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

ТИП

Facts and Figures

(statistics 2021)

8900

Current members

Established in

2009

1652

Intake in 2021



1115

Graduations in 2021



29%

International doctoral candidates

39%

Female doctoral candidates



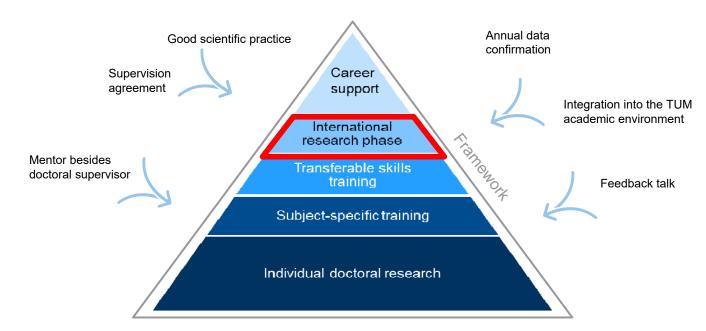
Top 5 international countries of origin





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.



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Internationalization

Holistic approach @ TUM-GS



TUM-GS program and services – internationalization as cross cutting topic

International peer-

publication

Mentor in addition to thesis supervisor

research exposé

Double mentoring

Supervision

agreement +

Discussion of research in the

ine internationa community

Subjectrelated qualification (6 SWS) Feedback talk & annual data confirmation

Integration into academic environment

Additional qualification & training requirements by the Gradauate Centers possible

International

research and individual mobility

> Good scientific practice

Transferable skills training

Coaching and career services

International summer schools University politics & responsibility



Graduate Council engagement

Welcome

Services

and

counseling

Exchange

programs

and joint

supervision

Social and networking activities

Interdisciplinary, international & intercultural exchange

TUM Graduate School
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Facets of Internationalization

Important: inbound – on-site – outbound!

Partnership Programs: Joint Activities

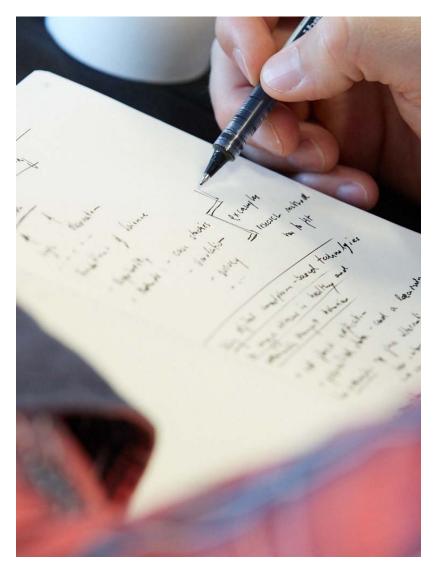
Recruitment | Welcoming

Partnership Programs: Joint Supervision

Scientific Training | Transferable Skills Training

Individual international Research Phase

Special Funding for Int'l Projects





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



Transferable Skills Training

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

academic environment

Improving Your Intercultural Collaboration Skills
 Acting successfully in an international

Doctorate-oriented Program		Career-oriented Program	
Personality & Self-Management	<u>a</u>	Science & Research	
Communication & Methodological Competence		Entrepreneurship & Startups	-, \$\documer{\angle}{\documer}\documer-
Leadership & Responsibility	200	Business & Industry	蓟



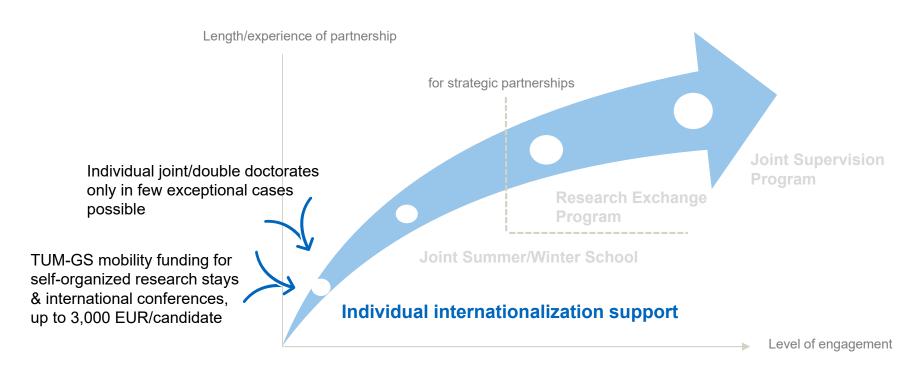
Individual international research phase

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.



