program at Jacobs University offers a strong foundation in pure mathematics and flexible study options to combine the study of mathematics with solid training in one or more fields of application. Math students participate in research groups together with graduate students and faculty, and many have even written research articles. One key element in our education is that we do not just teach courses to students, but accompany them as individuals throughout their education.

### CAREER OPTIONS

There are few undergraduate degrees which rival mathematics in the diversity of rewarding job options, including careers in research, finance, banking, management, biomedical technology, IT, engineering, and consulting.

#### YEAR 1 — CHOICE

- Fundamental Mathematics

#### YEAR 2 — CORE

- Core Mathematics
- Core Pure Mathematics
- Core Applied Mathematics

#### YEAR 3 — CAREER

(Exemplary course offerings for program-specific Specialization Module)

- Foundations of Mathematical Physics
- Differential Equations
- Number Theory
- Discrete Mathematics

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## MEDICINAL CHEMISTRY AND CHEMICAL BIOLOGY (BSc)

“The faculty not only instilled in us a passion for science, but also guided us through the beginning of our professional lives. After only one year, I was accepted to an internship at an Ivy League university – I realized then how well the program prepares us for work in world-class research facilities.” **JOSEPH MCINNES, UNITED STATES**

### PROGRAM OVERVIEW

Human life expectancy and quality of life has dramatically increased over the last hundred years and this is directly connected to the rise of modern medicine. The Medicinal Chemistry and Chemical Biology (MCCB) program places the student at the forefront of the revolutionary efforts now underway to understand and treat disease. The program provides a fundamental understanding of the drug-body interaction from the molecular to the macromolecular level, thus enabling identification and exploitation of bio-active molecules. The topics covered range from drug discovery, molecular docking and drug delivery and resistance to the intricacies of refining our knowledge of drug target and function within molecular biology. This program is based on an innovative, multidisciplinary approach which encompasses life scientists, chemists, biophysicists, and biotechnologists.

### CAREER OPTIONS

MCCB graduates have a wide variety of career choices. They are naturally to be found in pharmaceutical companies, but also in the pharmaceutical, chemical and bio-technology industries, analytical food testing laboratories, quality management, academic careers, regulatory affairs or even as patent attorneys.

### YEAR 1 — CHOICE

- Biochemistry and Molecular Biology
- Organic Chemistry

### YEAR 2 — CORE

- Chemical Biology
- Drug Action and Production
- Drug Development

### YEAR 3 — CAREER

(Exemplary course offerings for program-specific Specialization Module)

- Introduction to Biophysical Chemistry
- Binding and Enzyme Assays
- Concepts and Applications of Metabolism
- Pharmaceutical Formulation and Targeting Technology
- Structure Elucidation of Biomolecules

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## MEDICAL NATURAL SCIENCES (BSc)

“What really makes this program special is the close connections that are fostered between students and faculty. We learn from the knowledge and real-life industry experiences of our professors, and we students support and encourage each other. Together we explore our subject, together we are pioneers.” **ZEJUN CHEN, CHINA**

### PROGRAM OVERVIEW

The Medical Natural Sciences (MedNat) program specifically prepares students for later studies in medicine at a German state university. This preparatory program combines modules in natural sciences, life sciences, and medicine with intensive German language courses. Students are taught the foundations of the natural sciences and modules are comprised of a series of lectures in disciplines such as organic chemistry and physics with corresponding lab courses. Students will also become familiar with the basic concepts of life sciences and medicine in specialized modules. The three intensive German modules not only consist of language classes, but also of seminars on Germany and its regions, the German healthcare system, and the transition to German medical schools.

### CAREER OPTIONS

MedNat prepares students to continue their studies at medical schools in Germany and to become medical doctors, or to start a scientific research career in biomedicine, molecular medicine or medical technology. The program has been designed for students from non-European Union countries, and provides the basis for successful study at renowned German medical schools. A Bachelor of Science (BSc) will be awarded after successful completion of the three-year program.

