



RUHR-UNIVERSITÄT BOCHUM

## STUDYING PHYSICS AT RUB

Niklas Fornefeld, consultant for the admission procedure



**Physik und Astronomie**  
*from matter to materials*

# Overview

- The faculty of Physics and Astronomy
- Your study advisors
- Our study program
- Further support services
- The next steps

Note: you will receive these slides at the end of the interview!







RUHR  
UNIVERSITÄT  
BOCHUM



# The Faculty of Physics and Astronomy at RUB

- 24 professors
- approx. 800 students overall
- approx 40 M.Sc. students graduating/year
- approx. 25 PhD students graduating/year

**Nuclear +  
Particle Physics**

**Solid State  
Physics**

**Plasma Physics**

**Astronomy/  
Astrophysics**

**Neuro-  
informatics**

**Didactics**

**Biophysics**



# The Faculty of Physics and Astronomy at RUB

## Student advisory service at the faculty



**Dr. Andreas Kreyssig**  
Student advisor for  
international students  
- your first point of contact



**Dr. Ivonne Möller**  
Advises on general  
questions concerning  
examination regulations



We ask all students to contact us by email:  
**[master-international@physik.rub.de](mailto:master-international@physik.rub.de)**

# Our Master's Program



**First:** you are all admitted to the program, and you can enroll after this interview.

The requirements can be taken during study!

## General Structure:

- Two year program = four semesters (standard period of study)
- Approx. 30 credit points (CP) earned per semester
- **First year:** study phase (60 CP)
- **Second year:** preparatory modules + Master's thesis (60 CP)



# Our Master's Program

**BUT....**

...two years are the standard period of study according to examination regulations

...no one from the faculty checks the achievements per semester

...if less than 30 CP are acquired, this has no consequences

...it is possible to study for more than two years (the study period is not limited)

→ Your individual plan can differ from the „official“ and standardized regulation





# Our Master's Program

## General Structure: First Year

Five areas:

- Experimental physics (9-18 CP)
- Theoretical physics (6-18 CP)
- Your focus area (15-25 CP)
- Minor subject (5-18 CP)
- Key qualifications (5-15 CP)

