Deutscher Akademischer Austauschdienst
German Academic Exchange Service

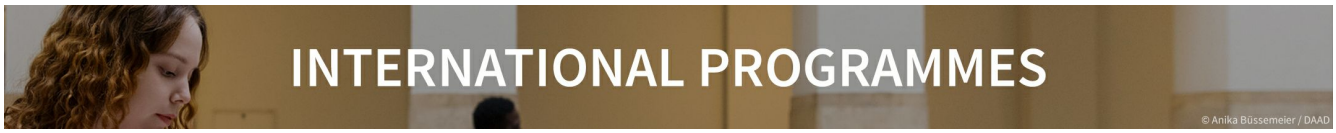

Table of Contents

Bachelor's degree

International Physics Studies Programme (Honours)

Leipzig University • Leipzig

Overview

Degree	Bachelor of Science
Teaching language	• English
Languages	Courses are held in English (100%). German language courses are offered as part of the course programme.
Programme duration	8 semesters
Beginning	Winter semester
Application deadline	Non-EU applicants: 15 July for the following winter semester (uni-assist) EU applicants: 1 September for the following winter semester (uni-assist)
Tuition fees per semester in EUR	None
Joint degree / double degree programme	No
Description/content	Knowledge of the physical world has been imparted to students of Leipzig University since it was founded in 1409. In 1557, the first professorship of physics in Leipzig was created and in 1871, one of the first chairs for geography in Germany was set up at Leipzig University. In the 20th century, physics in Leipzig flourished with researchers such as Otto Wiener, Ludwig Boltzmann, Werner Heisenberg or Gustav Hertz. Today the subject physics is offered in German and English. More than 1,500 students from about 40 countries are working towards the coveted degrees at the Faculty of Physics and Earth Sciences. This Bachelor's course is a traditional university education in physics. The aim of the Bachelor of Science course in Physics is to provide international and German students with a basic scientific understanding. Fundamental courses in experimental physics, theoretical physics and mathematics given in English language provide an overview over the whole spectrum of topics in the field of physics. Laboratory courses introduce to the basics of measurement in physics. Choosing advanced specialisation courses from a catalogue of state-of-the-art physical research, you will be enabled to develop and follow your own interests, which you may further pursue in a Master's programme. A range of topics outside physics, including chemistry, informatics and German language, completes the Bachelor's course. The programme is concluded by a first research project, which is documented in the BSc thesis. Overview of topics covered in our course programme: • Experimental Physics and Laboratory Courses (Mechanics, Fluid Mechanics, Heat, Electricity, Magnetism, Optics, Atomic Physics, Molecular Physics, Soft Matter and Solid State Physics)

- Advanced Physics Laboratory Course and Project Lab
- Mathematics (Linear Algebra, Advanced Differential and Integral Calculus, Sequences and Series, Ordinary and Partial Differential Equations)
- Theoretical Physics (Classical Mechanics, Electromagnetic Field Theory, Special Relativity, Thermodynamics, Introductory Quantum Mechanics and Statistical Physics)
- Electives in Physics (Semiconductor Physics, Photonics and Quantum Technology, Soft-Matter and Biophysics, Spin Resonance and Magnetism, Cosmology, Relativity, Quantum Statistics, Quantum Field Theory, Non-linear Dynamics, Materials Science or Astrophysics) and outside physics (German language courses, Chemistry, Numerics)
- Bachelor's thesis

In graduating in the BSc IPSP (Honours) programme, you will acquire fundamental competences in physics, measurement technology and applied mathematics. This guarantees a head start in the job market, which presents rapidly changing challenges to graduates. Due to the acquirement of analytical research competences and problem solving strategies during their studies, physicists are often sought after even in areas quite unrelated to physics, e.g. in management consultancies. However, with a successful Bachelor's degree in Physics, you will be invited to continue your education in the form of Master's studies in Physics or in a related subject.

Course Details

Course organisation

The course contents are taught in single, organisationally independent units (modules). Modules contain clearly defined areas of knowledge that have a factual or thematic relationship. Modules might contain various teaching units, e.g. lectures (L), seminars (S) or laboratories (P) and are concluded by a final exam. Modules are rated by their teaching load in credit points (CP); one credit point corresponds to an average working load of 30 hours.

