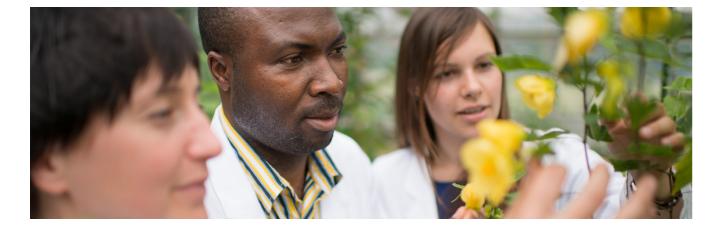


# The University of Kassel: Nature, technology & society



Nature, technology & society - by combining International short-term programs, intensive these fields of competence, the University of Kassel has set new standards.

This particular combination is exceptional in Germany and clearly shapes the academic profile of the university.

Interdisciplinary research is a priority for the University of Kassel including research cooperation and dialogue with partners from all over the world.

Founded in 1971, the University of Kassel is the newest university in the state of Hesse in Germany.

All study programs are open to German and international students and the university offers a wide range of degrees.

German language courses and orientation programs for international students make Kassel an attractive place to live and study - right at the geographical center of Germany.

- Professors: 303
- Academic Staff: 2.019 (total: 3.265)
- Students currently enrolled: 24,400 (48% female, 52% male)
- Including approx. 2,900 students from over 120 countries



## Faculty of Mathematics and Natural Sciences

Interdisciplinary scientific research bringing together biology, chemistry, physics and mathematics enriched by cooperation with the engineering faculties is the major scope of the Faculty of Mathematics and Natural Sciences. It is structured in four Institutes of Biology, Chemistry, Mathematics and Physics, with a total of 41 research groups.

Many of the scientists are also members of the Center for Interdisciplinary Nanostructure Science and Technology (CINSaT) or the Institute of Nanostructure Technologies and Analytics (INA). Among the major research topics are three-dimensional nanostructures, biosensing, photonics, chiral systems, optoelectronic- and nano-photonic semiconductor devices, fs-laser-physics, light-matter interaction and many more. Internationally and interdisciplinarily constituted teams are working together in a broad range of applied and basic research projects at the forefront of world-class

research. State-of-the-art empirical research on mathematics and science education completes the research portfolio of the faculty.

The faculty has a strong commitment to highest quality graduate and undergraduate education. Bachelor's and Master's programs are offered in biology, nanoscience, physics and mathematics as well as for primary, lower and higher secondary school teachers.

With a total of 400 employees and 200,000 sqft laboratory and office space at an own location easily reachable from the city center the faculty is a one of the largest faculties in the university of Kassel.

- Professors: 41
- Academic Staff: approx. 500
- Students currently enrolled: 3,100 (51% female, 49% male)

## Biology

The Institute of Biology has 11 full professorships scientists.

The research areas covered in this Institute reflect Nanobiology. the diversity of modern Biology and can focus, for example, on molecular methods including state of The Institute offers educational courses for biology the art equipment in molecular biology, biochemistry and cell biology. Other research areas focus including animal facilities and a botanical station. ing and learning of biology. Central facilities include confocal microscopy, isotope laboratory, NMRs, REM and EM.

In the taught program the entire spectrum of biology is covered: Animal Physiology, Biochemistry, Biophysics, Botany, Cell Biology, Ecology, Biology for Teachers, Genetics and Developmental Biology, Human Biology, Microbiology, Plant

Physiology and Zoology. For advanced coursework, and a scientific staff of approximately 25 PhD-level students can choose between four fields including Molecular Sciences, Physiology, Biodiversity and

teaching. The Biology Education Group pursues as its central research interests the Nature of Science, on green land biology and ecology with facilities Inquiry Based Learning and the evaluation of teach-

#### **Contact Institute of Biology**

Prof. Dr. Birgit Gemeinholzer Campus "Heinrich-Plett-Strasse" +49 561 804-4601 b.gemeinholzer@uni-kassel.de





