DAAD

Deutscher Akademischer Austauschdienst
German Academic Exchange Service

INTERNATIONAL PROGRAMMES

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Master's degree

Machine Learning
University of Tübingen • Tübingen

Overview

Degree	Master of Science
Teaching language	• English
Languages	Courses are held in English. German courses specially designed for international Master's and PhD students are available at the university's House of Languages. The full German course programme is available at: www.uni-tuebingen.de/en/1056.
Full-time / part-time	• full-time
Programme duration	4 semesters
Beginning	Winter semester
Application deadline	30 April (for international [non-EU] citizens as well as for German and EU citizens)
Tuition fees per semester in EUR	Varied
Additional information on tuition fees	Approx. 1,500 EUR per semester for students from non-EU countries
Combined Master's degree / PhD programme	No
Joint degree / double degree programme	No
Description/content	The Master's programme in Machine Learning offers a wide choice of courses in machine learning and general computer science. Apart from a few mandatory courses, allows students to choose their subjects according to their interests. Students will attend lectures, seminars, and project lab courses under the supervision of scientists who introduce them to basic and applied research and current topics in machine learning. To pick up on scientific trends and make the best use of the current state of research, the curriculum relies heavily on the strong research presence on site in machine learning (Max Planck Institute for Intelligent Systems, Max Planck Institute for Biological Cybernetics, Excellence Cluster "Machine Learning: New Perspectives for Science'', Tübingen AI Center, Cyber Valley, IMPRS for Intelligent Systems) as well as in the wider field of computer science. Top-level researchers in all major methodological branches of machine learning are present in Tübingen – personnel that will

actively engage in teaching the Master's programme in Machine Learning. (See CSRankings for the University of Tübingen and note that the Max Planck Institute for Intelligent Systems is located in Tübingen as well.) Since the field is obviously very young and currently developing extremely rapidly, training will naturally be based on the most recent insights and the most pressing research questions of these teaching researchers. Project work and the Master's thesis will offer students the opportunity to develop code for research purposes and their own scientific projects.

As interdisciplinarity is an important aspect, the Master's thesis can be supervised by a professor of any subfield of computer science.

Course Details

Course organisation	The programme consists of four major study areas: Foundations of Machine Learning, Diverse Topics in Machine Learning, General Computer Science, and Expanded Perspectives. In the first semester, Mathematics for Machine Learning, Deep Learning and Data Literacy are recommended modules, followed by Statistical Learning, Probabilistic Inference and Learning in the next semester. At least one practical course and one seminar are recommended for the second or third semester. The Master's thesis is recommended for the fourth semester. » PDF Download
A Diploma supplement will be issued	Yes
International elements	• International guest lecturers • Specialist literature in other languages
Course-specific, integrated German language courses	No
Course-specific, integrated English language courses	No

Costs / Funding

Tuition fees per semester in EUR	1,500 EUR
Additional information on tuition fees	Approx. 1,500 EUR per semester for students from non-EU countries
Semester contribution	Enrolment fees at the University of Tübingen are currently approx. 160 EUR per semester. This includes use of local public transport free of charge from Mondays to Fridays in the evening, at the weekend and on public holidays. In addition, students may purchase a semester ticket for unlimited use of public transport in the city of Tübingen and the surrounding area (currently approx. 140 EUR).
Costs of living	Estimated basic student expenses are around 950 EUR per month according to the Tübingen Student Services organisation ("Studierendenwerk"), including rent for student accommodation. Rent for private accommodation will be more expensive.

Funding opportunities within the university	Yes
Description of the above-mentioned funding opportunities within the university	There are a limited number of stipends for excellent students in extent very similar to the ones of the DAAD, in particular also from underrepresented groups.

Requirements / Registration

Academic admission requirements	Academic admission requirements include a Bachelor's degree (or equivalent) in either computer science, mathematics, physics, or related natural sciences with a grade of at least 2.3 (according to the German grading system in which a 1.0 is the best grade).
	In particular, competences from the following areas are required, equivalent in content and scope to those in the BSc course in Computer Science in Tübingen:
	• Mathematics: one- and multidimensional analysis, linear algebra and either numerical analysis or stochastics
	• Computer Science: programming, algorithms and data structures (theoretical analysis of algorithms)
	Candidates are judged based on the level of interest and their personal fit with the programme, for which we require a letter of motivation and a CV. Applicants must also provide adequate proof of English proficiency (see below). The final admission is based on the applicant's overall compatibility with the programme.
Language requirements	Applicants must provide adequate proof of English proficiency, documented by one of the following documents:
	• German "Abitur" certificate with proof of six (G8) or seven years (G9) of English language instruction
	• TOEFL iBT test with at least 94 points
	• IELTS test with a score of at least 7.0
	• Cambridge Certificate in Advanced English (CAE)
	• Higher education entrance qualification from Great Britain, Ireland, USA, Canada, Australia, New Zealand
Application deadline	30 April (for international [non-EU] citizens as well as for German and EU citizens)
Submit application to	Online application: https://uni-tuebingen.de/en/4204
	For questions regarding the application process, please contact the International Students Admissions Office via e-mail: study@uni-tuebingen.de.

Services

Possibility of finding part-time employment	Students may find jobs as graduate research assistants for projects of the Department of Computer Science as well as for many other research groups, e.g. at the Max Planck Institute for Intelligent Systems or at a company.

Accommodation	Accommodation is available through the Student Services organisation ("Studierendenwerk") or on the private market. Rooms in student accommodation cost approx. 200 to 400 EUR per month. As Tübingen is a very attractive place to live, private accommodation is more expensive and can take some effort to find. To make sure you find a suitable place to live, you should start looking as early as possible. We recommend you apply for student accommodation through the "Studierendenwerk" at the same time that you apply for admission to the Master's programme (https://www.my-stuwe.de/en/housing/halls-of-residence-tuebingen/ and https://www.my-stuwe.de/en/housing/faqs/) and send in a copy of your notification of admission as soon as you have received it (your application won't be finally processed before the "Studierendenwerk" has received proof of your admission). For further information, check out the "Studierendenwerk" pages on housing in Tübingen (https://www.my-stuwe.de/en/housing/housing-infos/).
Support for international students and doctoral candidates	• Welcome event • Accompanying programme
General services and support for international students and doctoral candidates	The university offers a number of "onboarding" services for newly arriving international students. These include: • a help desk • a buddy programme • an advisory programme: "How to Study at the University of Tübingen" • a wide range of social activities offered by student groups For further information, please refer to: https://uni-tuebingen.de/en/182071. A student initiative offers a buddy programme and a wide range of social activities during the orientation week and throughout the semester (www.studit-tuebingen.de/en/). Furthermore, there is the Office for Advising and Admission of International Students (http://www.uni-tuebingen.de/en/90787).

Contact

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Faculty of Science
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🌐 Course website: https://uni-tuebingen.de/en/140323

▶ https://www.youtube.com/channel/UCupmCsCA5CFXmm31PkUhEbA

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International Programmes in Germany - Database

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