### PREPARATORY PROGRAM

for later studies in medicine at a German state university

### YEAR 1

- Foundations in Medicine I
- Foundations in Natural Sciences
- Intensive German I

### YEAR 2

- Foundations in Medicine II
- Cellular Biology
- Intensive German II

### YEAR 3

- Foundations in Medicine III
- Intensive German III

An internship at a modern health care provider, over the course of one semester, is included in the program.

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## PHYSICS (BSc)



“The academic standard at Jacobs University is really high. The classes are small and I study with many incredibly talented people. This is something I find motivating and inspiring. We work closely together and support each other.”

GAUTAM RAI, INDIA

### PROGRAM OVERVIEW

Physics has shaped our view of the world through its quest to understand the fundamental concepts of space, time, and matter. It not only lays the foundation for other natural sciences, but physics is also a fundamental part of modern technology as it can be found in solar cells, computers and airplanes. The program covers an introduction to classical and modern physics followed by advanced courses in electrodynamics, relativity, quantum physics, and solid state physics, to name just a few. It also includes a thorough mathematical education. Lectures are complemented by teaching labs. Students can participate in faculty research projects from early on in their studies.

### CAREER OPTIONS

Graduates will find ample career opportunities: research positions in academia or engineering positions in research and development departments, for example in information technology, renewable energies, aerospace engineering, or medical technology. These positions are in the interdisciplinary fields of biophysics, nanotechnology, and geoscience. In addition, physicists work in the financial sector, consultancy, or software development.

#### YEAR 1 — CHOICE

- Classical and Modern Physics
- Principles of Chemistry and Physics

#### YEAR 2 — CORE

- Statistical Physics and Fields
- Applied Physics
- Classical and Quantum Dynamics

#### YEAR 3 — CAREER

(Exemplary course offerings for program-specific Specialization Module)

- Solid-State Electronic Devices
- Biophysics
- Advanced Optics
- Advanced Quantum Physics
- Particles and Fields

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## PSYCHOLOGY (BA)



UNDERGRADUATE PROGRAMS

02

“One of the best things is that from the first day on, you not only get a theoretical foundation but also gain practical skills. It feels good to know that I would be able to apply my knowledge anytime.”

ANNA KUZNETSOVA, UKRAINE

### PROGRAM OVERVIEW

The study program Psychology deals with the general principles of human behavior, feeling, and thought, their empirical investigation, and the implications of research findings for theoretical questions in a variety of applied settings. At the center of this program is the role of human cognition and feelings in interactions and communications across multiple dimensions of diversity, with respect to the individual, dyads, groups, and within and between societies. Understanding and explaining related phenomena, such as conflict and cooperation, involves an interdisciplinary view of the interaction between biological, psychological, and cultural processes. The program includes training in analytic and research methods, but also in a range of applied (interpersonal and intercultural) skills.

### CAREER OPTIONS

Graduates pursue careers in fields related to human interaction and communication, including intercultural relations, diversity management, human resources, information and media, sales and advertising, politics, and nongovernmental organizations. The program is a good preparation for advanced graduate studies in a variety of psychological disciplines.

#### YEAR 1 — CHOICE

- Introduction to Psychology

#### YEAR 2 — CORE

- Biology, Brain and Cognition
- Humans in Social Context
- Applied Psychology

#### YEAR 3 — CAREER

(Exemplary course offerings for program-specific Specialization Module)

- Neuropsychology of Aging
- Psychology of Food
- Psychology of Happiness
- Human Neuroscience Advanced Lab


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“Jacobs University has given me a ton of specialist knowledge. But most of all, the university has taught me to make something of myself.”

