RUHR UNIVERSITÄT BOCHUM **RU**B



## OUR MINDSET. OUR FUTURE.

# » BOCHUM MAKES A DIFFERENCE. «

Kurt Biedenkopf, Rector at Ruhr University Bochum from 1967-1969







Ruhr University Bochum was built to change: It has set out to overcome boundaries between people, between disciplines and between science and society. Our campus is a heritage site boasting good access, flat hierarchies and diverse interactions for almost 50,000 people from all over the world. It is consequently rife with innovation.

No other university has produced as many first-generation academics as Ruhr University Bochum. It is the driving force behind the growth and transformation of a region that is now the densest and most exciting science hotspot in Europe. A living lab for social change. A paradise for pioneers and innovation-driven individuals from all walks of life.

I would very much like you to explore the concrete beauty that is Ruhr University Bochum. You can do so on the following pages and, even better, on a personal visit to our much-loved campus.

Yours, **Martin Paul** Rector

# » YOU'RE DIFFERENT? YOU'RE WELCOME! «



Saiman and Zhenya work for the student counseling office.

## HERE, IT'S NORMAL TO BE DIFFERENT

Ruhr University Bochum embraces its diversity as a strength: It promotes cooperation between all members of the university, regardless of gender, origins, skin color or religion. Saiman and Zhenya work in the counseling office and explain why diversity has long been an integral element of their everyday lives.

"It's not just the students seeking our help who are diverse, but also our counseling team itself," says Saiman, who has a severe visual impairment. "Our own diversity is the foundation for trustworthy, empathetic and professional advice." Saiman is aware of the danger of being discriminated against as a disabled person. "I'm grateful that Ruhr University Bochum is addressing this issue." His colleague Zhenya works with international students. The psychologist fled to Germany from Ukraine. She loves her new job as much as she loves the diversity at Ruhr University Bochum: "When I meet people on campus who are completely different from me, when I hear languages I don't know: That's wonderful."

> READ MORE ABOUT DIVERSITY



# » I USED TO THINK THAT A SCHOLARSHIP WAS ONLY FOR THE UPPER CLASSES. «

Scholarship holder and law student Yasmina with first-year student Maike

## **JUST DO IT!** THIS IS HOW WE PROMOTE TALENT

Taking the plunge into university education – for many, this is a major hurdle. This is especially true for all those people to whom an academic career was not handed on a silver platter. Set up in the heart of an industrial region, Ruhr University Bochum has decades of experience with first-generation academics. Its talent scouts visit schools, and they empower and help talented young people to get started – young people like Yasmina and Maike. A scholarship? Unattainable. Or so Yasmina used to think, until she got a taste of Ruhr University Bochum through the talent scout program. Now a scholarship holder herself, she is pursuing a degree in law. Maike, a first-year student of educational science and theater studies, also found her way to Ruhr University Bochum while still at school. She got to know and love the campus at talent meetings and workshops. When it came to choosing a university, her mind was made up: Ruhr University Bochum, no two ways about it!

A university in a region shaped by hard labor in mining and the steel industry? A gamble that paid off. There's hardly any other university that's produced as many first-generation academics as Ruhr University Bochum.

BUILT TO CHANGE – built to transform society.

READ MORE ABOUT TALENT DEVELOPMENT



uni.rub.de/en/talent-development

# AL FRESCO CLASSROOMS: BREATHE IN. BREATHE OUT.





#### NO CAN DO? YES CAN DO!

#### YOUR DEGREE, JUST THE WAY YOU LIKE IT

No matter whether you go for linguistics or law, psychology or physics, mechanical engineering or medicine: With its wide variety of subjects and faculties, Ruhr University Bochum, Germany's most diverse campus university, offers almost limitless degree options. But don't worry: There's also ample resources for advice, guidance and support, especially when you're taking your first steps at university. By providing personalized talent support, Ruhr University Bochum helps young people to identify their career path and unlock their potential. The university's first-year degree programs are among the best in Germany and regularly receive top marks in the CHE rankings. If you'd like to venture further afield, Bochum is the right place for you: By forging alliances with universities in neighboring cities, it offers you the opportunity to attend courses at different locations. Moreover, Ruhr University Bochum provides competent support for studying and researching abroad. The same applies to prospective startups who wish to develop and test their business ideas. The careers "made by RUB" are as diverse as the students themselves.

