

Welcome to Faculty IV

Electrical Engineering and Computer Science



1. where you are ...

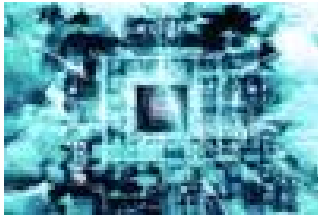
2. PhD @ Faculty IV of TUB

3. Recommendations

- Supervision agreement
- Sign up as a doctoral candidate & enroll

Faculty IV: Research areas

Data Analytics
& Cloud



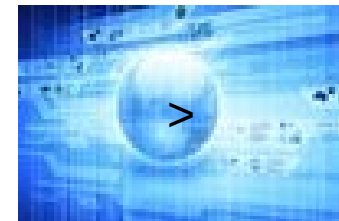
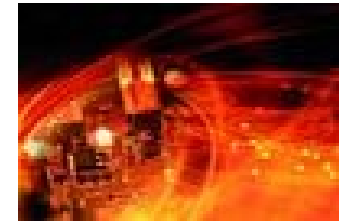
Sustainable
Energy Systems
& Mobility

Cognitive
Systems



Integration
Technology
& Photonics

Cyber-Physical
Systems



Future Internet &
Media Technology

Faculty IV: Facts & Figures

- ⚙ **6.800** students
- ⚙ **30%** international students
- ⚙ **72** research groups

- ⚙ 2017: **79** doctoral degrees (15 females)
- ⚙ 2018: **89** doctoral degrees (14 females)

- ⚙ 2018: **107** enrollments („Promotionsabsicht“)
- ⚙ Jan – Sep 2019: **89** enrollments

Ways of pursuing a PhD at Faculty IV

- ⚙ Employment as research associate with teaching duties (5 years)
- ⚙ Third-party funded employment (e.g. DFG)
- ⚙ Scholarship of Graduate School (or similar)
- ⚙ „External“ Doctorate (e.g. with fixed-term contract of employment in the industry or at a non-university research institute)

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Types of Degrees

- ⚙ Doctor of Engineering Sciences (Dr.-Ing.)
- ⚙ Doctor of Natural Sciences (Dr. rer. nat.)

Possible Thesis Formats

Monography

- ⚙️ Classical format to present dissertation research in **one** comprehensive report
- ⚙️ Pre-publication of parts of research is possible

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Paper-Based (Cumulative) Dissertation:

- ⚙️ 3 (accepted) publications in peer-reviewed journals
- ⚙️ PLUS: Introduction & Transitions & Discussion
- ⚙️ only 1 examiner might also be a co-author
- ⚙️ in agreement with supervisor



Startpage of TUB

search for ...

TUB-Login

with password

Technische Universität Berlin Electrical Engineering and Computer Science

Faculty IV - Electrical Engineering and Computer Science

About Us

Faculty Institutions

Research

Research Profile

Adjunct Lecturers, Associate Professors, Honorary Professors

Research Institutions

Doctorates

Doctoral Examination Dates

Doctorates 2019

Archive

Habilitations

Research Figures

Academics & Teaching

Conferral of Doctorates

At TU Berlin there is one PhD regulation effective for all faculties. For gaining a doctor's degree the candidate has to go through this examination procedure. The formal requirement for gaining a PhD degree is that the student has earned a Master's degree from a university or a German Fachhochschule or a degree of a similar level (Diplom, Magister, Staatsexamen) in the research field of the doctorate. Furthermore, the candidate must write a dissertation and pass an oral exam.

Because of its broad specter of fields the faculty of electrical engineering and computer science awards two different kinds of PhD degree:

- Doktor(in) der Ingenieurwissenschaften (Dr.-Ing.)
- Doktor(in) der Naturwissenschaften (Dr. rer. nat.)