CATHERINE JACOB-DOLAN, USA

# 03

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## GRADUATE PROGRAMS

## MASTER YOUR TALENTS

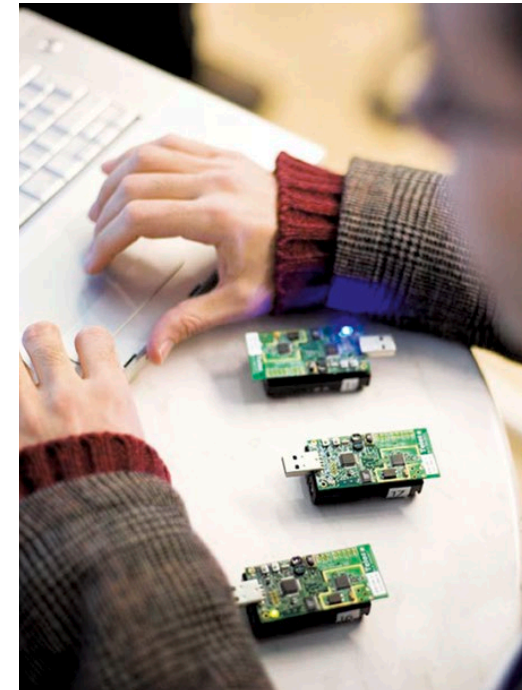
Graduate education at Jacobs University encompasses programs from engineering to psychology, the social sciences, and economics. Completion of one of these programs leads to a Master of Science (MSc) degree or a Doctor of Philosophy (PhD) degree.

At the graduate level, students deepen their knowledge, specialize in an area of their choice, and further extend their academic qualifications. At the same time, graduate students at Jacobs University are trained to investigate and analyze issues from multiple perspectives and without clear-cut disciplinary boundaries.

Graduate programs at Jacobs University maintain the highest standards of teaching and learning. The **student-faculty ratio is low** with dedicated mentors who provide academic advising on an individual basis. Moreover, students benefit from the university's focus on research and can be involved in research from a very early stage, thus getting familiarized with the use of **state-of-the-art technologies**.

All MSc programs comprise diverse learning platforms including lectures, seminars, workshops, laboratory trainings, and excursions.

For students interested in moving on to a PhD, institutes such as the Bremen International Graduate School of Social Sciences provide excellent opportunities



for research. There is also the possibility to obtain individual research PhD degrees in various fields.

Jacobs University is happy to provide its graduate students with attractive and affordable accommodation off-campus in the city of Bremen upon request.

### AT A GLANCE

Pursue master programs based on a coherent curricular structure:

- **CORE AREA**  
get acquainted with the foundational and advanced aspects of the program
- **METHODS AREA**  
get familiar with advanced concepts, methods and technologies
- **RESEARCH & DISCOVERY AREA**  
engage in scientific and industry projects
- **CAREER AREA**  
acquire professional skills and tools for your future employment



## DATA ENGINEERING (MSc)

### PROGRAM OVERVIEW

Big data has turned out to have tremendous potential, but poses major challenges at the same time. On the one hand, big data is driving the next stage of technological innovation and scientific discovery. On the other hand, the global volume of data is growing at a pace that seems to be hard to control. Faced with these prospects and risks, the world requires a new generation of data specialists. The Data Engineering program offers a fascinating and profound insight into the methods and technologies of this rapidly growing area. It deals with foundational and advanced approaches to data acquisition, data management, and data analysis. Students profit from a tailor-made curriculum consisting of lectures, tutorials, laboratory trainings, and hands-on projects. In addition, students have an excellent chance of working in paid industry and research projects during the program.

### CAREER OPTIONS

Demand for Data Engineers is massive. Typical fields of work encompass the finance sector, the automotive and health industry as well as retail and telecommunications. Companies and institutions in almost every domain need experts for data acquisition who know how to collect the relevant data; experts for data management who know how to make the optimum use of the obtained data; experts for data analysis who evaluate and interpret the collected data correctly and are able to visualize the findings clearly. Graduates of the program work as data analysts, data managers, data architects, business consultants, software and web developers, and system administrators. An MSc degree in Data Engineering also allows students to move on to a PhD and a career in academia and research institutions.