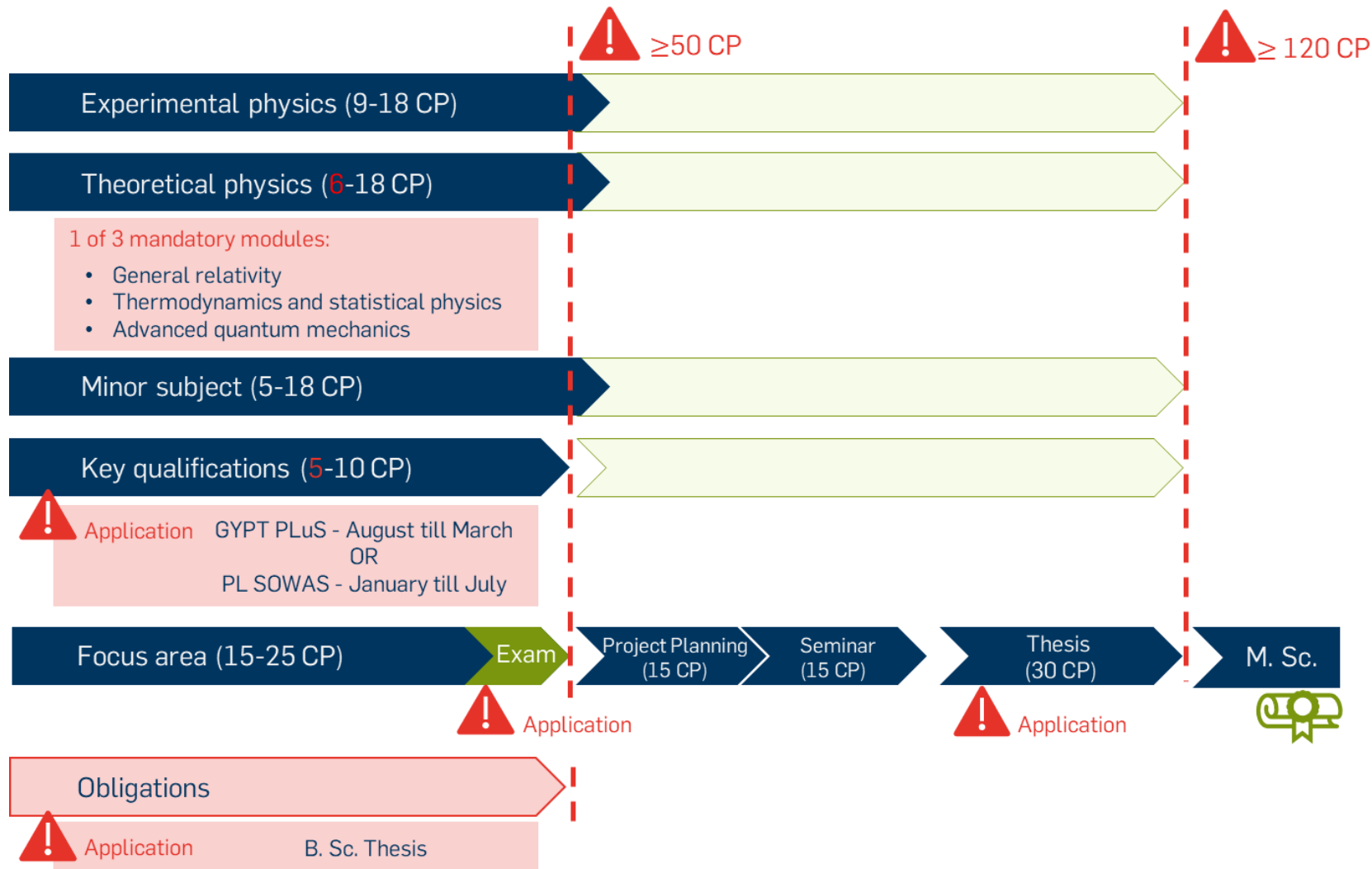
Complete list of offered courses

→ see [course catalogue](#)

## General Structure: Second Year

Preparation and writing of your master's thesis

- Three compulsory modules:
  - Knowledge of Methods and Project Planning (15 CP)
  - Project seminar for the Master's thesis (15 CP)
  - Master's thesis (30 CP)



# Requirements for International Students

## Requirement 1:

### Introduction to quantum mechanics and statistical physics (6 CP)

- At almost all international universities, the scope in the area of theoretical physics is smaller, so that many applicants receive this requirement.
- The grade of the exam does not count towards the Master's grade.





# Requirements for International Students



## Requirement 2:

### The Bachelor thesis (12 CP, 10 weeks)

- At our faculty the complete 6th semester is reserved for the bachelor thesis.
- At almost all international universities, the scope is smaller, so that many applicants receive this requirement.
- However, this requirement serves not only to fulfil the examination regulations, but also gives you the *opportunity to get familiar with our faculty*.
- The grade of the Bachelor's thesis **does not count!** towards the Master's grade.

# Requirements for International Students

„Can I start my studies, even though I got obligations?“

Yes!

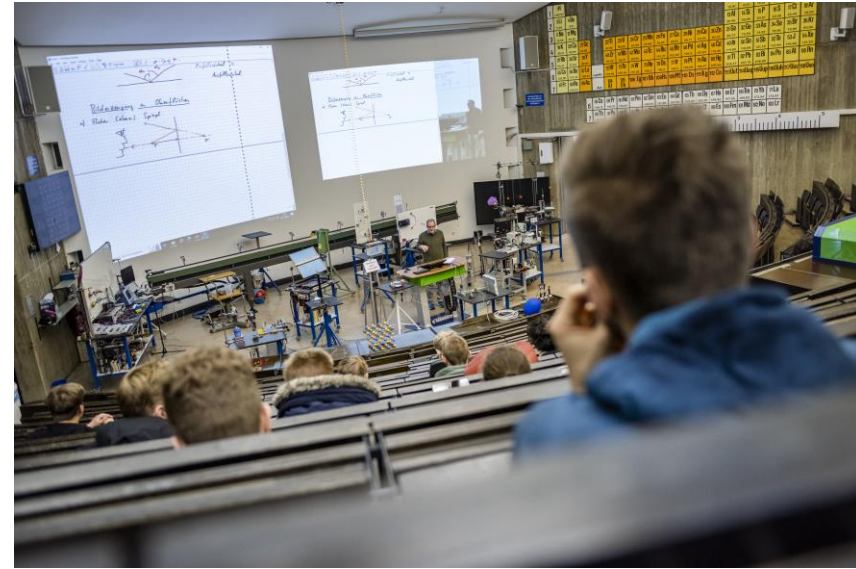
- Conditions must be proven at the latest upon admission to the Master's thesis.
- Your work in regard to the conditions does not have any effect upon your Master's program and grades, etc. will not be counted towards your Master's degree.

# Teaching format in the summer semester

It is planned to hold all courses in attendance on the campus.

The courses start 13<sup>th</sup> Oktober 2025.

You have to be in Bochum **latest** on 30<sup>th</sup> October 2025  
– otherwise you have to reapply for the summer term.





# The course catalogue

RUHR-UNIVERSITÄT BOCHUM **Select winter term 25/26** English

**eCampus** Information

Semester

Information

- Study guide
- Audiences
- Units
- Programme structure
- Persons
- Rooms
- Search

Back

**GENERAL VIEW XVI. FAKULTÄT FÜR PHYSIK UND ASTRONOMIE**

- XVI. Fakultät für Physik und Astronomie
  - Vorkurs 2
  - Tutorien
  - Bachelor of Science**
  - Master of Science**
  - 2-Fach Bachelor
  - Master of Education
  - Seminare für Doktorandinnen und Doktoranden
  - Für Hörerinnen und Hörer aller Fakultäten, Optionalbereich 12
  - Lehrveranstaltungen für Studierende mit Physik als Nebenfach 22