> READ MORE ABOUT STUDIES → studium.rub.de/en





## **THE MASTERPLAN** FOR YOUR SUCCESS

#### **RESEARCH-BASED LEARNING FOR A SUSTAINABLE CAREER**

The safest careers are those that can't be replaced by AI and machines. This is why our students learn to unleash their creative potential above all else. Hands-on approach and experimentation, developing and testing theories: All these skills are necessary to become a successful and happy participant in the digital world of tomorrow. By tackling current research questions, students at Ruhr University Bochum learn to think and work independently and critically. Research-based learning is the guiding principle of our academic teaching. Tangible application in practice provides the necessary foundation. This is aided by our close proximity to the many companies and emerging industries in the Ruhr region, which identify and promote sought-after talent at Ruhr University Bochum.

Our practice-oriented teaching formats at Ruhr University Bochum help young people acquire skills that fully prepare them for starting a career; they gain insights into the world of employment and forge valuable contacts. Lecturers find professional support in developing and testing new teaching and learning formats. Because only innovative teaching can pave the way for change.

> READ MORE ABOUT TEACHING



→ uni.ruhr-uni-bochum.de/en/teaching

# » I CAME AS AN EXCHANGE STUDENT. I'M ABOUT TO BECOME AN ENGINEER MADE IN GERMANY «

David from Ecuador pursues a Master's degree in Subsurface Engineering; Katherine contributes greatly to the welcoming culture at Ruhr University Bochum.



## **QUALIFICATION GOES HAND IN HAND** WITH INTEGRATION

Ruhr University Bochum is open to people from all over the world and promotes the international exchange of students and teachers. It helps young people from many different nations to integrate into the community during their academic studies and to feel at home in Bochum. Its global networks connect researchers with teams of experts around the world and make it easy to spend both short and long periods abroad as part of your degree course. Even easier than that, internationalization at home means that you can travel online to a lecture hall on the other side of the world and discover new approaches. Roughly 10,000 kilometers away from home, David feels quite the Bochum boy. A semester abroad at Ruhr University Bochum opened up an exciting perspective for him. David is now studying for a Master's degree in Subsurface Engineering. He loves the variety of cultures on campus. "When I hear my mother tongue, Spanish, I feel at home."

As a research assistant on an internationalization program, Katherine does a lot to promote a welcoming culture. She coordinates foreign language courses and exchange programs and communicates with students and lecturers from other countries on a daily basis. "Other cultures are fascinating and inspiring," is her enthusiastic verdict.

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Ruhr University Bochum has more than 6,000 international students, researchers and employees. It offers programs specifically for refugees. BUILT TO CHANGE – built to open doors.

READ MORE ABOUT THE INTERNATIONALIZATION STRATEGY → international.rub.de/en/internationalizationruhr-university-bochum



# **NOT TALKING DOWN,** BUT PULLING TOGETHER.



# » SPENDING A SEMESTER IN AUSTRALIA GAVE ME AN INCREDIBLE BOOST. «

Alina gained the freedom to achieve self-fulfillment, build up mental resilience and forge unforgettable friendships during her semester abroad – experiences that will stay with her for the rest of her life.