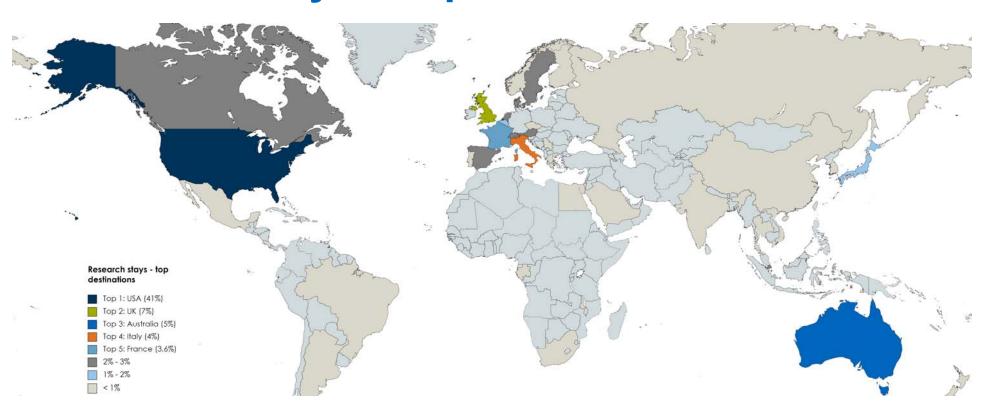


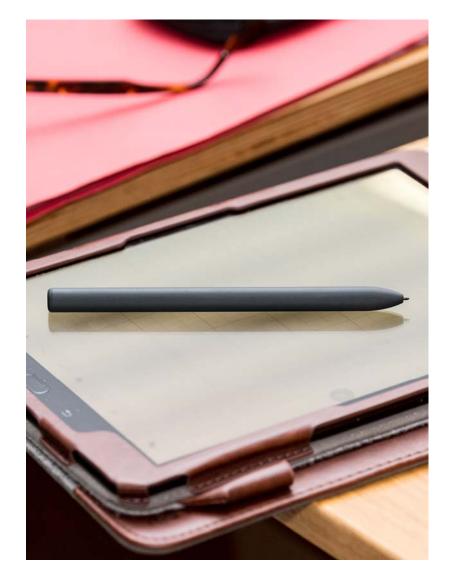
TUM-GS internationalization schemes





Research stays – top destinations







Joint/double degree

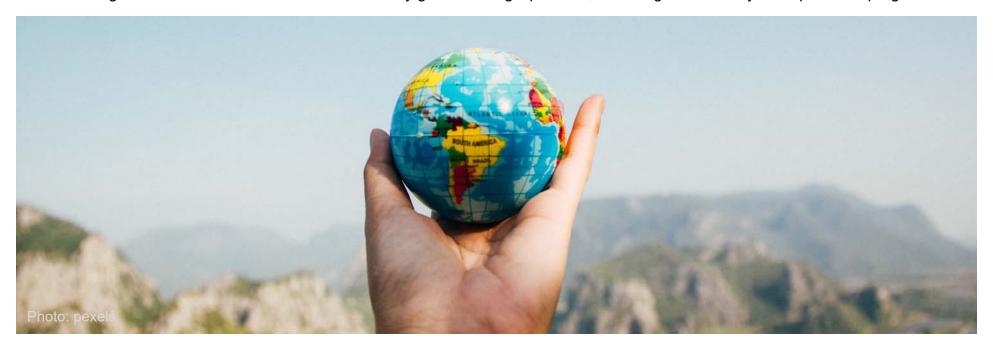
- Joint/double degree ("cotutelle de thèse") in few exceptional individual cases possible
- Requires lengthy and complicated legal negotiation for each single case
- Usually only feasible with continental European universities with similar/compatible doctoral degrees
- Usually within the framework of 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.



