



TECHNISCHE  
UNIVERSITÄT  
DRESDEN



GRADUATE  
ACADEMY

Graduate Academy

PhD Day 2018 | Workshop

# Doing Your PhD in Germany: A Guide for International Students



25<sup>th</sup> April 2018

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„Roughly 30,000 graduate students complete a doctorate in Germany every year – far more than in any other European country. **Every year, 5,000 international scholars** are awarded a doctorate by a German university.“

(<https://www.research-in-germany.org/en/jobs-and-careers/info-for-phd-students.html>)



## Agenda

- The German Doctorate
- Where can you do a doctorate in Germany? The German Research Landscape
- Forms of doing a Doctorate in Germany
- Doing a Doctorate at TU Dresden: Structures & Procedures
- Roadmap to PhD: Which steps to take?

## The German Doctorate

- Doctorate: **highest academic degree** & requirement for an academic career towards professorship
- Pursuing a doctorate: working rather **independently** on a specific research project under the **supervision of a full university professor**
- Doctoral candidates are considered **junior researchers** rather than students
- **Heterogeneous framework conditions:** funding, work organisation, supervision relationship, length of the doctorate

## Where can you do a doctorate in Germany?

### **The German Research Landscape:**

- HEI: Universities & Universities of Applied Sciences
- Extra-university research institutes
- Federal institutions
- Industry

## Higher Education Institutes in Germany

- **119 Universities** (19 Technical Universities): focus on basic (publicly funded) and applied (privately funded) research, combine research and teaching → **entitled to award doctorates**
- **222 Universities of applied sciences:** oriented vs practical application of knowledge, focus on teaching, → **doctorates only in collaboration with a university**
- **Film, Art und Music Colleges:** some have the right to award doctorates (i.e. HfBK Dresden)

## Non-university Research Institutes\*

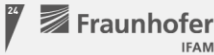
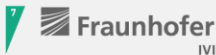
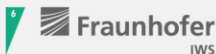
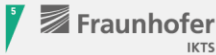
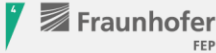
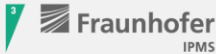
<b>Max Planck Society</b>	basic research, 666 International Max Planck Research Schools (IMPRS) with 50% of international PhD students
in Dresden	three MPIS (MPI CBG, MPI PKS, MPI CPfS), 3 Graduate Schools: IMPRS for Cell, Developmental and Systems Biology, IMPRS for Many-Particle Systems in Structured Environments, IMPRS for Chemistry and Physics of Quantum Materials
<b>Helmholtz Association</b>	high-performance infrastructure & large-scale research equipment, Helmholtz International Research Schools
in Dresden	one institute (HZDR), International Helmholtz Research School for Nanoelectronic Networks (IHRS NanoNet)
<b>Fraunhofer-Gesellschaft</b>	application-oriented research, cooperations with industry partners
in Dresden	five institutes: IWS, IPMS, IKTS, FEP, IVI
<b>Leibniz Association</b>	research on relevant topics for the future of society, Leibniz Graduate Schools
in Dresden	three institutes (IPF, IFW, IÖR), Dresden Leibniz Graduate School

**\*One third of doctorates in Germany is carried out in collaboration with a non-university research institution.**

# Network

## DRESDEN-concept

Dresden **R**esearch and **E**ducation **S**ynergies  
for the **D**evelopment  
of **E**xcellence and **N**ovelty





## Federal Research Institutions & Industry/Private Sector

- **Federal Research Institutes**, i.e. Robert-Koch-Institut as well as
- **Large companies** offer doctoral training opportunities (usually on projects and with part-time contracts)
  - **in collaboration with a university**
  - under the supervision of a **university professor**

## Forms of doing a Doctorate in Germany (1)

- Individual vs. structured doctorates
- “external” vs. “internal” doctorates
- Cooperative doctorates

## Forms of doing a Doctorate in Germany (2)

### Individual doctorate

- the „traditional“ and most common way (about 75%)
- finding a supervisor (full university professor), defining a research topic & carrying out research rather individually

⊕ usually more individual freedom & flexibility

⊖ sometimes less support & guidance

### Structured PhD Programs

- Graduate Schools and Research Training Networks
- More standardized: call for applications, thematic focus, team supervision, curriculum
- currently approx. 30 structured PhD programs at TU Dresden (**Online:** [TUD\\_Research\\_JuniorResearchers\\_Doctorate\\_Structured PhD programs at TUD and with partner institutions](#))

⊕ usually more support & guidance

⊖ often individual freedom & flexibility

## Forms of doing a Doctorate in Germany (3)

- **Internal doctorate:** pursuing a doctorate as a research associate employed at the university (chair/institute of doctoral supervisor)  
→ doctoral supervisor = superior
- **External doctorate:** working outside university, financing the doctorate by a scholarship or other type of income  
→ being affiliated with the university by supervision relationship

## Forms of doing a Doctorate in Germany (4)

- **Cooperative doctorates:**
  - in cooperation with a **University of Applied Sciences**,
  - with a company (**industry-sponsored doctorate**) or
  - with a partner university abroad (**bi-national doctorate** or Cotutelle)
- respectively two supervisors are needed
- a Cooperation Agreement has to be stipulated

# Doing a Doctorate at TU Dresden: Structures & Procedures (1)

Doctorates are administered by the **18 faculties** of TU Dresden

- Doctoral Admission Board, Doctoral Office, Doctoral Regulations
- Registration as a doctoral candidate (admission to the doctoral register)
- Submission of the doctoral thesis
- Organization and execution of the oral exam and the defense of the doctoral thesis
- Award of the doctoral degree

Doctoral supervisors have to be **full professors\*** at TU Dresden

- Full professors hold a chair/professorship of an institute/faculty
- Only with a confirmation of supervision from a full professor of TU Dresden you can apply for being accepted as a doctoral candidate by the respective faculty
- \* **TUD Young Investigators** can act as doctoral supervisors / examiners as well.

## Doing a Doctorate at TU Dresden: Structures & Procedures (2)

### Registration procedure for international doctoral candidates

- If you hold a **foreign university degree**: the **International Office of TUD** has to **authenticate** whether it meets the **formal requirements for admission as a doctoral candidate** at the respective faculty.
- **Enrolment as a doctoral student** is possible but **not mandatory!**
- For enrolment, use the **Online Enrolment Portal of the Admission Office** of TUD.

# Roadmap to Your PhD: Which steps to take?



## Sources

- DAAD PhDGermany Database: [www.phdgermany.de](http://www.phdgermany.de)
- Higher Education Compass:  
[www.hochschulkompass.de/en/doctoral-studies.html](http://www.hochschulkompass.de/en/doctoral-studies.html)
- Research in Germany:  
[www.research-in-germany.org/en/jobs-and-careers/info-for-phd-students.html](http://www.research-in-germany.org/en/jobs-and-careers/info-for-phd-students.html)
- Research Explorer:  
[www.research-explorer.de](http://www.research-explorer.de)
- [tu-dresden.de/forschung/wissenschaftlicher-nachwuchs/promotion](http://tu-dresden.de/forschung/wissenschaftlicher-nachwuchs/promotion)



**Thank you for your attention!**

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