TU WIEN Informatics

TU Wien Informatics Doctoral School

Information Event
Oct 2, 2025

Andreas Steininger

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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

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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

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TU Wien Informatics Doctoral School

- **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

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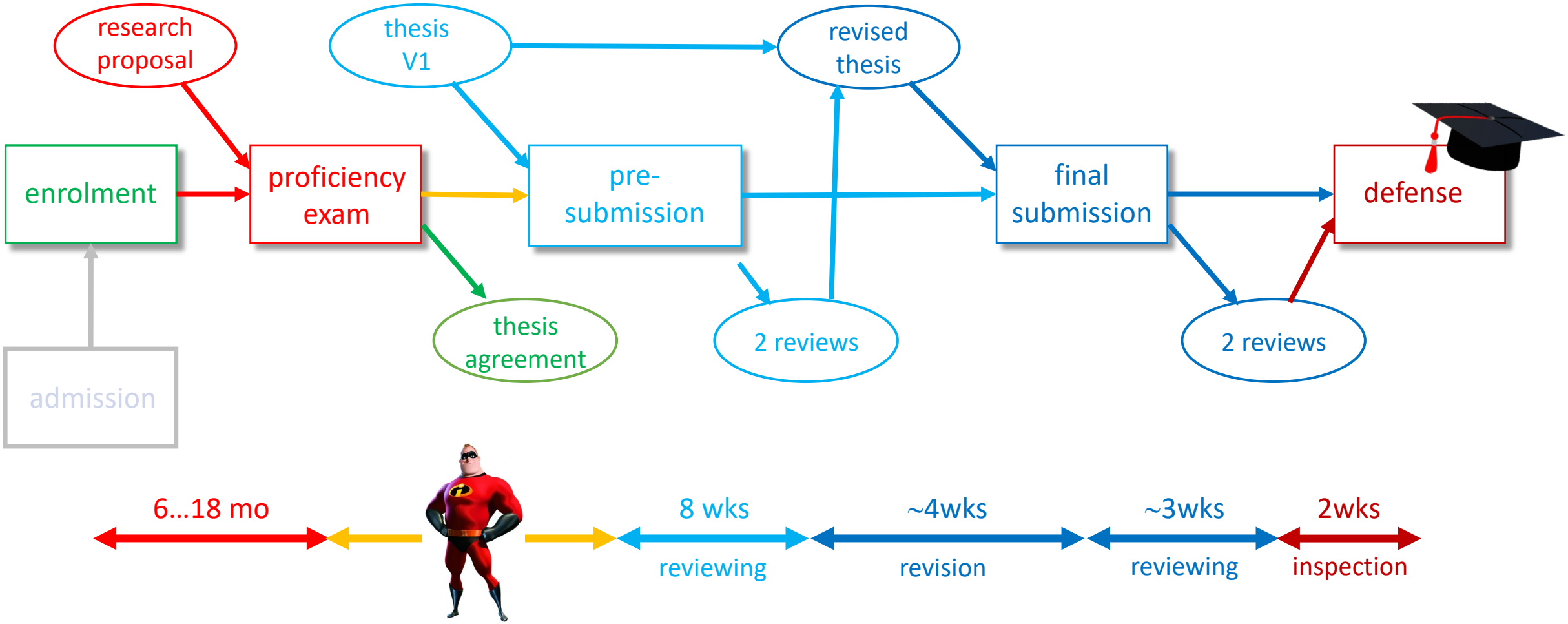
The Path to the Doctoral Degree



Proficiency Exam

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?