## **HOMEBASE AT THE RUHR** NETWORKS AROUND THE WORLD

#### **OUR COOPERATIONS AROUND THE GLOBE**

As a member of Ruhr University Bochum, you are by default part of our global community and benefit from our extensive networks. Here's a selection of our collaborations:

On a regional level, we have joined forces with our neighboring universities in the **University Alliance (UA) Ruhr**: This strategic cooperation produces internationally significant research areas and strengthens our position around the world. In addition, the Alliance expands study opportunities in the Ruhr region. While many regions are currently struggling with post-industrial transformation, the European university alliance **UNIC (European University of Cities in Post-Industrial Transition)** has tackled this issue. Ruhr University Bochum is the only German university in the network to be involved in the concept of a "European University", which connects young people across Europe. It is also strengthening its profile as a network university through its membership of the leading international **Worldwide Universities Network (WUN)**, which focuses on the sustainability goals of the United Nations. These and many other examples show how Ruhr University Bochum is using its expertise and resources to shape a better future through collaboration with others.

UA RUHR



Utrecht Netwo

SCHOLARS AT RISK

NETWORK



READ MORE ABOUT NETWORKS



→ international.rub.de/en/networks-and-representations

# » WE CAN SOLVE THE MAJOR CHALLENGES ONLY BY WORKING AS A TEAM. «

Two disciplines, one goal: the doctoral degree. Uta and Jonas support each other on their path towards it.

RLEINIGREIT

#### **SYNERGY GIVES ENERGY**

Psychology meets computer science, field research meets theory: This is what a dynamic interdisciplinary collaboration is all about. It broadens horizons and breaks down barriers between people and disciplines. At Ruhr University Bochum, the ways to meet each other are short. And so it's fun to see what's going on next door and where to find synergies.

"Traditional research that focuses on just one discipline is showing its limitations," says computer scientist Jonas. "We can solve the major challenges – for example, protecting companies and people from IT attacks - only by working as a team." Together with Uta from the Chair of Work, Organizational and Business Psychology, he is part of the interdisciplinary SecHuman research group at Ruhr University Bochum. Both appreciate the opportunity to exchange ideas across disciplines and support each other throughout their doctoral studies. A true win-win partnership!

21 faculties, approximately 200 subjects and almost 50,000 people: Which other higher education landscape in Germany can boast such density and diversity? Interdisciplinarity is not an alien concept; it's an integral part. BUILT TO CHANGE built to tear down disciplinary barriers.

READ MORE ABOUT **INTERDISCIPLINARITY** 



→ forschung.rub.de/en

# **CURIOUS TIDBITS** & AWESOME HIGHLIGHTS

With 17 higher education institutions, 5 universities and 50 non-university institutes, the Ruhr region is Europe's densest science and research hotspot.

A non-exhaustive list of Ruhr University Bochum highlights:



The main campus covers an area of 4.5 square kilometers – the equivalent of 630 soccer pitches.



With 12 Collaborative Research Centers and 17 participations as well as 36 ERC grants, Ruhr University Bochum demonstrates scientific excellence\*

\* As of April 2025

Facts & Figures



With almost 40,000 students, Ruhr University Bochum ranks among the top 10 largest universities in Germany.



The largest Makerspace in Germany boasts 2,000 m<sup>2</sup> of workshops, co-working areas and networking opportunities.