XVI. Fakultät für Physik und Astronomie

- Master of Science
  - Compulsory Courses 1
  - Elective Core Courses 13
  - Courses in Physics Major
    - Astronomy, Astrophysics 9
    - Nuclear and Particle Physics 1
    - Plasma Physics 3
    - Solid State Physics 1
    - Biophysics 1
    - Elective Courses (Soft Skills) 2

For obligation: QM lecture

160117	Introduction to Quantum Mechanics and Statistics	Eremin, Ilya	Lecture
160118	Einführung in die Quantenmechanik und Statistik (Übung)	Eremin, Ilya	Exercise

# The course catalogue

Items per page 25 (Items 1 - 9 of 9)			
 Course number	Title	Lecturers	Type
160611	Cosmology (Lecture)	Hildebrandt, Hendrik	Lecture
160612	Cosmology (Exercises)	Hildebrandt, Hendrik	Exercise
160613	Radio Astronomy	Adebahr, Björn	Lecture

## COSMOLOGY (LECTURE)

## COSMOLOGY (EXERCISES)

Common information

Event details

Registration procedure

Exams

Common information

Event details

Registration procedure

Exams

① Course number: 160611

Title: Cosmology (Lecture)

Event type: Lecture

Term: WS 22/23

① Semester weekly 3  
hours [SWS]:

① Course number: 160612

Title: Cosmology (Exercises)

Event type: Exercise

Term: WS 22/23

① Semester weekly 1  
hours [SWS]:

3 + 1 = 4CP

# Support Services

## General Services:

- Our Admissions Office

If you have questions about your admission, please contact the admissions office directly.

- Registrar's Office

If you have problems or questions about issues such as paying the social contribution fee, semester spent on leave etc. the student office is responsible.

- RUBiss team of the International Office

The RUBiss team provides support in social, cultural and university matters as well as in formal and legal matters. We support you throughout your studies.



# Welcome and onboarding events


## Preparatory webinar (by international office)

The webinar covers the following topics, among others:


- Organisational matters
  - Online enrolment
  - Health insurance
  - Financing your studies
  - Accommodation in Bochum
  - etc.
- Studying at RUB
  - RUB tools
  - Services and offers of the International Office for international students
  - Student advisory services
  - etc.

The next preparation webinars will take place as follows:

- Thursday, September 04, 2025, 10:30 a.m. (UTC +2) in English

- [You need to register via this link!](#) 

- Friday, September 05, 2025, 10:30 a.m. (UTC +2) in German

- [You need to register via this link!](#) 

We look forward to meeting you online!

**[Weblink: Preparatory webinar](#)**

# Welcome and onboarding events

## Onboarding course (spans the first semester)

The Onboarding course is aimed at newly admitted international students on all English-language Master's degree programs. It accompanies and supports international students right at the beginning of the introductory phase of their studies.

The Onboarding course takes place during the winter semester. During the lecture period, you will attend courses with a scope of 2 SWS (semester hours per week), plus block courses during the lecture-free period.

The content enables better integration into everyday university life and the degree program. Communication within and outside the university, academic integration, social exchange and intercultural skills will be strengthened.

The information on the course content is preliminary. Further and more specific information will be available here shortly.

## Registration

*Registration takes place via Moodle and is possible until Sunday, October 05, 2025!*

Please register for the course and complete the **questionnaire** by **Sunday**. Only then will your registration be successful.

The password for Moodle is:



**[Weblink: Onboarding course for international students](#)**

# Welcome and onboarding events

## International welcome (by faculty)

### 13th of October

Breakfast

Master-Welcome-Session (hybrid)

Introduction to eCampus & Moodle (hybrid)

Campus-Tour / Rally

### 14th of October

Introduction of Lecturers (hybrid)

Example Timetables (hybrid)

Get together

Karaoke

### 15th of October

Life at RUB / Social manners / communication (hybrid)

Scholarships / Jobs (hybrid)

Lunch with all freshmen

Planetarium

**Invitation via mail!**  
**Stay tuned!**

# The M.Sc. Mentoring-Team

## Weekly meeting:

- Everyday life on the Campus
- Dos and Don'ts
- Advice on schedule building
- Guidance on how to use E-campus, Moodle, etc.
- One-to-one mentoring sessions
- Strategies to make the most of your time in your masters
- Socializing and participating in campus life



**Allan Genú**



**Martin Kostka**

# The M.Sc. Mentoring-Team

## Moodle course



★ M.Sc. Mentoring (Physics) (SoSe 2025)  
Physik und Astronomie



⋮



**Note:** if additional documents are needed for the visa application (in case of problems with the visa) please contact the **International office**



- Support letter for landlords (accomodation on privat housing market)
- Support letter for visa (English proficiency etc.)
- ...



# Next steps

- Enrollment  
(see application portal)
- Apply for visa
- Organize accommodation
- Register to Mentoring offers  
(Moodle, WhatsApp-Channel, etc.)
- Master Introductory Meeting in April
- Start: 13<sup>th</sup> October 2025 (start of lectures)
- **Enjoy your studies at the RUB**





Welcome again and  
we look forward to your questions