## Nanosciences & Chemistry

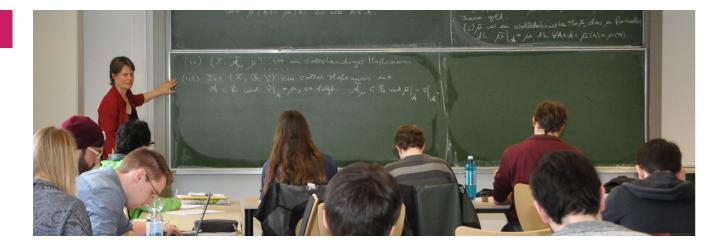
The research focus of the Institute of Chemistry lies in the fields of Chemistry of Mesoscopic Systems, Macromolecular Chemistry, Organometallic es as its central research interests the diagnosis of Chemistry and Molecular Materials. All research teams are involved in the Center for Interdisciplinary Nanostructure Science and Technology (CINSaT), which is a collaborative interdisciplinary effort involving Biology, Chemistry, Physics and Engineering.

The Institute provides Bachelor and Master programs in Nanosciences. Students appreciate in particular the intense support and the first-hand guidance by the staff. A great variety of elective modules allows the students to development their individual profiles.

The Institute offers educational courses for chemistry teaching. The Chemistry Education Group pursustudents' understanding of chemistry at schools and universities, the development of context-oriented chemistry teaching material and the implementation of context-oriented chemistry teaching approaches.

#### **Contact Institute of Chemistry**

Prof. Dr. Ulrich Siemeling Campus "Heinrich-Plett-Strasse" +49 561 804-4576/4277 siemeling@uni-kassel.de



### **Mathematics**

The Institute of Mathematics consists of 13 groups, whose research interests cover a broad range of modern mathematics with an emphasis on applications. The mathematical research subjects include applied and numerical analysis of ordinary and partial differential equations, cryptography, discrete optimization, computer algebra, stochastic processes as well as mathematical education, to only name a few.

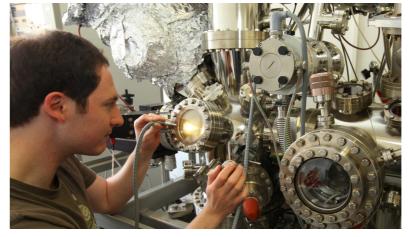
This diversity of specialized knowledge is reflected in the Institute's Bachelor and Master programs, which not only offer basic courses in mathematics, but also introductory and advanced courses within the above research areas. The central research topics of the mathematical education groups are teaching and learning of mathematical modelling,

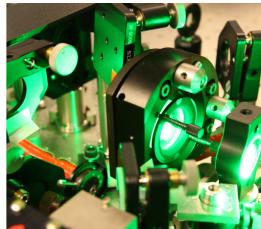
teacher professionalism, diagnostics and feedback within teaching, and stochastic thinking. Courses are offered for mathematics teaching for primary, secondary, and high school.

Students particularly appreciate the excellent support by professors and academic staff, as well as the possibility of an early involvement in reasearch and teaching.

#### **Contact Institute of Mathematics**

Prof. Dr. Dorothee Knees
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+49 561 804-4355
dknees@mathematik.uni-kassel.de





## **Physics**

The Institute of Physics at Universität Kassel, comprising eleven groups, specializes in optics and nanostructure science. Eight groups are working in the area of atomic, molecular and optical / quantum optical (AMO) science using advanced laser techniques. In our laboratory astrophysics group, exotic molecules are studied to be later identified in interstellar gas clouds. Other groups fabricate semiconductor devices like quantum dot lasers or tailor magnetic layers on the nanoscale for certain applications.

Bachelor's and master's programs in physics are offered with internationally competitive quality. For much of the master's programs, students specialize in one of our research fields and ac-

tively participate in running research projects. The Institute offers educational courses for physics teaching. The Physics Education Group pursues as its central research interests the use of experiments and stepwise learning aids in teaching physics as well as the transition process from primary to secondary school.

