

# STUDYING STEM IN THE RUHR RESEARCH TRIANGLE

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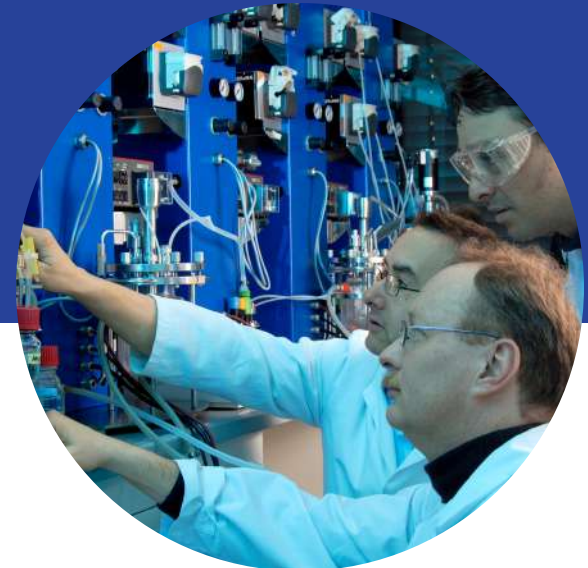


# RUHR AREA

## A REGION IN TRANSITION



**Coal mining**  
**Steel industries**



**Science**  
**Research**  
**Cultural hotspot**



# RUHR AREA

## A REGION IN TRANSITION

- 5.3 million people from over 150 nations
- European Capital of Culture 2010
- Soccer: Home of BVB & FC Schalke 04
- Located in the heart of Europe (connections to many other European cities like Paris, Amsterdam, Berlin, Brussels)



Culture



Nature



Sport





# UNIVERSITY ALLIANCE RUHR

THE UNIVERSITY ALLIANCE RUHR (UA RUHR) IS AN ALLIANCE OF RUHR UNIVERSITY BOCHUM (RUB), TU DORTMUND UNIVERSITY (TUDO) AND THE UNIVERSITY OF DUISBURG-ESSEN (UDE)



10 COLLABORATIVE  
RESEARCH CENTRES



115,000 STUDENTS  
17% International students  
1,300 PROFESSORS  
9,300 RESEARCHERS



570 DEGREE PROGRAMS  
62 International degree programs  
17 Joint graduate programs



3 LIAISON OFFICES  
Moscow + New York + Sao Paulo

UNIVERSITÄT  
DUISBURG  
ESSEN

*Open-Minded*

RUHR  
UNIVERSITÄT  
BOCHUM

RUB

tu technische universität  
dortmund

# UNIVERSITY ALLIANCE RUHR

## RESEARCH PROFILES



- Protein research
- Interfacial chemistry
- Religious studies
- Plasma science
- Neuroscience
- Subsurface modeling and engineering



- Production and logistics
- Chemical biology and biotechnology
- Modeling and optimization of complex processes and systems
- Educational research



- Nanosciences
- Biomedical sciences
- Empirical research in education
- Urban systems
- Transformation of contemporary societies

RESOLV & MATERIALS CHAIN

# UNIVERSITY ALLIANCE RUHR

## STUDYING AT UA RUHR IN THE RUHR REGION

### WHY STUDY AT UA RUHR?

- High academic standards and excellent reputation
- Many degree programs offered in English
- Close collaborations with industry partners in the region and beyond
- Strong focus on practice
- Internationally recognized degrees
- Outstanding employment opportunities

### WHY STUDY IN THE RUHR REGION?

- Europe's third largest metropolitan areas
- Vibrant art, music and theater scene
- Extensive sports programs - soccer!
- Excellent infrastructure with one of the world's biggest public transportation networks
- High standard of living at affordable prices - living expenses in Dortmund are around EUR 650.00 including health insurance



# APPLICATION AND ADMISSION



## General

- M.A.: 2 years (4 semesters)
- Ph.D.: 3-5 years
- Language of instruction German and/or English depending on the program
- Semesters start in October (Winter) and April (Summer)

## Requirements

- Undergraduate degree (B.A.)
- Good grades
- Proof of proficiency in German and/or in English depending on the program

