Vienna PhD School of Informatics

Social Event Oct 3, 2019

Andreas Steininger
**PHD EDUCATION AT OUR FACULTY**

common roof formed by
Vienna PhD School of Informatics

different ways of doing a PhD at our faculty

<table>
<thead>
<tr>
<th>Doctoral Colleges</th>
<th>Teaching Assistants</th>
<th>Research Assistants</th>
<th>Self-Funded PhDs</th>
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<tr>
<td>Resilient Embedded Systems</td>
<td>4 year univ contract</td>
<td>project contract</td>
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<td>LogICs</td>
<td>teaching load</td>
<td>reporting load</td>
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<td>TrustRobots</td>
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<td>Smart Industrial Concept</td>
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*different areas, institutes, different supervisors, ...*
MISSION:

✓ simplify the processes, maintain a high standard in PhD education

SERVICES (in tight cooperation with the Deans of Study Affairs):

✓ implement the basic curriculum common to all PhD tracks (mandatory lectures)
✓ organize guest lectures (selection, invitation, operation...)
✓ organize special courses in house (Current Trends in CS, Proposal Writing)
✓ maintain unified interface to the outside (webpage, PhD submissions)
✓ stimulate teambuilding (social events)
✓ provide aid to PhD students (visa, lodging, problems with supervisor,...)
✓ direct applications to potential supervisors, support hearings
Proficiency Exam

Free Choice, related to your PhD area

3.0 PhD School’s Guest Professor course

6.0 Fundamental Courses

3.0 PhD Seminar

3.0 Philosophy of Science
3.0 Fundamental Research Methods
3.0 Career Planning

9.0 Area Courses

Course Overview

18 ECTS

PhD Curriculum

PhD Defense

Free Choice, related to your PhD area

Admission
As a reminder: In total minimum 18 ECTS required

- **fundamental courses**
  - Philosophy of Science
  - Research & Career Planning for Doctoral Students
  - Fundamental Research Methods for Doctoral Students
    - *min 6 ECTS, min 1 methodology*

- **area courses**
  - PhD seminar, type 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
  http://www.informatik.tuwien.ac.at/dekanat/doktoratsstudium-neu
  (currently mostly in German, English version in preparation)

• Standard Procedure for Doctoral Program at the Faculty of Informatics
  http://www.informatik.tuwien.ac.at/dekanat/doctoral-program-informatics.pdf
## Curriculum TISS

### Vienna PhD School of Informatics

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<td>VU Philosophy of Science</td>
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<td>VU PhD seminar</td>
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<td>VU Fundamental research methods for doctoral students</td>
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<td>VU PhD Primary Area Computer Engineering Introduction</td>
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<td>VU Foundations of Data and Knowledge Systems</td>
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<td>VU Introduction to Media Informatics and Visual Computing at VUT</td>
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<td>VU Foundations of Business Informatics</td>
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<td>VU Advanced Topics in Service-oriented and Cloud Computing</td>
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<td>VU Discrete Mathematics and Probability</td>
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<td>VU Formal Methods</td>
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<td>VU Shape from function methods</td>
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<td>VU Computational Geometry and Topology</td>
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<td>VU Computational Complexity</td>
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<td>VU Essence of Cloud Computing</td>
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<td>VU Hybrid Systems</td>
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Research and Career Planning for Doctoral Students,
course 195.098 (same course as 184.778)
  Prof. Georg Gottlob
  tentative schedule: Oct 21/22 and Dec 9 – 13
  course webpage: https://www.dbai.tuwien.ac.at/education/rcp/

Philosophy of Science,
course 195.080
  Prof. Matti Tedre
  schedule: course start Oct 28 with learning & reading assignments,
  face to face Dec 2-6

Being a Researcher,
course 199.086
  Prof. Carlo Ghezzi
  schedule: Nov 25-29, Dec 17/18 tbc, Jan 20-24
Area courses by Guest Professors – preview

- All VU 3.0
- Currently no area course planned in winter term 2019

Preview about area courses by Guest Profs for summer term 2020:

- **Reachability Analysis Techniques for Hybrid Systems**
  - Prof. Erika Abraham, RWTH Aachen / Germany
  - schedule: March 1 – 10, 2020

  - Prof. Paulo Verissimo, University of Luxembourg
  - schedule: to be announced

- **Epistemic Logic (?)**
  - Prof. Hans van Ditmarsch, LORIA / France
  - tentative schedule: June 2020
Additionally we have invited the following renowned professors to give a course during summer term 2020:

- **Research area: Human Computer Interaction**
  - Prof. Jaime Sanchez, *University of Chile*

- **Research areas: IOT, Blockchain technologies, connected and autonomous vehicles,...**
  - Prof. Bhaskar Krishnamachari, University of Southern California

... and others...
Current Trends in Computer Science (VU 1.5, 195.072)

Ring lecture with talks given by the visiting professors of the current study year
offered throughout winter and summer term
requirements for positive grade
- Preferably students should attend 4 (or more) talks (any semester)
- write a report covering 3 talks
  - with 2 pages each, if 4 talks attended
  - for students who can only attend 3 talks, this summary must comprise at least 3 pages for each talk.

Talks already scheduled:
Nov 7, Martin Gaedke, TU Chemnitz / Germany
Nov 25, Carlo Ghezzi, Politecnico di Milano / Italy
Open Problems in Computer Vision (VU 3 ECTS, 183.292)

Already started, but still places available for PhD students in the area of Visual Computing

- Objective is to help students to write a publication
- Synchronously the Computer Vision Winter Workshop will be offered (as every year in Feb)
  Further information available here: https://cvww2020.vicos.si/

This course is not organized by the Vienna PhD School of Informatics. For questions please contact the lecturer Prof. W. Kropatsch.
Defense procedure

- effective since March 1st, 2015
- for those students
who announced their doctoral thesis on March 1st, 2015 or later,
who enrolled in doctoral studies for the first time after March 1st, 2015
Doctoral College Resilient Embedded Systems

- We offer 4-year funding for 7 PhD positions

- DC-Res is run jointly by TU Wien’s Faculty of Informatics and FH Technikum Wien

- Main research topics:
  - Digital circuits and hardware architectures
  - Dependable, real-time systems
  - Hybrid systems and optimal control
  - Quantitative and runtime verification
  - Computational modeling and simulation
  - Autonomous systems, robotics and automation systems integration
  - Control networks design
  - Cyber-physical social systems & (Industrial) Internet of Things

- 3rd Call for Applications will open in late 2019.
  https://informatics.tuwien.ac.at/dc-resilient-embedded-systems
Elective courses, not to be counted for the 18 ECTS of our doctoral program

Workshops, training sessions, info events related to “Publishing and Open Science”

Program for the winter term:
• Data management and research ethics, Oct 1 - already passed!
  ▪ Open access, free of charge: self-archiving. Secondary publication of publications in repositories, Nov 12
  ▪ Open access, free of charge: self-archiving. How to publish in open access via a repository, Nov 12
  ▪ ORCHID and your digital identity as a researcher, Nov 26
  ▪ How your publications are assessed: overview of biometric indicators
  ▪ An overview of open access publishing. Current developments and options available for researchers (appointment via e-mail open-access@ub.tuwien.ac.at)
  ▪ Publishing with TU Wien Academic Press (appointment via e-mail academicpress@tuwien.ac.at)

Detailed information on the content and how to register here:
http://www.ub.tuwien.ac.at/einfuehrungen.php#termine
You want to receive information about future social events

• please register here:

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