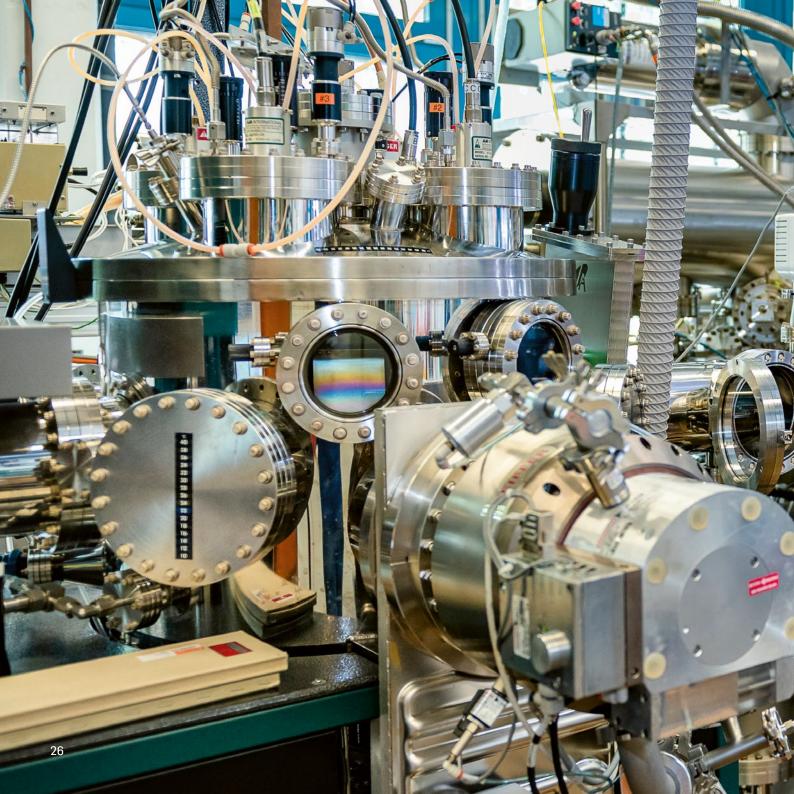
With 100 start-up projects every year, Ruhr University Bochum is one of the top 10 universities for start-ups in Germany.



We currently support more than 260 young talents with a Deutschlandstipendium scholarship.



**5** research buildings at Ruhr University Bochum have been funded by the federal government and the state of NRW in the last few years.



# NEW KNOWLEDGE

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#### MATHEMATICS AND MODERN SOCIETY

**»I've always had a fascination for developing solutions to the challenges of our modern society using fundamental mathematics.**« EIKE KILTZ, Leibniz Prize winner at the CASA Cluster of Excellence for IT Security

His fascination with mathematical problems led to encryption algorithms that are used all over the world to prevent cyberattacks. Even today, his team is working on protecting data from attacks carried out by quantum computers.

#### EXPLORING THE UNKNOWN

#### »The freedom to explore the unknown – that's what's at the core of my life as a scientist.«

ONUR GÜNTÜRKÜN, Communicator Grantee and spokesperson for the Extinction Learning Collaborative Research Centre

For Onur Güntürkün, the brain is one of the last great mysteries of science. He and his team hope to unlock this great unknown – starting at the molecular level and ultimately exploring the phenomenon of consciousness.



#### FASCINATION FOR LASER LIGHT

»What drives me: the fascination for laser light: pushing technology to the cutting-edge, to where people thought it was not possible, knowing it can make a big difference in so many fields. And mostly, getting young people to share this excitement is an incredibly rewarding journey.«

CLARA SARACENO, ERC Consolidator Grantee and member of the RESOLV Cluster of Excellence for solvation science

She has never allowed herself to be held back by technical limitations, but has always accepted them as a challenge. With her work on ultrafast lasers, she is penetrating new frequency ranges of the electromagnetic spectrum and opening them up for innovative applications.

#### MOVING BORDERS

»For me, being a researcher means pushing the boundaries of what is imaginable, breaking through or 'dissolving' walls. It takes enthusiasm, a strong team and the willingness to stand up for your convictions.«

MARTINA HAVENITH-NEWEN, spokesperson of the RESOLV Cluster of Excellence for solvation science

She was the first to highlight the role of solvents as active players in chemical and biological processes. As a result, she initiated a paradigm shift in chemistry and put Bochum on the global map as a hotspot for solvation science.



#### LOVE FOR THE UNIVERSITY

#### »In our rational-irrational world, I am always driven by my love for the university as a place of self-critical reason.«

ANNA TUSCHLING, Principal Investigator of the Collaborative Research Center "Virtual Lifeworlds" and Co-Speaker of the Research Training Group "The Documentary"

As a digital enthusiast and AI critic, she researches the socio-cultural consequences of technological developments, asking: "How are Artificial Intelligence and virtuality transforming our world?", "What do machines do with our affects and emotions?", "How can we preserve and understand the history of digital media?"

