



The Hector Research Institute of Education Sciences and Psychology at the University of Tübingen invites applications for the following position to be filled as soon as possible:

**PhD position (m/f/d)**  
**Focus: STEM Education for Gifted Students**  
**(75% TV-L E13<sup>1</sup>, fixed-term contract for 3 years)**

We are seeking a highly motivated person from the fields of psychology, empirical educational research, cognitive science, educational science and STEM didactics, or related disciplines who is eager to engage deeply with topics related to STEM curricula conceptualisation and development for gifted and talented students.

How can talent and motivation in STEM be fostered? This and similar questions are explored by the team of the scientific monitoring of the [Hector Children's Academies Program](#) (HCAP). The successful candidate will be part of this team. The HCAP is funded by the Hector Foundation II and is supported by the state of Baden-Württemberg. The HCAP provides additional educational opportunities for highly gifted elementary school children at 69 locations across Baden-Württemberg. The program aims to foster individual talents through a diverse range of course offers in STEM.

To support and expand these course offers, the HCAP also operates a Moodle platform that provides a digital learning environment for the HCAP, engaging over 17,000 students, 700 instructors, and over 100 courses offered annually. As part of several ongoing projects, our research team is dedicated to enhancing and expanding the existing STEM course offerings that have been developed, evaluated and offered since 2016 in the Hector Children's Academies.

The primary focus of this position is the conceptualization, design, development, and evaluation of STEM pull-out online courses for highly gifted and talented primary school students of the HCAP. The successful candidate will apply learning analytics methods and empirical research techniques to investigate student learning behaviours, engagement patterns, and instructional effectiveness within these online STEM courses. This includes designing evidence-based digital learning experiences, implementing interventions to foster STEM identity and self-regulated learning, and assessing their impact using quantitative and qualitative research approaches. The candidate will collaborate with interdisciplinary teams, including educational researchers, instructional designers, and STEM educators, to enhance the digital STEM curriculum and optimize pedagogical strategies tailored to the needs of gifted learners. Findings from this research will contribute to the advancement of personalized learning approaches and the continuous improvement of online STEM education within the HCAP. The successful candidate will work closely with Professors Ulrich Trautwein, Jessika Golle, Katerina Tsarava, as well as with other researchers at the Hector Research Institute.

**What we expect from you:**

- A very good academic degree in psychology, empirical educational research, cognitive science, educational science and STEM didactics, or related fields,

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<sup>1</sup> According to the general pay scale of German universities, the salary will be "E 13TV-L". This corresponds to a monthly salary of at least EUR 3,472.31 (75% position, gross pay, before tax). After taxes as a single (i.e. not married or living with a life partner; no children), the monthly salary is at least EUR 2,218 (net salary after taxes and health insurance payments). Your income will increase regularly if you remain employed. Information regarding cost of living in Tübingen: <https://tuebingenresearchcampus.com/tuebingen/>

- you conceptualize, develop, and refine STEM courses and digital learning interventions for talented and gifted students,
- you collaborate with interdisciplinary teams, including educational researchers, instructional designers, and STEM educators, to enhance curriculum development,
- you present research findings at national and international conferences and publish in peer-reviewed journals,
- you support the broader research activities at the Hector Research Institute and contribute to the scientific discourse on STEM education and gifted learning,
- excellent communication skills, with the ability to engage with practitioners and effectively bridge the gap between research and practice,
- willingness for continuous professional development in line with the position's requirements.

### What we can offer you:

- An inspiring and collaborative environment where you can fully realize your passion for education and research,
- intensive supervision and diverse opportunities for further trainings as part of academic career development,
- support for interdisciplinary and international exchange.
- integration into the [LEAD Graduate School & Research Network](#) ,
- inclusion in a dynamic team of motivated researchers passionate about education and giftedness,

For further information about the position, please contact Katerina Tsarava ([katerina.tsarava@uni-tuebingen.de](mailto:katerina.tsarava@uni-tuebingen.de)).

The Hector Research Institute of Education Sciences and Psychology is an intra-university research institute at the University of Tübingen that investigates individual, social, and institutional determinants of learning and educational processes. We employ a wide range of methodological approaches, from large-scale assessments and longitudinal studies to laboratory experiments and randomized field studies. Our close collaboration with schools and educational institutions enables us to provide evidence-based insights for improving the education landscape. Nationally and internationally, our research institute is one of the leading centres for empirical educational research. As an interdisciplinary team, we work in a well-equipped building located directly adjacent to Tübingen's historic old town. More information about us and our institute can be found at [www.hib.uni-tuebingen.de](http://www.hib.uni-tuebingen.de). For more job opportunities at the Hector Research Institute, please visit the following webpage <https://uni-tuebingen.de/en/45295>.

We hope to have sparked your interest and kindly ask you to submit your complete and compelling application (including a CV and certificates) as one PDF document, mentioning the reference "Phd STEM Online", as soon as possible or **latest by March 23, 2025**, via email to: [jobs@hib.uni-tuebingen.de](mailto:jobs@hib.uni-tuebingen.de).

Applications from equally qualified candidates with disabilities will be given preference. The University of Tübingen is committed to equal opportunities and diversity. It therefore takes individual life situations into account and asks for relevant information. The University seeks to raise the number of women in research and teaching and therefore urges qualified women to apply.

Employment will be officially organized by the central university administration.