### CORE AREA

- The Big Data Challenge
- Data Analytics
- Machine Learning
- Big Databases and Cloud Services

### ELECTIVE AREA

- Computer Science Track
- Geo-Informatics Track
- Bio-Informatics Track
- Business & Supply Chain Engineering Track

### METHODS AREA

- Modeling & Control of Dynamical Systems
- Modern Signal Processing
- Web Analytics
- Applied Dynamical Systems

### DISCOVERY AREA

- Current Topics in Data Engineering
- Advanced Projects

### CAREER AREA

- Communication & Ethics
- Language Skills

### MASTER THESIS

For more information, see:  
[www.jacobs-university.de/data-engineering](http://www.jacobs-university.de/data-engineering)  
 Or contact us:  
[dataengineering@jacobs-university.de](mailto:dataengineering@jacobs-university.de)

## PSYCHOLOGIE (MSc) (BILINGUAL)

### PROGRAMMÜBERSICHT

Die Globalisierung und der demographische Wandel sind die großen Herausforderungen für das Zusammenleben im 21. Jahrhundert. Der MSc in Psychologie bereitet darauf vor, diese Aufgaben in einer zunehmend vielfältigen Gesellschaft verantwortungsvoll wahrzunehmen. Inhaltlich umfasst der Studiengang drei Säulen: Die **Klinische Psychologie** befasst sich mit der Entstehung, Diagnose, Therapie und Prävention psychischer Erkrankungen. Die **Arbeits-, Organisations- und Wirtschaftspsychologie** analysiert, wie moderne Arbeit für den Menschen optimal gestaltet und die Work-Life-Balance verbessert werden kann. In der **Interkulturellen Psychologie** wird untersucht, wie das Zusammenleben von Menschen mit unterschiedlichem kulturellen Hintergrund ermöglicht und erleichtert werden kann. Etwa zwei Drittel der Kurse werden auf Deutsch und ein Drittel auf Englisch unterrichtet.

### BERUFLICHE PERSPEKTIVEN

Die im Studium erworbenen Qualifikationen finden ihre praktische Anwendung beispielsweise in den Bereichen psychologische Diagnostik, Beratung, Training und Psychotherapie. Typische Berufsfelder umfassen neben einer Tätigkeit als Psychologin/Psychologe eine Beschäftigung im Gesundheits-, Sozial-, Personal- und Bildungswesen, in Wissenschaft, Verwaltung oder in der Industrie. Der MSc in Psychologie qualifiziert darüber hinaus für vielfältige Aufgaben in leitenden Positionen in Unternehmen und anderen Institutionen.

### MODULBEREICH – KLINISCHE PSYCHOLOGIE

- Einführung in die klinische Psychologie
- Health Promotion and Counseling in a Diverse Society
- Klinisch-psychologische Forschung

### MODULBEREICH – ARBEITS- ORGANISATIONS-, UND WIRTSCHAFTSPSYCHOLOGIE

- Einführung in die Arbeits-, Organisations- und Wirtschaftspsychologie
- Entscheidungen (Decision Making) in Organisationen
- Organizational Behavior Across Cultures

### MODULBEREICH – INTERKULTURELLE PSYCHOLOGIE

- Einführung in die kulturvergleichende Psychologie
- Intercultural Competence and Conflict Management
- Spezielle Probleme der angewandten Sozialpsychologie

### MODULBEREICH – FORSCHUNGSMETHODEN UND PSYCHOLOGISCHE DIAGNOSTIK

- Advanced Quantitative Methods
- Testtheorie und Testkonstruktion
- Evaluationsmethoden
- Gutachtentechnik

### MODULBEREICH – KOMMUNIKATION WISSENSCHAFTLICHER ERGEBNISSE

- Techniken wissenschaftlichen Arbeitens
- Kolloquium: Präsentation eigener Forschungsergebnisse

### NICHT-PSYCHOLOGISCHER WAHLBEREICH / PRAKTIKUM / MASTERARBEIT

Mehr Informationen unter:  
[www.jacobs-university.de/msc-psychologie](http://www.jacobs-university.de/msc-psychologie)  
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## SUPPLY CHAIN ENGINEERING AND MANAGEMENT (MSc)