#### NEW FIELDS EMERGE

»The emergence of new, interdisciplinary knowledge and technology fields as well as the associated potential for science-based start-ups is a fascinating area of research for me and my team.«

STEFANIE BRÖRING, Academic Director of the Worldfactory Start-up Center

She contributes to the sustainability transition – by fostering a better understanding of the transfer of technologies into new business models. Her focus is on both the transformation of established companies and the emergence of start-ups.





## **EXCELLENT RESEARCH** MADE IN BOCHUM

On the most diverse campus in Germany, Ruhr University Bochum houses 21 faculties with a wide range of subjects, encompassing natural sciences, engineering, life sciences, medicine, humanities and social sciences. The close proximity fosters interdisciplinary cooperation, which is the basis for the scientific success of our researchers. Many of their projects contribute to the sustainability goals of the United Nations, thus helping to shape social change.

The main areas of research at Ruhr University Bochum are organized in research departments affiliated across disciplines and on an international level. Bochum's research excellence is reflected in 12 Collaborative Research Centers and the Clusters of Excellence "RESOLV – Ruhr Explores Solvation" in solvent chemistry and "CASA – Cyber Security in the Age of Large-Scale Adversaries" in IT security. In order to become even bigger and more successful in the international arena, Ruhr University Bochum cooperates with its neighboring universities, TU Dortmund University and the University of Duisburg-Essen. Under the umbrella of the University Alliance Ruhr, the three universities are bringing together their top researchers in four new research centers and a college of humanities and social sciences. This concentration of excellence is in turn attracting top scientists from around the world, creating a total of 50 new professorships. It is also an ideal environment for extramural research institutions and business incubators.

BUILT TO CHANGE – the Ruhr knows how transformation works.

> READ MORE ABOUT RESEARCH → forschung.rub.de/en



ing.rub.de/en



## **EXCELLENCE** IS A LEARNING CURVE

Countless nights alone in front of your computer and nobody's interested in your output? We won't stand for that! Ruhr University Bochum supports all of its doctoral students from day one until they become independent researchers. The RUB Research School welcomes you into a community that fosters exchange and individual development. This will prepare you for a responsible position after your doctorate, both in academia and in the free market. If you decide to pursue an academic career, you will find that Ruhr University Bochum provides the best conditions. We attach great importance to early scientific independence. Through junior professorships, young researchers can build up their own research groups and sharpen their scientific profile.

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The RUB Research School was one of the first projects to be funded by the Excellence Initiative of the German federal and state governments. It offers an interdisciplinary qualification program free of charge to more than 4,000 young researchers. **BUILT TO CHANGE – built to boost scientific careers.** 

#### READ MORE ABOUT EARLY CAREER RESEARCHERS



→ forschung.rub.de/en/early-career-researchers

# ALL THEORY IS GRAY? NOT WHEN IT BRIDGES THE GAP TO APPLICATION.





## WHERE IDEAS **BECOME FACTS**

#### SCIENCE MEETS EVERYDAY LIFE

As is reflected in its concrete architecture, Ruhr University Bochum is by no means an ivory tower. The research and development that takes place here is inspired by the issues of the day and has an impact on society. Successful transfer means enriching everyday life with knowledge and promoting social progress.

For dialog within the university, with the public, with stakeholders from politics and business, and with partners from science, Ruhr University Bochum provides a variety of formats, such as student labs, public lecture series and discussion forums. With the WORLDFACTORY in the O-Werk, it has also established a unique facility for technology and knowledge-based start-ups: It is a think tank, laboratory and production site for the innovations that our world urgently needs.

Our Worldfactory Start-up Center enables business ideas to emerge from scientific research. The success of the university's support for entrepreneurs is reflected in its high ranking in the Start-up Radar of the donors' association Stifterverband. BUILT TO CHANGE – built to create facts.

