TU Wien Informatics Doctoral School

Information Event
March 5, 2024

Andreas Steininger
Doctoral Education at our Faculty

common roof formed by
TU Wien Informatics Doctoral School

different ways of funding a doctoral degree at our faculty

Doctoral Colleges  Teaching Assistants  Research Assistants  Self-Funded PhDs  ...

different areas, different institutes, different supervisors, ...

but the same curriculum, process, evaluation criteria apply to every doctoral student

the Doctoral School is not a secluded club –
every doctoral student is considered member of our Doctoral School

currently ~400
Excellent Education for Doctoral Students

☑ Excellent Supervision

➢ Well-thought Dissertation Process

➢ Quality Assurance

➢ Structured Curriculum

➢ Top-class Guest Professors

➢ Information & Support of Students

➢ Teambuilding & Socializing
**Mission:**

- ...to provide you with an environment that encourages you to contribute to technology advancement through systematic, yet creative research. Our program enables you to become an independent researcher capable of generating, pursuing, and communicating novel research ideas. To achieve this, you will be involved in research activities as soon as possible.

**Services** (in tight cooperation with the Deans of Academic Affairs & Dean’s Office):

- maintain unified interface inside and to the outside (webpage, Q&A)
- implement the basic curriculum (mandatory lectures)
- organize guest lectures (selection, invitation, operation...)
- organize special courses in house (Current Trends in CS, Proposal Writing)
- stimulate teambuilding (social events)
- keep contact to doctoral students, provide aid (relay info, give pointers when problems)
- inform (events), coordinate, provide facts & figures
The Path to the Doctoral Degree

enrolment -> proficiency exam -> pre-submission

thesis V1 -> revised thesis -> final submission

thesis agreement -> admission

2 reviews -> final submission -> defense

reviewing revision reviewing inspection

6...18 mo 8 wks ~4wks ~3wks 2wks

research proposal

revised thesis

2 reviews
research proposal (~10p) & presentation (30’)

- outline the research challenge you want to address
- put in context with related work (>10 ref’s)
- outline envisioned methodology
- sketch the expected output
- give a time table including publications
- present a plan for your 18 ECTS coursework

Is the topic scientifically challenging?
Is the candidate proficient in the field?
Is the methodology appropriate?
Is the thesis doable?
Does the candidate know the relevant venues?
Does the plan align with the rules, does it make sense?
Quality Assurance

- early feedback & transparency through proficiency exam
- extra guidance by PE members: National Expert & Chair
- extra certainty through clear commitments in thesis agreement
- grading of thesis by 2 independent experts
- possibility for thesis revision
- thesis & reviews open for inspection by faculty
PhD Curriculum

18 ECTS

PhD Defense

6.0 Fundamental Courses

3.0 PhD Seminar

9.0 Area Courses

Proficiency Exam

Structured Curriculum

- 3.0 Philosophy of Science
- 3.0 Fundamental Research Methods
- 3.0 Career Planning
- 3.0 Crafting Good Professional Life
- 3.0 Digital Humanism
- 3.0 Scientific Proposal Writing

3.0 Doc School’s Guest Professor course

Free Choice, related to PhD area

submission of plan after proficiency exam; needs approval!

Admission & Enrolment
As a reminder: In total minimum 18 ECTS required

• **fundamental courses**
  • Philosophy of Science (M)
  • Research & Career Planning for Doctoral Students (M)
  • Fundamental Research Methods for Doctoral Students (M)
  • Crafting Good Professional Life
  • Digital Humanism
  • Scientific Proposal Writing

*min 6 ECTS, min 1 methodology*

• **area courses**
  • PhD seminar, 3 ECTS
  • visiting professor courses, min 3 ECTS
  • own choice of courses related to research area

*min 12 ECTS, at most 6 ECTS seminar or PV*

*submission of plan after proficiency exam; need approval!*
• Information of the Dean’s Office about Doctoral Study Process
  https://informatics.tuwien.ac.at/study-services/doctoral-graduation/

• Webpage of the TU Wien Informatics Doctoral School
  https://informatics.tuwien.ac.at/doctoral/

• Standard Procedure for Doctoral Program at the Faculty of Informatics
  https://informatics.tuwien.ac.at/doctoral/procedure/

• Registration to Doctoral School news:
  https://inn.tuwien.ac.at/socialevents_doctoralstudents