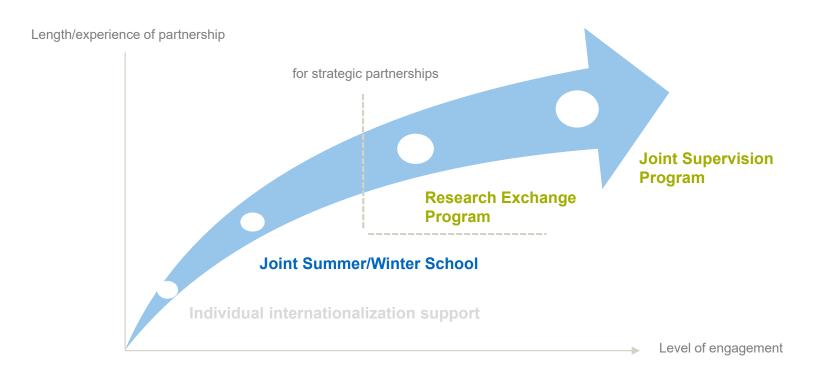
Strategic international collaborations

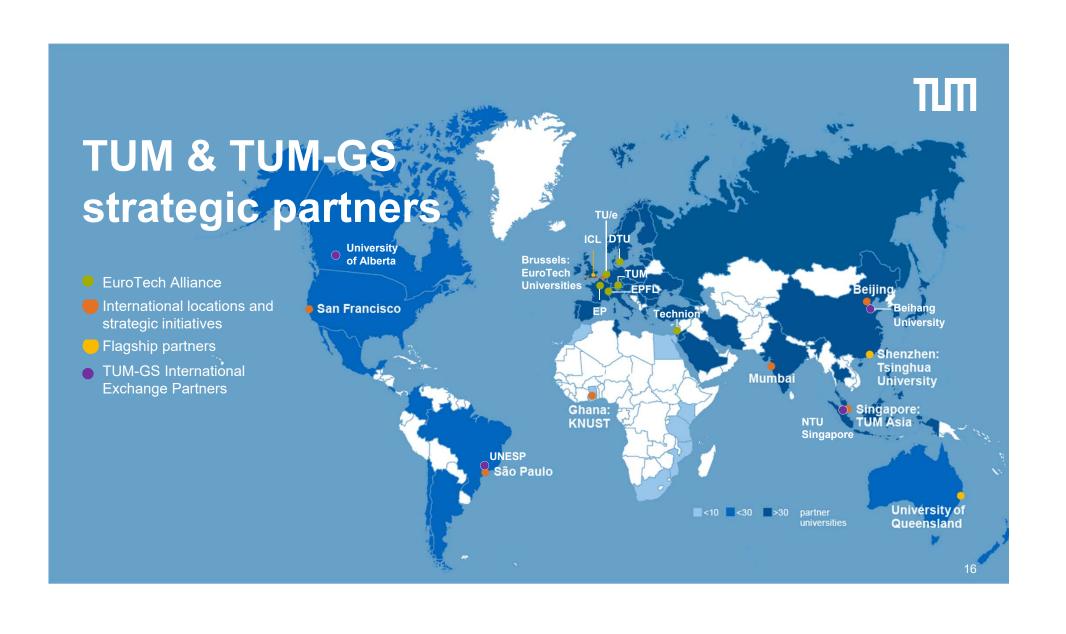
To support international collaboration and joint doctoral training, as well as to foster intercultural experience, TUM-GS offers a wide range of international activities with TUM's key global strategic partners, from single events to joint supervision programs.





TUM-GS internationalization schemes









#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)

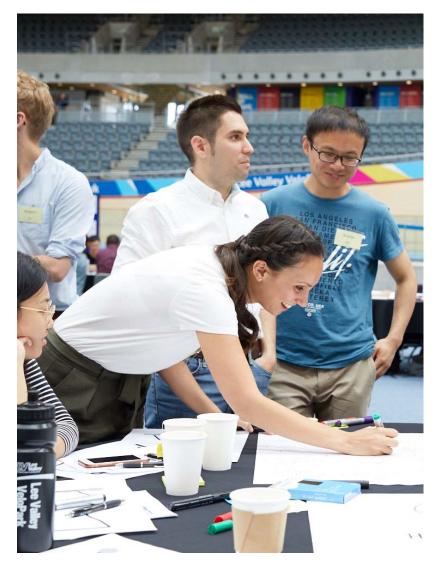




#2 EuroTech Universities Alliance

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

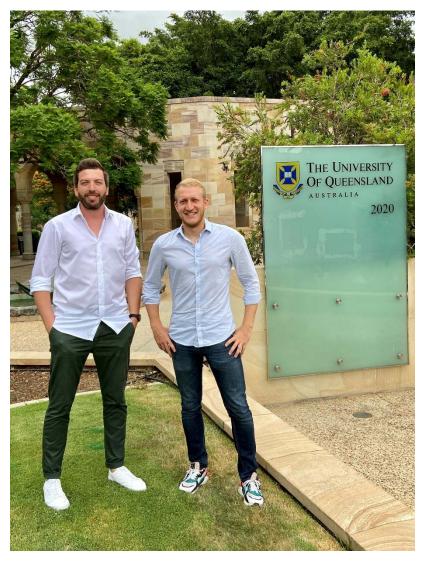




#4 TUM – ICL Joint Academy of Doctoral Studies (JADS)

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

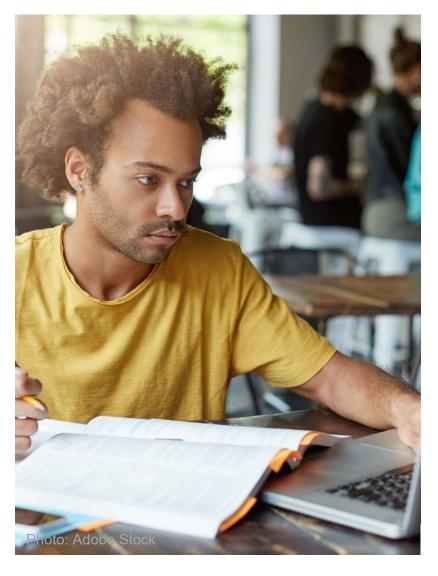




#5 TUM – UQ Exchange Program

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 grouporiented networking activities
- Transferable skills training and lecture series with focus on the program theme "Sustainable Global Leadership"



Internationalization

(or globalization, or how ever you want to call it)

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

Thank you!

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