

# INTERNATIONAL PROGRAMMES

| Ta | h | le | of | Co | nt | ent | ς |
|----|---|----|----|----|----|-----|---|
|    |   |    |    |    |    |     |   |

| Master's degree  | 2 |
|--|---|
| Master of Science in Physics (Research-Oriented) - Johannes Gutenberg University Mainz - Mainz | 2 |

## Master's degree



## **Master of Science in Physics (Research-Oriented)**

Johannes Gutenberg University Mainz • Mainz

### Overview

| Degree                                      | Master of Science in Physics   |
|---|--|
| Teaching language                           | • English  |
| Languages                                   | English  |
| Programme duration                          | 4 semesters  |
| Beginning                                   | Winter and summer semester   |
| Application deadline                        | The MSc in Physics programme currently offers an open application season with no fixed deadline for applications. Please be aware that normal processing times between submitting a completed application and receiving a decision on your application spans about six to seven weeks, although some applications may take longer to evaluate. For more information, please contact the programme coordinator listed.  |
| Tuition fees per semester in EUR            | None   |
| Combined Master's degree /<br>PhD programme | No   |
| Joint degree / double degree programme      | No   |
| Description/content                         | The students of our Master's programme benefit from an exceptionally wide range of research opportunities, providing them with a choice of more than 50 research groups. During the Master's degree programme, our students benefit from a number of unique programmes that are offered by the MAINZ School of Excellence (MAterials Science IN MainZ), the PRISMA+ Cluster of Excellence (Precision Physics, Fundamental Interactions and Structure of Matter), the Research Training Group, and the nearby Max Planck Institute for Chemistry and Polymers Research. |
|   | While our Physics programmes are internationally recognised for their strong focus on research, the excellent student-to-faculty ratio allows for lectures on a remarkably wide range of topics.   |
|   | The exact programme content depends on the specialised subjects chosen. Please find more detailed information about the content in our module handbook, which is attached under "Course organisation".   |
|   | We also have an Excellence Track for especially qualified MSc programme applicants, generally those in the top 15% of their respective BSc classes. The Excellence Track also offers a limited number of scholarships for accepted applicants. See the website for the separate application details and deadline.  |

#### **Course Details**

#### **Course organisation**

The first two semesters are dedicated to advancing knowledge and understanding and to specialising in two or more fields of physics. During this time, students gain new insights into experimental and theoretical physics with lectures and accompanying exercises. They also participate in two seminars, two advanced lab courses, and two specialised lectures, so that they can focus on topics of their choice. The courses for the chosen minor are also taken during the first two semesters (specialisation phase).

During the third semester, students attend two seminars providing them with the specialised knowledge and various methods required for the Master's thesis. The Master's thesis and final oral examination are scheduled for the fourth semester (research period).

Please find more detailed information in the attached module handbook.

A template course schedule is shown in the figure below.

#### » PDF Download

## A Diploma supplement will be issued

Yes

#### International elements

• International guest lecturers

#### Integrated internships

An internship is not an essential part of the programme. However, the university is located in the economically thriving Rhine-Main metropolitan area. Companies in this region are glad to welcome interns from our Master of Science in Physics programme.

## Course-specific, integrated German language courses

No

Course-specific, integrated English language courses

No

### **Costs / Funding**

| <b>Tuition fees</b> | per | semester | in |
|---------------------|-----|----------|----|
| EUR                 |     |          |    |

None

#### Semester contribution

Approx. 350 EUR per semester

The fee includes a semester ticket that covers public transport in the Rhine-Main metropolitan area and a discount at the university's cafeterias.

#### Costs of living

Approx. 800 EUR per month for rent, food, and personal expenses, depending on personal preferences

## Funding opportunities within the university

Yes

Description of the abovementioned funding opportunities within the university The Department of Physics, Mathematics and Computer Sciences offers a scholarship for students in the Master of Science in Physics programme who are also enrolled in the certificate programme called EXCELLENCE TRACK. Please visit this website for more detailed information: https://www.studies.fb08.uni-mainz.de/physics/prospective-students/excellence-track/

### Requirements / Registration

## Academic admission requirements

Applicants are required to provide proof of a Bachelor's degree in Physics with a minimum grade of 2.5 (good) or an equivalent final degree from a university in Germany or abroad. We require the equivalent of at least:

- 30 CP in experimental physics
- 19 CP in laboratory work
- 25 CP in theoretical physics
- 23 CP in advanced mathematics and calculational methods as well as
- 9 CP for a written Bachelor's thesis

(Note that our three-year BSc programme corresponds to 180 CP.)

Applicants with a grade of less than 2.5 may apply for a selection interview. Additionally, applicants may apply for a selection interview if at least 80% of the credit points listed above have been achieved or the applicant has not written a Bachelor's thesis. Requirements to complement the achievements obtained at a foreign university may be imposed. In order to be admitted to the Master's programme, these requirements may not exceed 27 CP and must be met in the first year of the Master's studies.

#### Language requirements

Applicants must provide proof of English proficiency. There are several ways to do this:

- 1. High school diploma/secondary school-leaving certificate from an English-speaking institution
- 2. University degree in a study programme taught in English
- 3. German "Abitur" with appropriate English courses
- 4. First Certificate in English (University of Cambridge ESOL Examinations) or higher level (Advanced (CAE) or Proficiency (CPE))
- 5. IELTS (International English Language Testing System) with a result of 5.5 or higher
- 6. TOEFL (Test of English as a Foreign Language) with a result of 213 (computer-based test [CBT]) or 79 (Internet-based test [iBT]) or 550 (paper-based test [PBT])
- 7. Telc English B2

Exemption is possible for native speakers. The test date may not be older than three years at the time of the application.