### PROGRAM OVERVIEW

A broad range of industries require professionals who are trained in designing, organizing, and managing complex supply chain networks. Understanding your suppliers and supply chain risks is critical since their performance has a direct impact on a company's ability to produce and deliver. The ability to manage supply chains is therefore fundamental to success in a global economy. Students of Supply Chain Engineering and Management learn how to initiate, maintain, and restructure business processes, understand market dynamics, and acquire modern leadership skills. The program offers a tailor-made curriculum consisting of seminars, workshops, excursions, tutorials, interactive case studies, exercises, and using both group and self-study.

### CAREER OPTIONS

Graduates of the program find a wide range of attractive career options in the dynamic field of supply chain management and beyond. They are qualified to opt for a career in industry, academia, governmental institutions, international organizations, business associations, the media, and non-profit organizations. Graduates work for the automotive and aerospace industry, food and transportation companies and business consultancies.

### CORE AREA

- Supply Chain Management, Logistics & Transportation
- Big Data Challenge
- Advanced Project, Quality & Risk Management
- Purchasing & Distribution

### RESEARCH & DISCOVERY AREA

- Applied Modeling & Simulation
- Supply Chain Engineering
- Research Project

### MATH & METHODS AREA

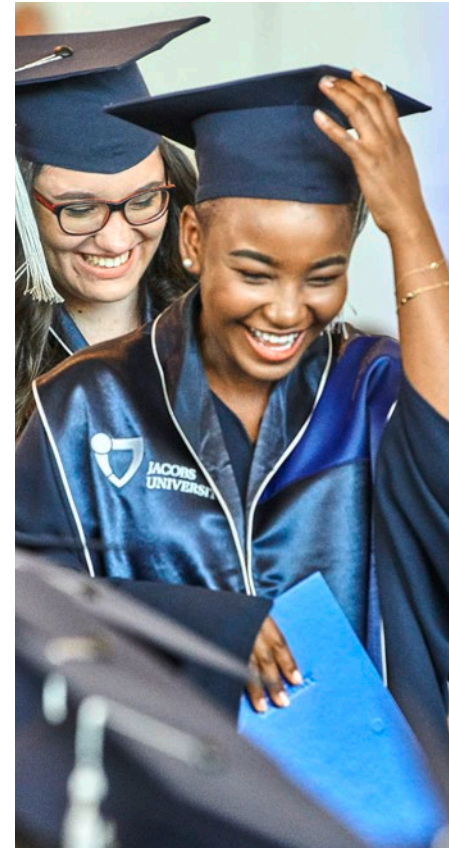
- Programming Approaches for Data Analytics
- Research Methods
- Advanced Programming Approaches for Data Analytics

### CAREER AREA

- Communicating & Presenting
- Language Skills
- Business in Practice & Theory

### MASTER THESIS

For more information, see:  
[www.jacobs-university.de/scem](http://www.jacobs-university.de/scem)  
 Or contact us:  
[scem@jacobs-university.de](mailto:scem@jacobs-university.de)



## SCHOLARSHIPS & FINANCIAL SUPPORT

Both undergraduate and graduate applicants will automatically be considered for a merit-based scholarship during the admissions process, taking into account their qualifications and academic potential without regard to their material wealth or financial resources.

Upon admission, students receive an individual tuition deferral offer, which is granted independently of the student's financial situation but is solely based on future income and personal circumstances.

Applicants for regular bachelor programs can apply for additional need-based financial support. Individualized financial aid packages make it possible for all qualified students to study at our university.

## CONTACT

Do you have any questions about our financing options? Our Student Financial Services Team is happy to help.