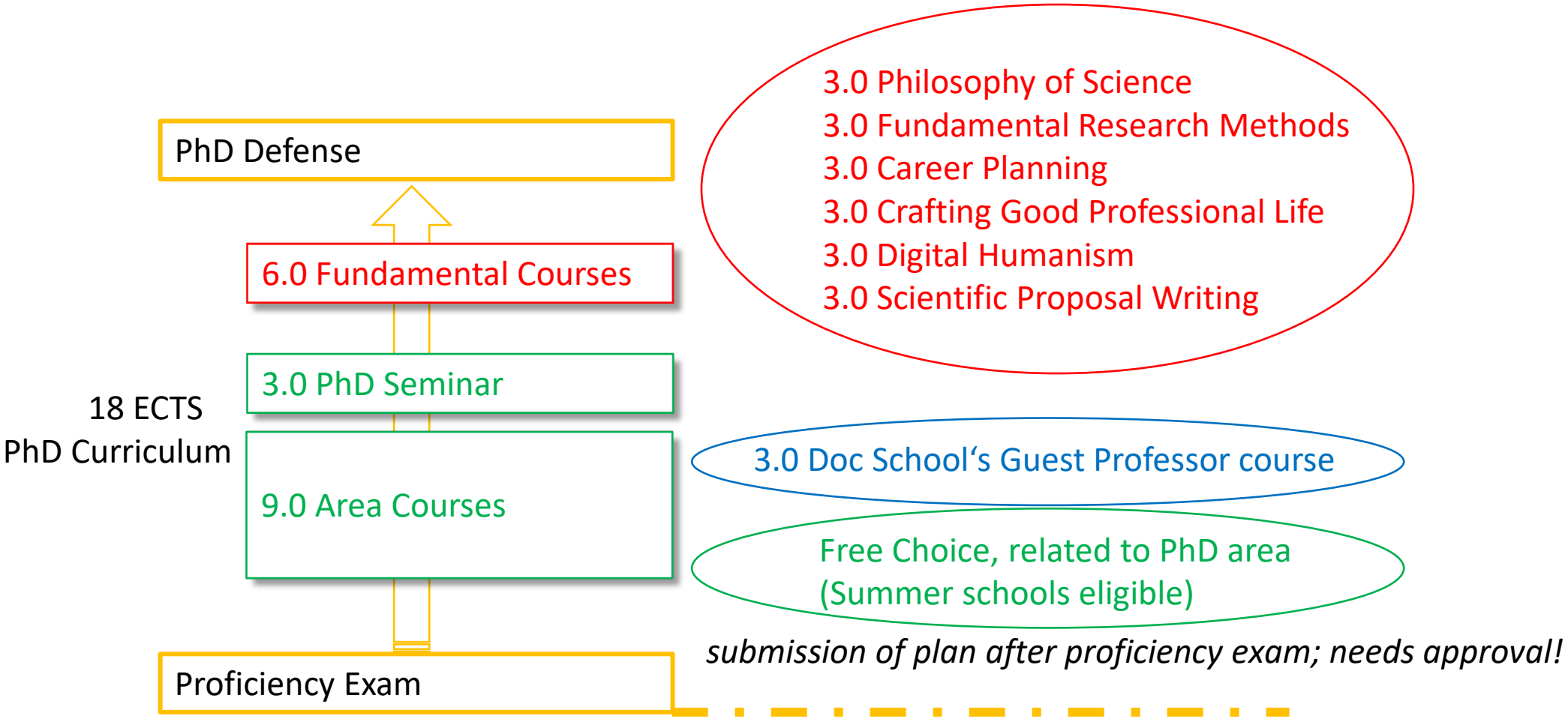
Does the candidate know the relevant venues?

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

Structured Curriculum



Curriculum Structure

As a reminder: In total minimum18 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!

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Important Sources of Information

- 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/admission-to-a-doctoral-programme
- TUW DOC School's Mentorship Program
  https://www.tuwien.at/en/research/tuw-doctoral-center/p2p-doc-mentorship-program
- Fachschaft Doktorat
  https://fsdr.at/
- TU Wien – Student Support
  https://www.tuwien.at/en/studies/student-support
- Psychosocial Counselling
  https://www.tuwien.at/en/studies/student-support/psychological-counselling-and-mental-health
- Ombuds Office for Academic Affairs
  https://www.tuwien.at/en/studies/student-support/ombuds-office-for-academic-affairs