#### Application deadline

The MSc in Physics programme currently offers an open application season with no fixed deadline for applications. Please be aware that normal processing times between submitting a completed application and receiving a decision on your application spans about six to seven weeks, although some applications may take longer to evaluate. For more information, please contact the programme coordinator listed.

#### Submit application to

https://www.studium.uni-mainz.de/en/your-application/masters-degrees

Please note that the deadline listed on the university page **does not** apply to the MSc in Physics programme, and thus applications for the MSc in Physics programme will be accepted at any time for the upcoming semester(s).

#### **Services**

#### Possibility of finding parttime employment

EU citizens may work up to 20 hours per week (without losing their student status and the connected reduction of fees for social security insurance). Students of all other nationalities may work for up to 120 days (or 240 half days) per year without restriction of job field or up to 20 hours per week in special student jobs (typically at the university). Student jobs are available at the Institute of Physics every semester.

#### Accommodation

The student service organisation (Studierendenwerk) in Mainz offers accommodation in different student residences. Apply by 15 July for the following winter semester and by 15 January for the following summer semester. If you missed the deadline, it does not mean that you cannot get a room at a student residence – rooms are often available even after the deadline.

#### Career advisory service

The career service at JGU offers individual counselling, workshops, and training as well as recruiting events to all JGU students. The Graduate School "Materials Science in Mainz" offers the lunch talk series excellence@work, in which professionals from various fields share their personal journeys from being students of natural sciences to attaining their current positions.

## Support for international students and doctoral candidates

- Welcome event
- Buddy programme

## General services and support for international students and doctoral candidates

**International Office:** 

https://www.international-office.uni-mainz.de/

Supervisor-student ratio

1:2.5 (all semesters accumulated)



## Welcome to Mainz University!

Are you interested in studying at Johannes Gutenberg University Mainz (JGU)? Watch some of our international students talk about the reasons why they study at JGU and learn more about our university, the city of Mainz and the region.

more: https://youtu.be/Ql1fsPvLi1s

## Johannes Gutenberg University Mainz

With around 31,000 students from over 120 nations, Johannes Gutenberg University Mainz (JGU) is one of the largest and most diverse universities in Germany. JGU unites almost all academic disciplines under one roof, including the Mainz University Medical Center, the Mainz Academy of Fine Arts, the Mainz School of Music, and the Faculty of Translation Studies, Linguistics, and Cultural Studies in Germersheim. About 4,400 academics, among them 570 professors, teach and conduct research in over 100 institutes and clinics. With 75 fields of study and more than 270 degree courses, JGU offers an extraordinarily broad range of courses.

As the only German university of its size, nearly all of the institutions of JGU are located on one single campus near the city centre, which is also home to four partner institutes involved in top-level non-university research: the Max Planck Institute for Chemistry (MPI-C), the Max Planck Institute for Polymer Research (MPI-P), the Helmholtz Institute Mainz (HIM) and the Institute of Molecular Biology (IMB). The campus of the University Medical Center is only about a kilometre away and both Mainz Leibniz Association institutions – the Institute of European History (IEG) and the Roman-Germanic Central Museum (RGZM) – are located slightly further away in the city centre. In addition to this, many local businesses also carry out research, making Mainz a uniquely dynamic research hub.



### University location

Mainz is a lively, loveable city on the Rhine that was founded in Roman times and is situated in the midst of a wine-growing area, near the UNESCO world cultural heritage site "Oberes Mittelrheintal" ("Upper Middle Rhine Valley"). Science and technological progress have been connected with the name Mainz for a long time; one need only think of the invention of the printing press by Johannes Gutenberg over 500 years ago.

The university town of Mainz offers a stimulating environment and an excellent infrastructure to its more than 40,000 students in town and on the campus of the Johannes Gutenberg University (JGU). Our students can experience a wide range of cultural events as well as diverse recreational and sporting activities. Students of the JGU benefit from reduced entrance fees or even free entrance to many cultural events such as performances at the Mainz State Theatre. With its historical character and cultural atmosphere, Mainz combines the quality of life of a medium-sized town on the Rhine with the dynamic and versatile range of a state capital.

The university campus, which is close to numerous dormitories for students, is located within walking distance of the town centre and is well-connected to local public transportation. In addition, the central location of Mainz offers an excellent transport connection to the whole federal territory. For instance, you can reach Frankfurt Airport, one of the most important traffic centres in Europe, in 30 minutes.

#### Contact

#### **Johannes Gutenberg University Mainz**

Department of Physics

Dr Felix Yu

Staudingerweg 7 55128 Mainz

Tel. +49 61313925796

yu001@uni-mainz.de

y

Course website: https://www.studying.uni-mainz.de/physics-m-sc/

f https://de-de.facebook.com/uni.mainz/

https://twitter.com/uni\_mainz/

https://www.instagram.com/unimainz/

Last update 25.04.2024 00:53:22

### International Programmes in Germany - Database

www.daad.de/international-programmes www.daad.de/sommerkurse

#### Editor

DAAD - Deutscher Akademischer Austauschdienst e.V. German Academic Exchange Service Section K23 – Information on Studying in Germany Kennedyallee 50 D-53175 Bonn www.daad.de

#### **GATE-Germany**

Consortium for International Higher Education Marketing www.gate-germany.de

#### Disclaimer

The data used for this database was collected and analysed in good faith and with due diligence. The DAAD and the Content5 AG accept no liability for the correctness of the data contained in the "International Programmes in Germany" and "Language and Short Courses in Germany".

The publication is funded by the German Federal Ministry of Education and Research and by contributions of the participating German institutions of higher education.