In the past, there was an additional degree 'Doktor(in) der Wirtschaftswissenschaften (Dr. rer. oec.)' which ceased to be awarded. The research field of the dissertation determines which of the two degrees is awarded (i.e. not the specialization in which the PhD student holds his/her Master's degree). Dissertations with a specialization in electrical engineering or computer science are usually awarded with a Dr.-Ing. degree. If the specialization of the dissertation is in mathematics or natural science, a Dr. rer. Nat. degree is awarded. If the degree is outside of the subject area or from a foreign university, additional courses and exams can be required. In order to clarify this and other formal questions, the doctorate regulations require a **letter of intent (application as a doctoral candidate)** at an early stage. The faculty decides whether this letter of intent is accepted or declined. At the same time it is determined if and which additional exams or courses the graduate student has to take.

Students holding a **Diploma degree of a German Fachhochschule** can be accepted if their final mark is above average (at least „good“) and after having passed the assessment tests.

Contact point for information, forms and all other dissertation issues in the faculty of electrical engineering and computer science is the **faculty's administration**

Quick Access:

Go to:

Auxiliary Functions

maximize aux. functions

This site uses **Matomo** for anonymized webanalysis. Visit **Data Privacy** for more information and opt-out options.

Contact

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Ombudsperson for Doctoral Candidates

Prof. Dr. habil. Odej Kao

Doctoral Examination

Guidelines & Forms

Forms

- [▶ Application as a Doctoral Candidate](#)

- [▶ Admission to Doctoral Procedure](#)

- [▶ Supervision Agreement](#)

For guidelines and forms for dual programs (Doppelpromotionen/Cotutelle de Thèse), please, contact the faculty's service center.

Guidelines

[Promotionsordnung für die Technische Universität Berlin](#) (Doctoral Regulations TU Berlin)

[Regulations Governing the Conferral of Doctorates](#)

Translation of the Official Information Bulletin No. 2/2014 of 15. January 2014

- [📄 Guidelines for Writing Dissertations at Faculty IV \(PDF, 158,6 KB\)](#)
- [📄 Regulations for cumulative Dissertations/Habilitations \(Bulletin\)](#)

Supervision Agreement

Forms

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Admission to Doctoral Procedure



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Supervision Agreement

In case of conflicts both sides can appeal to the ombudsperson for doctoral candidates at the respective faculty.

Elements of a **thorough and active** supervision arrangement are:

1. Regular meetings to discuss progress of the dissertation and frequent proactive reports by the doctoral candidate
2. Creating adequate conditions for independent research work during the dissertation (e.g. publications)
3. Participation of the candidate in (international) workshops and conferences
4. Access to technical or artistic infrastructure
5. Further issues, e.g. regular colloquia for doctoral candidates; possibility to participate in further education courses

re 1. Regular meetings

a) Frequency of progress reviews of the dissertation, at least every

- three months
- six months
- more frequently:

give details

Quality Assurance with Doctoral Degrees

- ⚙ „The supervisor and the doctoral candidate should be obliged to **meet on a regular basis** to constantly supervise, review, evaluate, and assess the doctoral process.“ (S. 18)
- ⚙ „Candidate and supervisor are **both responsible** for the dissertation quality.“ (S. 19)
- ⚙ „...obligation of the **supervisor**..., data verification concerning plausibility, examination of the process, and to give **feedback at an early stage** regarding methodology and data quality.“(S. 23)
- ⚙ „In order to prevent data manipulation it must be ensured that the refutation of a thesis can also lead to a doctoral degree, if the independent scientific achievement is proven.“(S. 23)

(from policy paper of the Academic Science Council (Wissenschaftsrat), 2011)

Supervision Agreement

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✓ Discuss **supervision agreement**

→ web quick access code via homepage of TUB: 141970

Supervision Agreement

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Personal advice:

- Be in charge! - develop sense of self-determinism
- think of advisor as coach
- become a scholar

Become a doctoral candidate

Forms



 Application as a Doctoral Candidate

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1. Officially registered – we know you exist

2. Student status (quick access: 75472)

- BVG ticket
- Reduced fares to all kinds of fun stuff
- Potentially reduced fee for health insurance

3. If you do not want any of the above at least sign into the

list of doctoral students on the website (quick access: 14567)

Graduate school should be the most fun you ever have!

Raman, I.M.(2014). How to be a graduate advisee. *Neuron*, 81, 9-11.

Barres, B.A.(2013). How to pick a graduate advisor. *Neuron*, 80, 275-279.

Contact



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