[SFS@jacobs-university.de](mailto:SFS@jacobs-university.de)  
 Phone +49 421 200-4210  
[jacobs-university.de/financing-options](http://jacobs-university.de/financing-options)



MORE THAN

70%/85%

OF OUR BACHELOR/MASTER STUDENTS RECEIVE A MERIT-BASED SCHOLARSHIP

## HOW TO APPLY

### APPLICATION DEADLINES

FOR PRE-DEGREE STUDY PROGRAMS	DEADLINE I	June 15 for students who require a visa to enter and study in Germany
	DEADLINE II	August 15 for students who do not require a visa
FOR UNDER-GRADUATE STUDY PROGRAMS	EARLY DECISION	Due by November 1
	EARLY ACTION	Due by December 1
	EARLY ACTION II	Due by February 1
	ROLLING ADMISSION	Due by June 1 for students who require a visa to enter and study in Germany and July 20 for EU students
FOR GRADUATE STUDY PROGRAMS	DEADLINE I	June 1 for students who require a visa to enter and study in Germany
	DEADLINE II	July 15 for students who do not require a visa
	DEADLINE III	August 15 only for applicants to the MSc in Psychologie who do not require a visa

Admission to Jacobs University is based on a candidate's motivation, school and/or university achievements, personal references, and performance on required standardized tests. **There is no application fee.**

For more information on the application process and a full list of requirements, please visit our website: [www.jacobs-university.de/apply-now](http://www.jacobs-university.de/apply-now)

Or contact our Admission Teams:  
[admission@jacobs-university.de](mailto:admission@jacobs-university.de)  
[graduateadmission@jacobs-university.de](mailto:graduateadmission@jacobs-university.de)  
[foundationyear@jacobs-university.de](mailto:foundationyear@jacobs-university.de)  
[medprep@jacobs-university.de](mailto:medprep@jacobs-university.de)



### ACADEMIA

#### TIMES HIGHER EDUCATION WORLD UNIVERSITY RANKING 2019

TOP 300 #1 INTERNATIONAL UNIVERSITY IN GERMANY #1 PRIVATE UNIVERSITY IN GERMANY

35 EXCHANGE PARTNER UNIVERSITIES

90% GRADUATION RATE

1:16 TEACHER TO STUDENT RATIO

### STUDENT LIFE

>35 STUDENT CLUBS

2018 >30 STUDENT EVENTS PER ANNUM

### ALUMNI\*

84% WOULD RECOMMEND JACOBS UNIVERSITY

90% FOUND THEIR FIRST JOB WITHIN THEIR FIRST YEAR OF GRADUATION

1 IN 2 RECEIVED A JOB OFFER WITHIN 3 MONTHS OF GRADUATION

71% RECEIVED THEIR FIRST JOB OFFER IN EUROPE

44% IN GERMANY



~40% SENT OUT 3 APPLICATIONS OR LESS TO GET THEIR FIRST JOB

### TOP 3 SKILLS ACQUIRED AT JACOBS UNIVERSITY



- INTERCULTURAL AWARENESS
- ABILITY TO ADAPT TO CHANGE
- ABILITY TO THINK CRITICALLY

20%

OF THOSE WHO PURSUED FURTHER STUDIES WENT TO ONE OF THE WORLD-WIDE LEADING UNIVERSITIES OF

- THE IVY LEAGUE
- THE TOP UK UNIVERSITIES
- THE TOP 10 UNIVERSITIES IN THE 2018 TIMES HIGHER EDUCATION RANKING

\*According to Alumni Survey 2018

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# JACOBS UNIVERSITY IN NUMBERS

as of October 2018

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## STUDENT BODY

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**1,466** STUDENTS FROM

**111** COUNTRIES



ASIA 38%  
GERMANY 21%  
EUROPE 19% (WITHOUT GERMANY)  
AFRICA 9%  
NORTH AMERICA 5%  
SOUTH AMERICA 5%  
MIDDLE EAST 3%

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## CAMPUS

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**4** RESIDENTIAL COLLEGES



**34** HECTARE GREEN, PARK-LIKE CAMPUS

# YOUR FUTURE STARTS HERE

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## CONTACT US

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[www.jacobs-university.de](http://www.jacobs-university.de)

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