

## ***The University of Hohenheim's Master's Programme in Earth System Science: An Opportunity to Specialize in Astrobiology***

Many students of classical subjects such as biology, chemistry or astronomy at some point become interested in the fundamental questions dealt with by astrobiology. Some of them even become inspired to seek a career as an astrobiologist. The Master's programme Earth System Science at the University of Hohenheim in Stuttgart, Germany, allows students to specialize in astrobiology.

The City of Stuttgart is situated in the southwest of Germany. The Stuttgart Region has a population of 2.7 million and is one of Europe's most important and most successful economic centres. The Stuttgart Region is also one of Germany's top educational and research locations. The University of Hohenheim has 10,000 students in three faculties: Natural Sciences, Agricultural Sciences, and Business, Economics and Social Sciences. The beautiful Hohenheim campus is built around an 18th century palace and provides an attractive and academically stimulating environment.



Earth System Science (ESS), one of currently 24 Master's degree courses offered by the University of Hohenheim, is a 4-semester interdisciplinary, research-oriented programme. The language of instruction is English. Up to 20 students are admitted annually. ESS focuses mainly on the understanding and the simulation of Earth system components, such as the regional climate, land use and land management. However, from the second semester on, specialization is possible in the field of astrobiology.

Semester	30 credits					
1st	Lecture Series Earth System Science (1201-550)	Economics for Earth System Science (1201-510)	Measurement, Modeling and Data Assimilation I (1201-520)	Physics of the Earth System (1201-580)	Chemistry of the Earth System (1301-460)	Biology of the Earth System and Biodiversity (2101-500)
2nd	Climate History and Evolution of the Earth System (1201-560)	Energy and Water Regime at the Land Surface (3103-500)	Debate Seminar (1201-570)	Mathematical Methods in Earth System Science (1201-610)		
3rd	Land Use Economics (4904-430)				Elective Modules	
4th				Master's Thesis Earth System Science (1200-500)		



astrobiology-related preparatory module

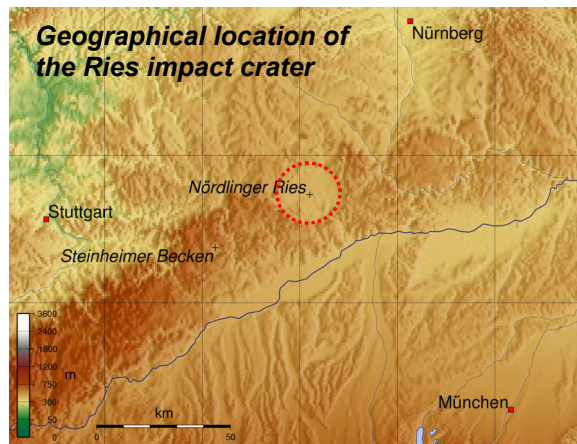


specialization in astrobiology

After preparatory courses, mainly in the 1st semester, ESS students can start specializing in astrobiology by attending the relevant courses:

- ▶ Lectures "Introduction to Astrobiology" and "Key Experiments in Astrobiology"
- ▶ Literature seminar on astrobiology
- ▶ Lecture "Chemical Evolution"
- ▶ Practical laboratory course "Chemical Evolution".

A two-day excursion to the Ries crater ("Nördlinger Ries") is a highlight of the 2nd semester. The 24-km-diameter crater is a relatively well-preserved impact structure 100 km east of Stuttgart. It was formed about 15 million years ago by a large meteorite. The excursion comprises visits to the Ries Crater Museum and to geologically interesting locations in the Ries.



The Master's thesis can be chosen from the topics "biosignatures" and "chemical evolution" (at Hohenheim) or other astrobiological topics (in cooperation with external institutions). The degree awarded is "Master of Science" (M. Sc.).

For more information on the Master's Programme in Earth System Science, see:  
[www.uni-hohenheim.de/ess](http://www.uni-hohenheim.de/ess)

