

Unique in Germany

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

How you can apply

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. As the programme is taught entirely in English, language skills at the C1 level are required. German language skills are not necessary. For detailed information on admission requirements, please read the programme's admission regulations carefully before applying. If you have any questions please contact the programme coordinator.



Learn more!



Apply now!

¹**Restricted admission:** Please note the current Special Admission Regulations for the Master's degree programme and contact the programme coordinator if you have any questions or uncertainties.

²**WiSe:** Winter semester, from 1 October to 31 March

³**SuSe:** Summer semester, from 1 April to 30 September

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Interested? Having questions?

**Please don't hesitate to
contact us!**

We look forward to seeing you.



Technische
Universität
Braunschweig



Photo: ©NASA

Solar System Physics

Master's degree programme (MSc)

**Explore the infinite vastness of
space...**

Why Solar System Physics?

Exploring the solar system has always been one of humanity'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.

A profound understanding of the physics governing our solar system is indispensable to actively participate in the increasing exploration of our neighbourhood in space, to correctly interpret signals from distant exo-planetary systems and to pioneer the development of new technologies. The Master's programme in Solar System Physics at TU Braunschweig prepares students for this challenge.

The study programme

Degree:	Master of Science
Standard duration of study:	4 semesters (120 credits)
Language of instruction:	English
Start of programme:	winter and summer semester
Admission:	free admission ¹
Application to WiSe ² :	1 June to 15 July (EU applicants) 1 February to 15 March (non EU)
Application to SuSe ³ :	1 December to 15 January (EU app.) 1 August to 15 September (non EU)

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 you for

the global job and science market and for cooperation with international colleagues. You will have the chance to acquire in-depth specialist knowledge in the field of solar system physics, for example

- formation and evolution of planetary systems
- the sun and its heliosphere
- planetary surfaces
- the internal structure and processes of planets
- the atmospheres and magnetospheres of planetary bodies

Step by step, you will become familiar with innovative work

Competence area	Semester 1 or 2	Semester 2 or 1	Semester 3	Semester 4
Specialised deepening phase	Planetary Bodies 15 credits	Solar System 15 credits	Hands-On Solar System Physics 15 credits	"Special Courses" 15 credits
	Scientific Key Qualifications 10 credits			
Compulsory elective area				
Research phase			Research Internship 15 credits	Master Thesis 30 credits
	30 credits	30 credits	30 credits	30 credits

1 credit = 30 working hours

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 their ability to independently investigate a subject-specific issue by applying scientific work methods.

The Master's degree entitles the holder to a doctorate in physics (Dr. rer. nat.).



Photo: @ESA/NASA/JPL-Caltech

SSP @ TU Braunschweig

- From the first day of your studies, you can discuss all questions about your studies with your mentor in confidence.
- Benefit from intensive cooperation with non-university institutions in teaching and research, for example with the Max Planck Institute for Solar System Research (MPS), the German Aerospace Center (DLR), the European Space Agency (ESA) and industrial partners.
- As graduates, you are optimally trained for a "career in space". This is evidenced by the numerous awards and prizes won by our students, doctoral students and teaching staff, as well as their high reputation in science and industry.