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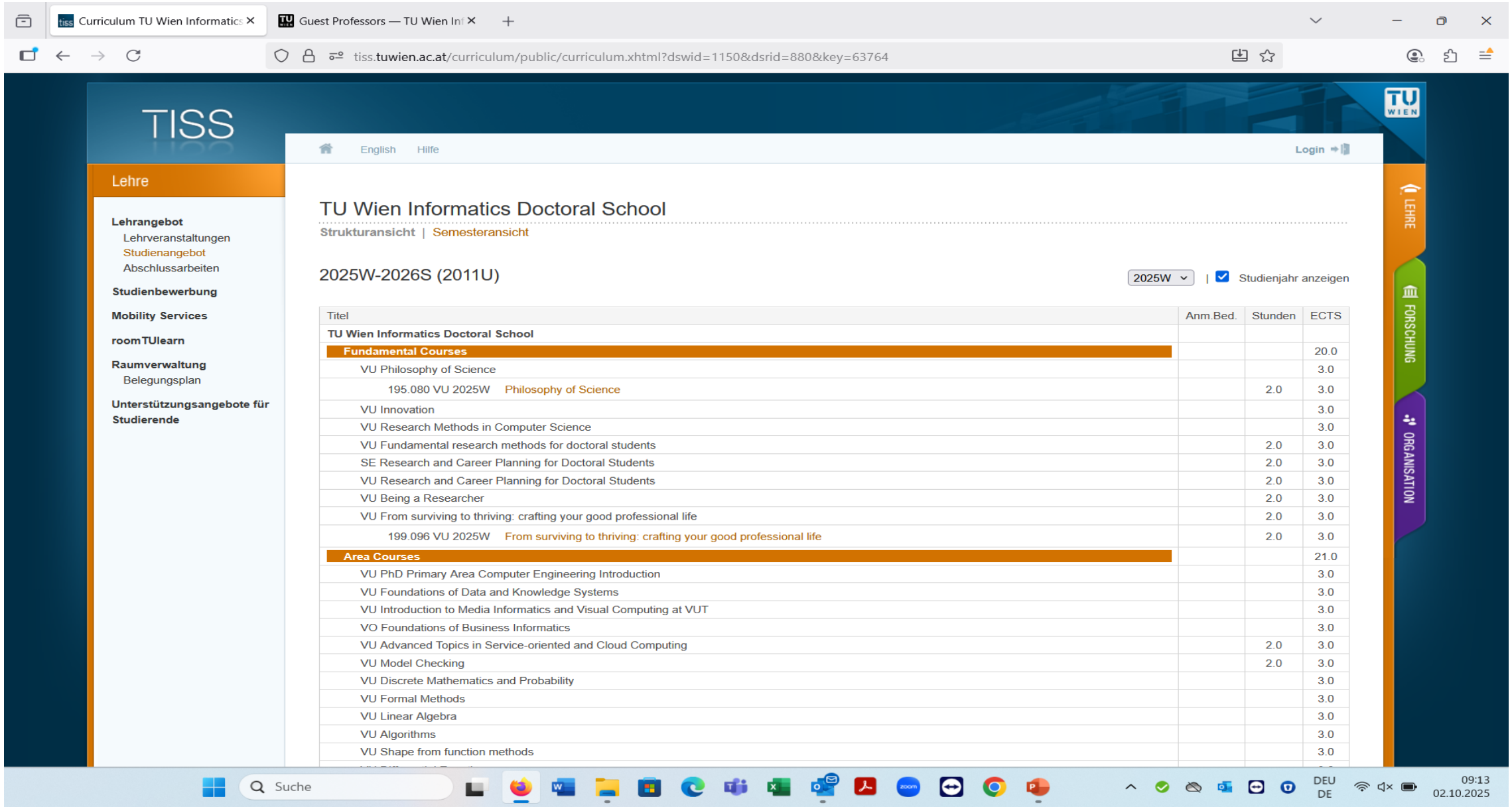
Curriculum TISS