• Admission Office
  https://www.tuwien.at/en/studies/admission/the-conditions-for-international-students/doctoral-programme/

• Psychosocial Counseling

• Ombudsperson for students
  https://www.tuwien.at/en/studies/student-support-services/ombudspersons-office-for-academic-affairs
TU Wien Informatics Doctoral School

2023W-2024S (2011U)

**Fundamental Courses**

- **VU Philosophy of Science**
  - 195.080 VU 2023W
  - Philosophy of Science
  - 2.0 ECTS

- **VU Innovation**
  - 195.079 VU 2024S
  - 3.0 ECTS

- **VU Research Methods in Computer Science**
  - 3.0 ECTS

- **VU Fundamental research methods for doctoral students**
  - 2.0 ECTS

- **SE Research and Career Planning for Doctoral Students**
  - 2.0 ECTS

- **VU Research and Career Planning for Doctoral Students**
  - 2.0 ECTS

- **Research and Career Planning for Doctoral Students**
  - 2.0 ECTS

- **VU From surviving to thriving: crafting your good professional life**
  - 2.0 ECTS

- **199.096 VU 2023W**
  - From surviving to thriving: crafting your good professional life
  - 2.0 ECTS

**Area Courses**

- **VU PhD Primary Area Computer Engineering Introduction**
  - 3.0 ECTS

- **VU Foundations of Data and Knowledge Systems**
  - 3.0 ECTS
Guest Professors

International collaboration and exchange is in our DNA. We host a multitude of guest professors from all over the world each year.

2024

Gordana Dodig-Crnko...
Mälardalen University and Chalmers University of Technology
Sweden

Wolfgang Reisig
Humboldt-Universitaet Berlin
Germany

Konrad Rieck
TU Berlin
Germany

Viola Schiaffonati
Politecnico di Milano
Italy
- **199.019 System Modeling in Informatics and Business Informatics: Motivation, Principles, Case Studies**
  Lecturer: Prof. Wolfgang Reisig, Humboldt-Universitaet Berlin
  Course start: April 8

- **199.108 Digital Ethics and the Connected World**
  Lecturer: Prof. Gordana Dodig-Crnkovic, Mälardalen University & Chalmers University of Technology.
  Course start: May 2

- **199.017 Artificial Intelligence in Computer Security**
  Lecturer: Prof. Konrad Rieck, TU Berlin
  Course start: May 13

- **199.018 Experimentation in the digital world**
  Lecturer: Prof. Viola Schiaffonati, Politecnico di Milano
  Course start: June 12
Fundamental Courses – Summer Term

- **195.079 Fundamental Research Methods for Doctoral Students**, course start: March 19
  - Introduction to Methodologies and Paradigms
  - Qualitative Methods
  - Formal Methods
  - Quantitative Methods
  - Design Methods
  - Lecturers: P. Wozniak, U. Egly, A. Posekany, C. Huemer

- **195.109 ProWriting – Effective Research Project Proposal Writing for Public Funding**, course start: March 8
  - Lecturers: S. Biffl, A. Ciabattoni, C. Maszl-Kantner, E. Schludermann, A. Steininger
Current Trends in Computer Science (VU 1.5, 195.072)

- Ring lecture with talks given by the guest professors of the current study year
- Offered throughout winter and summer term
- Highly probable that we have 6 talks in total during this study year 2023/24 (check TISS & TUWEL)

Requirements for positive grade:

- Preferably students attend 4 talks, choose 3 of those for their report and give a summary of at least 2 pages for each.
- For students who can only attend 3 talks this summary must comprise at least 3 pages for each talk.

The course will end after the summer term, a further combination with talks of the winter term 24/25 will not be possible.
- Regular Info Events (process, upcoming guest prof courses, Q&A, ...)
- Social Events
  - Special-focus Guided Tours
    („Vienna for students“, „Hidden Secrets of Vienna“, ...)
  - Visit & Tour of Ottakringer Beer Brewery
  - Visit of Vienna Museum of History
  - Visit of Christmas Market
  - ...

Informatics
Information, Teambuilding, Socializing
Date: June 14 (plus optional trainings before)
Registration: by April 4 at clarissa.schmid@tuwien.ac.at
Skills: team spirit only
Costs: covered by our faculty
You want to receive information about future social events

• please register here:

https://inn.tuwien.ac.at/socialevents_doctoralstudents
Thank you!