#### **Contact Institute of Physics**

Prof. Dr. Thomas Baumert
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+49 561 804-4452/4660
baumert@physik.uni-kassel.de

# How to apply

If you are enrolled as an undergraduate or graduate student at one of our partner universities and wish to spend one or two semesters at the University of Kassel as an exchange student, please apply via internet. Application Deadline for the summer term is **January 15th**, for the winter term **July 15th**. Please find our online application platform here:

https://moveonline.uni-kassel.de/move/moveonline/incoming/login.php?\_type=login



Your application can be submitted in either German or English. If you register with a login and a password, you can complete the application you have already begun or to rework your application at any time before you send it. In addition, you can follow the status of your current application. After sending us your application you will receive a copy in PDF format automatically. Please print this document and have it signed and stamped by the ERASMUS-



coordinator or your student abroad advisor of your university. Finally sign the application form yourself and send the complete documents to our postal address:

#### Contact - Postal Address

University of Kassel International Office, z. Hd. (f.a.o.) Frau Ernst Mönchebergstr. 19, 34109 Kassel, Germany

As soon as we will have checked and accepted your application, we will send you a letter of admission. Further details concerning the application process as well as the support we can offer you concerning visa, accommodation and all the other things to be arranged before a stay in Kassel you will find here:

http://www.uni-kassel.de/ uni/en/internationales/international/exchange-students/ studying-in-kassel-erasmus-exchange.html



If you need further information, please feel free to contact us directly at any time (cf. page 11). We are looking forward to welcoming you as an exchange student at the University of Kassel!



## Living in Kassel - Getting to Kassel



The city of Kassel with almost 200.000 inhabitants is located in the middle of Germany and Europe. Being the capital of the German Fairy Tale Route and the home of the documenta, the world's most famous exhibition of contemporary art, it has a lot to offer. The city is a unique blend of cultural activities and outdoor lifestyle. Many different parks, such as Wilhelmshöhe Mountain Park, recently named a UNESCO World Heritage site, or a wide range of thematically different museums offer a great variety of leisure activities. From the nearest international airports Frankfurt and Hanover you can reach Kassel within one hour by train.

From the main railway station Kassel-Wilhelmshöhe trams will bring you conveniently directly to the central University Campus "Holländischer Platz", where the Admissions Office and the International Office are located. Within easy reach from the central University Campus, the Faculty of Mathematics and Natural Science is located on Campus "Heinrich-Plett-Strasse", where staff members of our International Bureau will welcome you.

- http://kassel-marketing.de/en/home
- www.kassel.de/englisch

## **Contact & Information**

team will provide you with all necessary informamatters so that you will feel at home soon. We place special importance on individual and practical assistance and would like to support you extensively located on the main Campus "Holländischer Platz".

The Welcome Centre of the University of Kassel is The International Bureau is located directly at the the first contact point for international students. Its Faculty of Mathematics and Natural Science on the Campus "Heinrich-Plett-Strasse". Its team will tion and practical assistance in all non-academic answer all your questions concerning academic matters. Prior to your arrival we will provide you with all information necessary for course selection, schedule of lessons, time tables, exams etc. At your before and upon your arrival in Kassel. Our Office is arrival we will give you a campus tour and an onsite introduction to the important persons and facilities. During your stay we serve as your mentors and will be responsive to all possible issues.





#### University of Kassel - Exchange Programs

http://www.uni-kassel.de/uni/en/ internationales/international/ exchange-students/studying-inkassel-erasmus-exchange.html



#### About the University of Kassel

www.uni-kassel.de/uni/internationales/ english-version/university/ about-us.html

Courses in English at the University of Kassel

www.uni-kassel.de/fb10/cc



Language Courses at the University of Kassel

www.uni-kassel.de/go/learning\_german



