READ MORE ABOUT **TRANSFER & START-UPS** 



→ transfer.rub.de/en

## » OUR GOAL IS TO MANUFACTURE THE MOST EFFICIENT AI CHIP IN THE WORLD. «

Enver, Dennis and Moritz integrate artificial intelligence with sustainability.



## **TO BOLDLY GO INTO** A SUSTAINABLE FUTURE

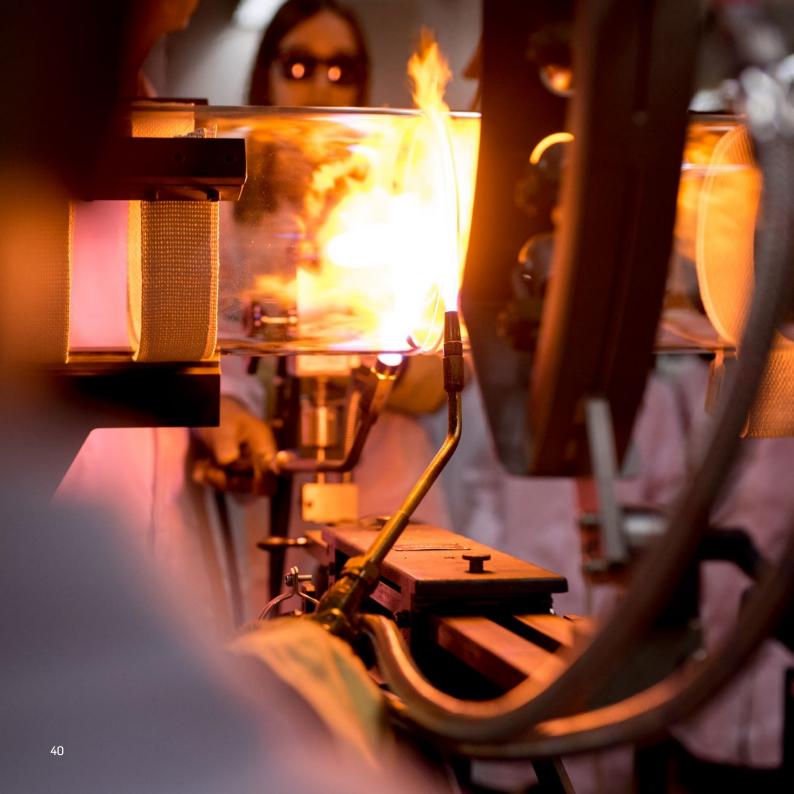
Climate neutrality, ecological transformation – it's all pretty complicated, isn't it? Ruhr University Bochum provides the necessary expertise and is committed to improving climate protection on campus and in global networks. It creates degree programs focusing on sustainability and promotes pioneering spin-offs such as "Gemesys". The start-up shows that a sustainable business idea can not only save resources, but also make money. "Data centers that run artificial intelligence consume as much energy as entire cities," say Enver, Dennis, and Moritz of Gemesys, all three alumni of Ruhr University Bochum. "We're using human memory as inspiration to create the most efficient AI chip in the world. It's more powerful, more energy efficient and much more compact." The prototype the team is working on aims to equip mobile devices with maximum artificial intelligence while consuming minimum energy. Climate protection in your pocket!

While pursuing greater sustainability, Ruhr University Bochum is committed to the UN goals. All members of the university are called upon and encouraged to participate in the transformation process. After all, our future concerns us all. **BUILT TO CHANGE – built to update the way we think.** 

READ MORE ABOUT SUSTAINABILITY



→ nachhaltigkeit.rub.de/en



## HAND IN HAND WITH RESEARCH

#### CAREERS IN TECHNICAL AND ADMINISTRATIVE POSITIONS

Where would the ambitious researcher be without a lab, the hungry student without Mensa food and the visiting professor without housing? Many individuals have to pull together so that young people can pursue their studies and lay the foundation for their careers, and so that cutting-edge research can produce innovations that provide answers to the pressing questions of our time. Ruhr University Bochum thrives on the efforts of thousands of people engaged in a wide variety of scientific and non-scientific activities.