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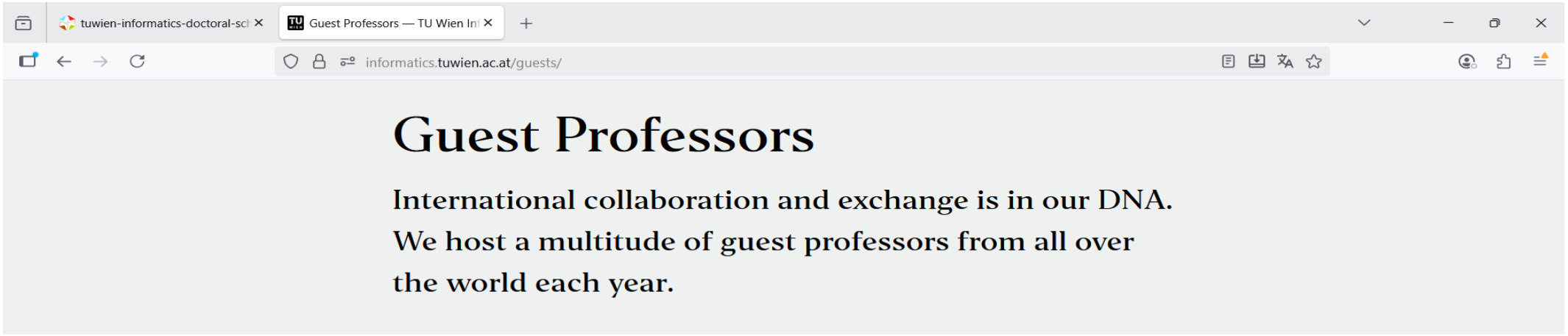
Top-class Guest Professors



Courses and public lectures held by our guest professors in: 2025 / 2024 / 2023 / 2022

2026

Alessandro Abate
University of Oxford
UK

Nikolaj Bjørner
Microsoft Research
USA

Manfred Droste
Leipzig University
Germany

Jan Drugowitsch
Harvard University
USA

Danh Le-Phuoc
TU Berlin
Germany

Matti Tedre
Stockholm University
Finland

Area Courses by Guest Professors – WS25

- **199.030 Avanced Topics in Verification and Synthesis for AI-Enabled Cyber-Physical Systems**

  Lecturer: Alessandro Abate, University of Oxford

  Course start: Oct 13

- **199.029 SMT Solving Internals**

  Lecturer: Nikolaj Bjorner, Microsoft Research, USA

  Course start: Oct 13

- **199.031 Knowledge Representation for Robotics, Automotive, and SmartCities**

  Lecturer: Danh Le-Phuoc, TU Berlin

  Course start: Oct 27

all VU 3.0

Area Courses by Guest Professors – WS25

- **199.032 Weighted Automata and Weighted Logics**

  Lecturer: Manfred Droste, Leipzig University

  Course start: Nov 3

all VU 3.0

Fundamental Courses – WS25

- **199.096 From surviving to thriving: crafting your good professional life**

  Lecturer: Prof. Geraldine Fitzpatrick

  Course start: Oct 10

- **195.080 Philosophy of Science**

  Lecturer: Prof. Matti Tedre, University of Eastern Finland

  Course start: Nov 19

all VU 3.0

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 (following!) summer term
- Most likely we have 6 talks in total during this study year 2025/26 (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 26/27 will not be possible.

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Elective Courses

Current Trends in Computer Science (VU 1.5, 195.072)

First talk by

Jan Drugowitsch, Harvard Medical School / Boston

Title: Normative decision-making strategies, and what they tell us about the brain
Oct 8, 2025, 17:00 c.t., EI11
Details: https://informatics.tuwien.ac.at/news/2990

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Information, Teambuilding, Socializing

- 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
  - Curling
  - ...

- Doctoral Stammtisch
  (organized by group Student Support)
  once a month, next one: Oct 22
  https://www.tuwien.at/en/studies/student-support/get-togethers-for-doctoral-students

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You want to receive information about future social events

- please register here:

https://inn.tuwien.ac.at/socialevents_doctoralstudents

Thank you!