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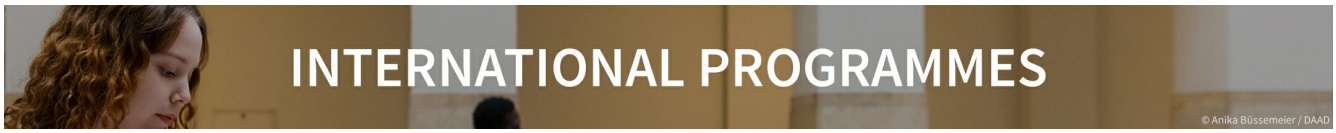
German Academic Exchange Service



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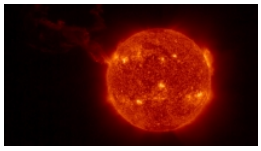
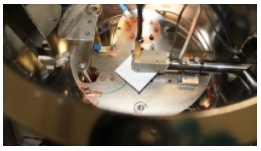
Master's degree

Solar System Physics (SSP)

Technische Universität Braunschweig • Braunschweig

Overview

Degree	Master of Science
Teaching language	• English
Languages	Courses are held in English (100%)
Full-time / part-time	• full-time
Programme duration	4 semesters
Beginning	Winter and summer semester
Application deadline	All applicants: • For the winter semester: 1 June – 15 July • For the summer semester: 1 December – 15 January
Tuition fees per semester in EUR	None
Combined Master's degree / PhD programme	No
Joint degree / double degree programme	No
Description/content	**STUDY SSP AND EXPLORE THE INFINITE VASTNESS OF SPACE** Exploring the solar system has always been one of mankind's most fascinating endeavours, and it continues to pose great challenges. Scientists today study celestial bodies with the aid of modern ground- and space-based telescopes and use probes that venture deep into space. To successfully collect data about our solar system, these space missions rely on countless, highly sophisticated technologies. To further the continuous advancement of these technologies and the invention of new ones, an in-depth understanding of the physics of our solar system is required. The Master's programme in

Solar System Physics prepares students for this challenge.

WHAT IS SPECIAL ABOUT TU BRAUNSCHWEIG?

TU Braunschweig's Master's programme in Solar System Physics is the only one of its kind in Germany. It offers you the chance to study the physics of our solar system and to qualify for a future career in the aerospace industry or in exploring planetary bodies. The programme perfectly complements the focus on Space Physics and Technology in TU Braunschweig's Physics Department.

Course Details

Course organisation

STRUCTURE OF THE SSP MASTER'S PROGRAMME

The two-year, consecutive Master's programme in Solar System Physics has a strong focus on research and is a full-time, attendance-based programme. With English as the language of instruction, this programme is an ideal way to prepare yourself for the global job and science market and for networking with international colleagues.

You will have the chance to acquire in-depth specialist knowledge in the field of solar system physics, including, for example, the formation and evolution of planetary systems, the sun and its heliosphere, planetary surfaces, and the internal structure and processes of planets as well as the atmospheres and magnetospheres of planetary bodies.

Step by step, you will become familiar with innovative work methods in research and science and practice hands-on, problem-solving techniques. With a final thesis completed over the course of eight months, students will demonstrate the ability to independently investigate a subject-specific issue by applying scientific work methods.

First year: In-depth specialisation

- Deepening and practical application of knowledge acquired during the Bachelor's programme
    - Physics and evolution of the solar system and its planetary bodies
    - Hands-on training (laboratory, simulations and data analysis)

Transition to the second year of studies

- Acquisition of a broader knowledge base and instrumental skills in a multidisciplinary context
- Special Courses module
    - Specialisation in sub-sections of solar system physics
    - Expansion of interdisciplinary knowledge in areas chosen by the student
- Scientific Key Qualifications module
    - Scientific programming
    - Scientific communication

Second year: Research phase

- Literature Research module: Systems thinking and other communication skills
- Research Internship module: Practical scientific and/or research work
- Master's Thesis module: Completion of largely independent research projects

	For detailed information about the contents of this study programme, please see the programme-specific part of the university's examination regulations.
Integrated internships	The Research Internship module is supervised by the institutes involved in the degree programme and prepares students for the Master's thesis.
Course-specific, integrated German language courses	No
Course-specific, integrated English language courses	No

Costs / Funding

Tuition fees per semester in EUR	None
Semester contribution	In order to enrol at TU Braunschweig or to register back for the coming semester, you have to pay your semester contribution (currently approx. 364 EUR). The semester contribution for example covers your semester ticket for public transport.
Costs of living	By German standards, Braunschweig is not an expensive place to study. Nevertheless, you need a minimum of about 940 EUR per month to be able to study here successfully. More information about financing your studies can be found here.
Funding opportunities within the university	Yes
Description of the above-mentioned funding opportunities within the university	TU Braunschweig has a scholarship programme for excellent students ("Deutschlandstipendium"). The stipend rate is 300 EUR per month. Information on funding can be found here.