It also provides training in many professions. Would you have thought that gardeners, bookbinders and glassworkers learn their trade here? With 6,000 jobs and apprenticeships, Ruhr University is the largest and most diverse employer in Bochum. Employees benefit from a wide range of services, including comprehensive health management, specialized continuing education, family support programs and perhaps the finest range of cuisine among German universities, from Asian to vegan. The result is a great work environment and high motivation. Here, everyone pulls together to advance research and teaching!

> READ MORE ABOUT CAREERS → uni.rub.de/en/career



# BERMUDAJECK

TEAMSPORTS

adidas

## **DEEP IN THE WEST**

#### LIFE AND LEISURE DON'T COST MUCH IN GERMANY'S FRIENDLIEST CITY

"Here, where what counts is heart, not money," as Ruhr University alumnus Herbert Grönemeyer sings about his hometown in his popular Bochum song. And this line is not "just" a romantic declaration of love. It's underpinned by empirical evidence: According to a survey by the British polling institute Censuswide, Bochum is the friendliest city in Germany, scoring high in politeness and helpfulness towards visitors and strangers.

The renowned German Economic Institute rated Bochum as the top location for affordable student accommodation in its student housing report. All this gives the people of Bochum ample reason to celebrate, which in turn, makes Bochum the ultimate party destination, with countless clubs and pubs in the city's nightlife district Bermuda3eck. But Bochum has a lot more to offer. Located in the center of the cultural metropolis Ruhr, the city is home to the Musikforum concert venue and the Schauspielhaus theater. It also makes the heart of Bundesliga fans beat faster. On top of that, Ruhr University Bochum offers a wealth of activities for anyone who wants to participate: Music lovers are welcome to join the university orchestra or choir – and they may even get to sing the Bochum anthem.

Care to try? All rise, scan the QR code and join us in singing the Bochum song.

> FRIENDS OF RUHR UNIVERSITY SINGING THE BOCHUM SONG



www.youtube.com/ruhruniversitaet



### **CAPTURING ALL YOUR SENSES**

#### DIVE INTO THE CULTURAL COSMOS OF RUHR UNIVERSITY BOCHUM

"The essence of the 'university of the new type' should be that it serves as a counterweight to the disproportionate emphasis on materialistic and technological tendencies in the Ruhr area." This was the founding vision of Ruhr University Bochum, as expressed in 1960 by Werner Schütz, Minister of Culture of North Rhine-Westphalia. For the first time in Germany, the engineering sciences, which had previously been taught at technical colleges, were integrated into a university, in order to bridge the gap between technology and philosophy.

This holistic approach has encompassed more than the academic sphere. Right from the outset, sports facilities, a

botanical garden, a cultural center and art collections were part of the integrated concept at Ruhr University Bochum. It offered its students, many of whom came from working-class families, a comprehensive education. In 1990, the botanical garden was enriched by a true gem when the partner university Tongji in Shanghai presented Ruhr University Bochum with a Chinese garden in the style of a traditional southern Chinese scholar's garden.

In keeping with its founding mission, Ruhr University Bochum is constantly evolving, driving structural change in the Ruhr region and opening up new opportunities for its residents. BUILT TO CHANGE.

## **EVERYTHING FLOWS.** WHAT WAS. WHAT IS. WHAT WILL BE?



## **R U B**UILT TO CHANGE?

#### CONTACT

For prospective students: studium.rub.de/en



PUBLISHER Ruhr University Bochum Universitätsstraße 150 44801 Bochum, Germany

PHOTO CREDITS

#### For job seekers: uni.rub.de/en/vacancies



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