## Fees

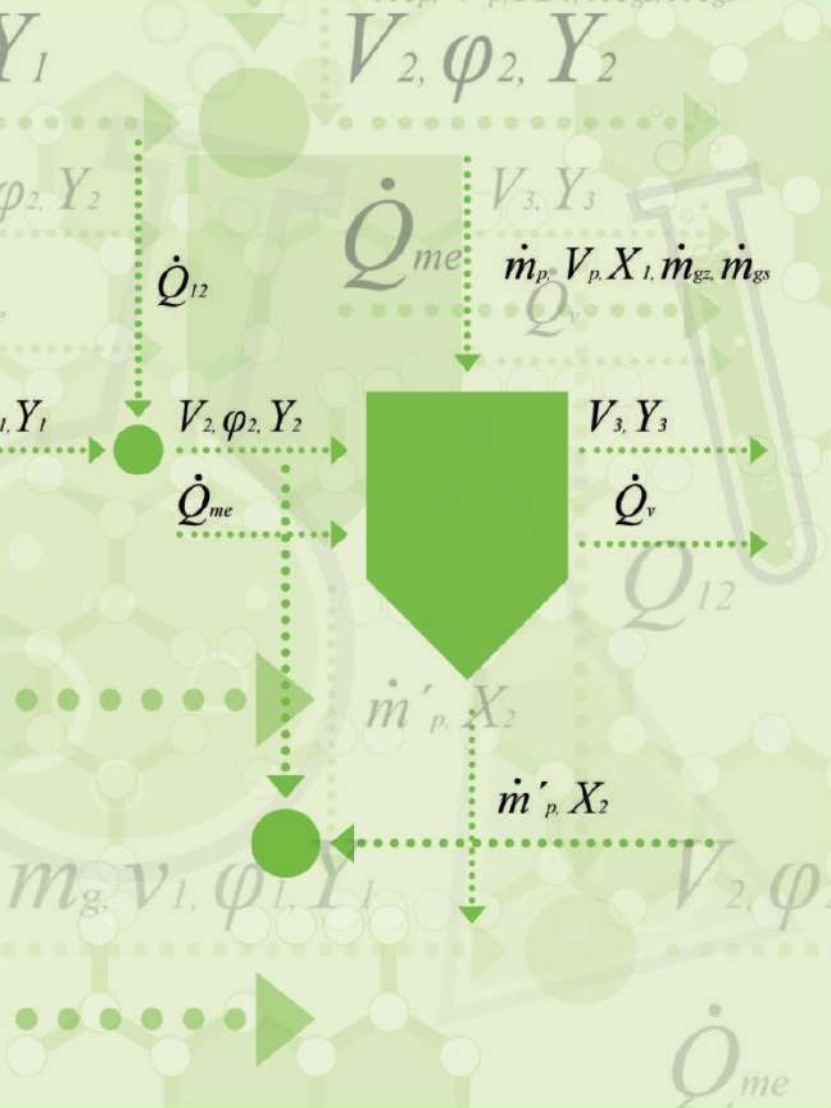
- Semester fee of EUR 270.00, includes public transportation ticket
- Some graduate programs may charge an additional semester fee

## Deadlines

- Deadlines for international students vary depending on the program
- Example: Application period for international students at TU Dortmund University for Summer Semester 2018: November 15, 2017 until January 15, 2018

## Application documents

- School report, High School Diploma or similar
- Transcript of records including translation
- Graduation degree in the original language and a translation in German or English
- Additional documents may be required depending on country of origin and study program



## M.Sc. Process Systems Engineering



Prepares students to work on the design and operation of complex chemical and biochemical production systems



Special requirements  
Prep course (see Semester 1)



Semester 1: Preparatory Semester with Intro to Process Systems, Lab Course, Language Course GER or ENG, Fundamentals of Chemical Engineering, Industrial Chemistry  
Semesters 2 & 3: Process Modeling and Optimization, Reaction Engineering, Fluid Separations, Particle Technology, Simulation Technology ...  
Semester 4: Master Thesis



Semester fee of EUR 270.00  
Additional semester fee of EUR 480.00



Link



## M.Sc. Spatial Planning



The program Urban Transformations prepares students in the fields of urban and regional planning, spatial planning and urban design.



Special requirements  
240 ECTS credits or professional experience



2-semester program  
+ Equip students with skills for managerial positions in professional practice  
+ Provide them with a comprehensive overview of their subjects  
+ Train them in advanced scientific methods



Semester fee of EUR 270.00



[Link](#)

# International M.Sc. in Engineering



This degree program bridges the gap between technology and culture. Drawing on the expertise on one of Germany's largest engineering schools, the program offers a variety of specializations including:

M.Sc. Automation and Control Engineering

M.Sc. Communications Engineering

M.Sc. Computational Mechanics

M.Sc. Computer Engineering ... 5 more



Special requirements

GER and ENG at the B1 level



Semesters 1-3: Core Subjects, Advanced Theory,  
Profile Subjects, Electives

Semester 4: Master Thesis

Industrial Internship: Optional



Semester fee of EUR 270.00



[Link](#)

# Ph.D. / B.Sc.-Ph.D. in Neuroscience



The International Graduate School of Neuroscience offers a Ph.D. program in all aspects of neuroscience from the molecular level to higher cognitive functions.



Special requirements  
M.A. or Diploma for Ph.D. program or B.A. in STEM for B.Sc.-Ph.D. program  
ENG at the B2 level  
Subject test and interview



6 semesters with obligatory courses, lab and symposia



Semester fee of EUR 270.00



Link



# International Summer Programs



## **International Summer Program (ISP) June 3 - August 10, 2018**

- 8-week program
- Students are integrated into regular summer semester courses and campus life
- Courses taught in English
- German Language Course
- Cultural program & excursions
- Research project possible
- 2 Tracks  
Track A: Engineering (Applied Math, Automation and Robotics, Biochemical and Chemical Engineering, Computer Science, Business and Economics, German Culture)  
Track B: German & European Culture



Link



# Research Academy Ruhr

- Germany's largest platforms to support young researchers and prepare them for careers inside and outside academia
- 
- Features
- 
- Career counseling
- Grant writing workshops
- Qualification programs
- Funding opportunities for research and travel
- Networking platforms



Link



# Engineering Unit Ruhr (EUR) TU Dortmund & Ruhr University Bochum



Leading center for research and innovation in the field of engineering in the Ruhr area



Cooperation between mechanical engineering faculties at TU Dortmund University & Ruhr University Bochum



7 study programs ranging from Mechanical Engineering to Teaching Technical Sciences



Goals:

- Combining resources
- Advancing the Ruhr Area
- Train skilled engineers
- Innovation
- Cutting-edge technology
- Building links to corporations



## CONTACT

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## THANK YOU!