The International Experience as Part of Mentoring
Experiences from TUM Graduate School

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www.gs.tum.de
Doctorate @ TUM

The TUM doctoral model
Facts and Figures
(statistics 2021)

8900
Current members

1652
Intake in 2021

1115
Graduations in 2021

39%
Female doctoral candidates

29%
International doctoral candidates

China, Austria, Italy, India, Iran
Top 5 international countries of origin

Established in
2009
The TUM doctoral model

The TUM doctoral model ensures **independent research** while fostering **interdisciplinary networking**. It offers structure and flexibility, enabling each member to design the doctorate based on his*her individual needs.
Internationalization
Holistic approach @ TUM-GS
TUM-GS program and services – internationalization as cross cutting topic

- Mentor in addition to thesis supervisor
- Double mentoring
- Supervision agreement + research exposé
- Subject-related qualification (6 SWS)
- Integration into academic environment
- Discussion of research in the international community
- Feedback talk & annual data confirmation
- Good scientific practice
- International research and individual mobility
- International summer schools
- Transferable skills training
- Welcome Services and counseling
- Coaching and career services
- Exchange programs and joint supervision
- Graduate Council engagement
- Social and networking activities
- Interdisciplinary, international & intercultural exchange
- University politics & responsibility

International peer-reviewed publication

- Additional qualification & training requirements by the Graduate Centers possible

Subject-related qualification (6 SWS)

Transferable skills training
Facets of Internationalization
Important: inbound – on-site – outbound!

Partnership Programs: Joint Activities
Recruitment | Welcoming

Scientific Training | Transferable Skills Training
Special Funding for Int'l Projects

Partnership Programs: Joint Supervision

Individual international Research Phase
Scientific Training & Publication

- Available at the research groups, departments and schools
- Training at the intersection of engineering, natural sciences, health sciences, and social sciences
- Scientific courses and training at international partner institutions
- Good Scientific Practice
- Proofreading service for peer-reviewed international publications
TUM-GS provides **more than 80 courses** per semester, **50-60% of those are in English**.

Top selection of courses with an international focus:

- Presenting your research in international conference talks and poster sessions
- Communicating in intercultural teams and difficult situations
- Global Mindset
- Improving Your Intercultural Collaboration Skills
  - Acting successfully in an international academic environment
Individual international research phase

The TUM-GS supports early international & intercultural collaboration in research and the creation of personal networks of our doctoral candidates. We offer individual mobility funding of up to 3,000 € per candidates for research stays.
TUM-GS internationalization schemes

TUM-GS mobility funding for self-organized research stays & international conferences, up to 3,000 EUR/candidate

Individual joint/double doctorates only in few exceptional cases possible

Level of engagement

Length/experience of partnership

for strategic partnerships

Individual internationalization support

Joint Supervision Program

Research Exchange Program

Joint Summer/Winter School
Research stays – top destinations

- Top 1: USA (41%)
- Top 2: UK (7%)
- Top 3: Australia (5%)
- Top 4: Italy (4%)
- Top 5: France (3.x%)
- 2% - 3%
- 1% - 2%
- < 1%
Joint/double degree

- Joint/double degree (“cotutelle de thèse”) in few exceptional individual cases possible
- Requires lengthy and complicated legal negotiation for each single case
- Usually only feasible with continental European universities with similar/compatible doctoral degrees
- Usually within the framework of EU-MSCA projects to meet program requirements
- Not an instrument for sustainable, long-term university partnerships

To enable and support international research collaboration, as well as to foster international and intercultural experience, TUM-GS introduced several international exchange and joint supervision programs.
Strategic international collaborations

To support international collaboration and joint doctoral training, as well as to foster intercultural experience, TUM-GS offers a wide range of international activities with TUM’s key global strategic partners, from single events to joint supervision programs.
TUM-GS internationalization schemes

- Individual internationalization support
- Joint Summer/Winter School
- Research Exchange Program
- Joint Supervision Program
- for strategic partnerships

Length/experience of partnership vs. Level of engagement
TUM & TUM-GS strategic partners

- EuroTech Alliance
- International locations and strategic initiatives
- Flagship partners
- TUM-GS International Exchange Partners
#1 EuroTech Universities Alliance

**Doctoral Summer/Winter Schools**

- Self-organized summer/winter school by doctoral candidates for their peers
- Organization committee from at least 3 EuroTech partners
- Interdisciplinary topic at the cutting edge of science and society
- Up to 10,000 EUR funding from each partner

For 2022/23:
- Green Hydrogen – Powering the Future (@DTU)
- Economics & Management of Innovation and Technological Change (@DTU)
- Learning Environments in Chemistry (@Technion)
Joint doctoral supervision program

- Supervisor at TUM and co-supervisor(s) at partner(s) for the entire doctoral research project
- Usually pre-existing research collaboration between research groups
- At least 6 months research stay at partner(s)
- Additional travel support and research allowance
- Joint doctoral examination at home university
- Only home university awards its own single doctoral degree
- For TUM candidates: special TUM doctoral diploma possible, mentioning international co-supervision
#3 TUM – ICL Global Fellows Program

- **Annual 5-day Summer School** in June/July
- **Focus on professional skills training & collaboration activities** under an interdisciplinary academic theme
- Since 2021: **trilateral Summer School** with 3rd partner NTU Singapore

- Doctoral candidates from all disciplines, ~40 participants in total (1/3 from each partner)

- **Fully funded by each partner for its candidates** (travel to location, accommodation on site, participation fee)
- **Research placement @ partner for 3-4 weeks** possible after the summer school with additional program funding
#4 TUM – ICL Joint Academy of Doctoral Studies (JADS)

The JADS is a bilateral, interdisciplinary doctoral program consisting of up to six joint projects, each of which will be worked on by doctoral candidates and their co-supervisors from TUM and Imperial.

- Annual call in a different research area
- One fully funded doctoral candidate per project (by home university)
- Research stay of 12 months at the partner university
- Complementary joint doctoral training and activities
- Joint thesis examination committee and program diploma but only the home university awards its own single degree
#5 TUM – UQ Exchange Program

TUM-University of Queensland Research Exchange

- Research exchange as non-award doctoral candidates for stays of 3-6 months at partner
- Usually 3-5 placements per year
- Tuition fee waiver and full access to research facilities
- Open to doctoral candidates from all disciplines
- Have the approval from the home supervisor
- Have found a supervisor at the host university
- Fixed application deadlines and mobility period possible
- Excellent English language proficiency
- Additional travel support and research allowance
- Joint Graduate School program certificate possible
#6 TUM.Africa Talent

- Joint initiative of the TUM Global & Alumni Office and TUM-GS
- Brings together doctoral candidates from KNUST and other sub-Saharan African universities with professors, senior researchers and doctoral candidates at TUM
- Funding for six candidates for a research stay at TUM for 3-4 months
- TUM doctoral candidates at host chair as “buddies”; all participants form a cohort
- Combination of individual research projects and group-oriented networking activities
- Transferable skills training and lecture series with focus on the program theme “Sustainable Global Leadership”
Internationalization
(or globalization, or however you want to call it)

• is a core part of mentoring & training
• has inbound, on-site, and outbound components

Thank you!