The core of the study programme comprises several subjects:

- Experimental Physics
- Mathematics
- Theoretical Physics
- Physical Modelling and General Physics labs
- Advanced Physics lab course and Project lab

The remaining credit points are awarded for the specialisation courses in topical physics areas, the non-physics electives (German courses, chemistry, numerics), the advanced seminar and the Bachelor's thesis.

An indispensable tool of physics is mathematics. Therefore, the participation in a preparation course in mathematics is highly recommended, but it is not compulsory. The course is usually held in the last two weeks of September.

A Diploma supplement will be issued

Yes

International elements

- International guest lecturers
- Projects with partners in Germany and abroad

Integrated internships

There are possibilities to do internships at:

- Leibniz Institute of Surface Engineering
- Max Planck Institute for Mathematics in the Sciences
- Helmholtz Centre for Environmental Research - UFZ
- Helmholtz Centre Dresden Rossendorf (HZDR) Research Size Leipzig
- Leibniz Institute for Tropospheric Research

Course-specific, integrated German language courses	Yes
Course-specific, integrated English language courses	No

Costs / Funding

Tuition fees per semester in EUR	None
Semester contribution	266.90 EUR
Costs of living	About 900-1,000 EUR per month
Funding opportunities within the university	No

Requirements / Registration

Academic admission requirements	The general or subject-oriented matriculation standard (12 years of school attendance) is necessary for admission. Further certificates have to be acknowledged by the responsible and officially recognised administration. Extended school courses in mathematics and/or physics are recommended, but not obligatory. Check the uni-assist database to see whether your certificate qualifies you for admission to German universities: https://www.uni-assist.de/en/tools/check-university-admission/. Information on important additional country-specific requirements is also given. **Recommended skills:** The main reason for studying physics ought to be a love of the subject. After the first lecture, students soon realise that physics at university level is a different matter to school physics: the degree programme involves logical thinking and a precise method of working. Other necessary skills are the perseverance and patience required to complete weekly problem sheets. In addition, creativity and capacity for teamwork are also very useful.
Language requirements	English language proficiency equivalent to the B2 level of the Common European Framework of Reference for Languages is required. Applicants need to submit one of the following forms of proof / certificates: • Certificate of European B2 Level in English Language • TOEFL scores (minimum): PBT: 543, cBT: 207, iBT: 72 • IELTS score (minimum): 5.5 • Cambridge FCE (minimum): Grade B or C • TOEIC (minimum): Listening and Reading: 785, Speaking: 160, Writing: 150, all four modules • Pearson PTE Academic (minimum): 59 Certified knowledge of German is not required.
Application deadline	Non-EU applicants: 15 July for the following winter semester (uni-assist)

	EU applicants: 1 September for the following winter semester (uni-assist)
Submit application to	The application is an online application via **uni-assist**. Details are provided on the university website: **Application Procedure**. Applicants with a German BSc degree submit their application via AlmaWeb.

Services

Possibility of finding part-time employment	There is the possibility of finding student positions with a wage of up to 520 EUR per month. Starting in the third semester, the department might employ students for homework corrections, programming, specific laboratory work, and tutorials.
Accommodation	Student halls of residence run by the "Studentenwerk Leipzig" (https://www.studentenwerk-leipzig.de/en/housing/our-student-halls-residence), shared apartments, accommodation services and real estate agencies
Career advisory service	https://www.uni-leipzig.de/studium/beratungs-und-serviceangebote/career-service/
Support for international students and doctoral candidates	• Welcome event • Tutors
General services and support for international students and doctoral candidates	The guidance and support of our international students is provided centrally by our "International Centre". This includes the period prior to the studies (application, enrolment, advice on study programmes and the start of studies) and during the studies (e.g. study abroad). Our international students also receive comprehensive advice from the "Studentenwerk Leipzig", which not only covers housing, but services like psychosocial and social counselling and legal advice.

Contact

Leipzig University
Faculty of Physics and Earth System Sciences

Dr Christian Chmelik

Linnéstraße 5
04103 Leipzig

Tel. +49 3419732403
chmelik@uni-leipzig.de
Course website: https://www.physgeo.uni-leipzig.de/studium/studienangebot/bachelor-international-physics-studies-program-honours
International Centre

Tel. +49 3419732080
Email

Last update 24.12.2024 02:16:06

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

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