Requirements / Registration

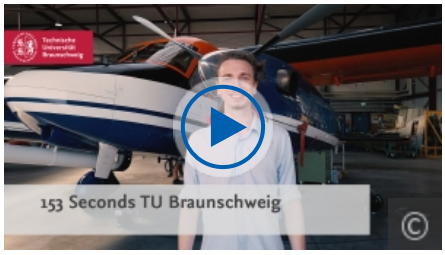
Academic admission requirements	You can apply for the Master's programme in Solar System Physics if you have a Bachelor's degree in physics or a closely related field.
Language requirements	As the programme is taught entirely in English, language skills at a level C1 are required. German language skills are not necessary. For detailed information on admission requirements, we ask that you read the programme's admission regulations carefully before applying.
Application deadline	All applicants:

- For the winter semester: 1 June – 15 July
- For the summer semester: 1 December – 15 January

Submit application to	https://www.tu-braunschweig.de/en/application

Services

Possibility of finding part-time employment	During their studies, students usually have the opportunity to work as student assistants.
Accommodation	The Student Services OstNiedersachsen ("Studentenwerk") offer several dormitories: https://www.stw-on.de/en/braunschweig/housing/. More information about finding housing is available here:https://www.tu-braunschweig.de/en/freshmen-hub/important-informations/housing-search.
Support for international students and doctoral candidates	• Welcome event • Buddy programme • Accompanying programme • Cultural and linguistic preparation
General services and support for international students and doctoral candidates	TU Braunschweig offers a broad range of support programmes for all administrative, academic, social, and personal questions and challenges that international students may have. Read more about our International Student Support programme



153 seconds TU Braunschweig

TU Braunschweig in a quick run-through: student Jannick Stühff takes you along and shows you what studying at the Carolo-Wilhelmina is all about. Get to know our campus, learn more about life in Braunschweig, and see first-hand what cutting-edge research means to us.

» more: https://www.youtube.com/watch?v=A5jGY9lYDMo

Technische Universität Braunschweig

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275 years of experience in teaching and research

A very warm welcome! We are happy you are interested in studying in Braunschweig. TU Braunschweig is a university with a long tradition of excellent research and teaching. We are part of the TU9 network, the alliance of the leading Universities of Technology in Germany.

TU Braunschweig has about 16,000 students and about 19 percent of them are international students. Six departments and 120 institutes offer 86 degree programmes and excellent facilities for interdisciplinary research work in the fields of engineering, natural sciences, social sciences, and the humanities.

TU Braunschweig is situated at the centre of Europe's most active research and development region. The large number of major companies

and leading national research institutes in the Braunschweig region create an enormous scientific potential. Students benefit greatly from the many active partnerships between university and industry. They can be involved in current research projects early on in their studies and work on study projects with practical relevance. Internships and practical training enable students to gain insights into various companies and to establish initial contacts with potential employers.

https://www.tu-braunschweig.de/en/why-braunschweig

University location

Braunschweig is a lively student city situated in northern Germany. With a population of around 250,000, it is big enough to feel cosmopolitan and yet small enough not to be overwhelming. As an important cultural and political centre dating back to the Middle Ages, Braunschweig retains the imprint of each passing age, from the medieval castle and the Gothic cathedral to modern shopping streets and leisure facilities.

Braunschweig has an international reputation as a city of research. The high density of national and international companies and scientific research institutes located in and around the city make Braunschweig the most active research and development region in all of Europe.

www.braunschweig.de

Contact

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Course website: https://www.tu-braunschweig.de/en/degree-programmes/solar-system-physics-master

https://www.facebook.com/tubraunschweig

https://www.linkedin.com/school/tu-braunschweig/

https://www.instagram.com/tu.braunschweig/?hl=en

https://www.youtube.com/channel/UC8X4NAyIUr9Q12hVUOoqyhQ

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