



SCIENCE
PASSION
TECHNOLOGY

PhD at TU Graz

Robbin Steentjes - robbin.steentjes@tugraz.at

Student Representative of the Doctoral School of Physics

January 17, 2024

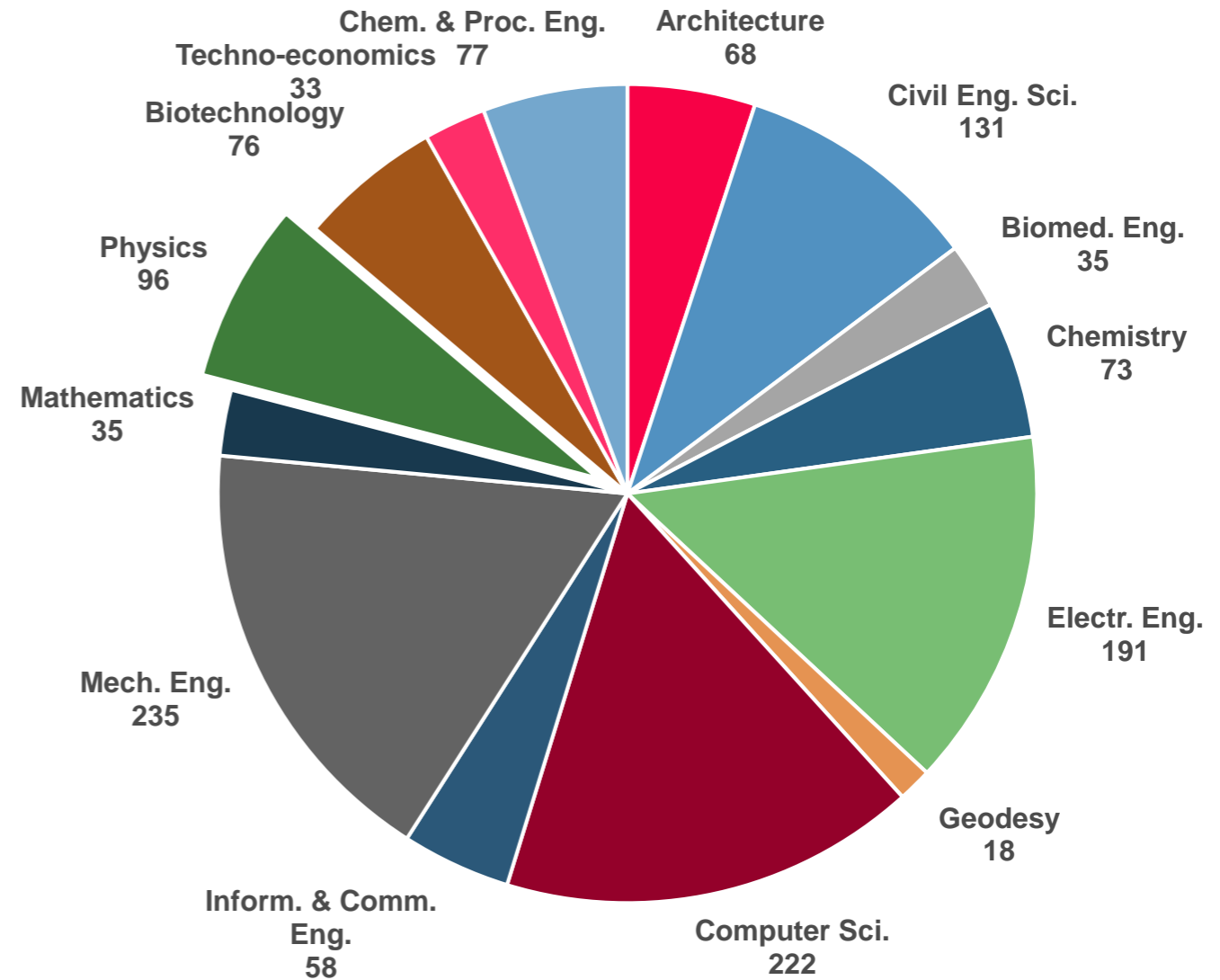
- PhD at TU Graz
- Curriculum & Statutes
- Timeline of your PhD
- Representative bodies

- Tips & Tricks
- Questions, discussion

Please ask questions right away!

PhD students at TU Graz

- 1380 PhD students
- 14 DocSchools
- 2 Curricula
 - Natural sciences
 - Technical sciences
- 3 contract forms
 - University Project Assistant
 - University Assistant
 - No university contract
- Average duration: 3-5 years



University Law

Statutes of TU Graz

Curriculum (**Dr. techn.** or **Dr. rer. nat.**)

DocSchool Statutes

Architecture

Biomed. Eng.

Chem. & Proc. Eng.

Chemistry

Civil Eng.

Computer Sci.

Electrical Eng.

Geodesy

Info. Comm. Eng.

Mathematics

Mechanical Eng.

Biotechnology

Physics

Techno-economics

Where to get information?

- **DSP part of TU website:** <https://www.tugraz.at/studium/studienangebot/doktoratsstudien/doctoral-school-physik>
 - Curriculum, Statutes, contacts (or Google: doctoral school physics tu graz)
Maintained by: communications
- **TU4U:** <http://dtp.tugraz.at/regulations.html>
 - Curriculum, Statutes, basically every other form (also see Timeline part of this presentation)
Maintained by: Dean's office!
- **Faculty website:** <https://mpug.tugraz.at>
 - Contacts
Maintained by: Dean's office
- **DSP website:** <https://dsp.tugraz.at>
 - News, less official forms, latest changes in regulations
Maintained by: Coordination Team
- **The DSP coordination team**

Curriculum & Statutes

Curriculum 2019

- University wide
- Valid for all PhD students
- Contains
 - Admission, curricular workload, and period of study
 - Doctoral Schools
 - Rights and Duties of Supervisors and Students
 - PhD Thesis regulations
 - Instructional Classes
 - Thesis Defence
 - Overall Assessment

Graz University of Technology



Curriculum for the Doctoral Programme
in Technical Sciences

Curriculum in the version of 2019

*Legal validity remains restricted to the German
original*

The changes to the curriculum for the Doctoral Programme in Technical Sciences were decided by the Curricular Committee for Doctoral and University Certificate Programmes on 26 January 2019.

On the basis of the Universities Organisation and Studies Act (*UG 2002*), Austrian Federal Law Gazette (BGBl.) No. 120/2002 as amended, and the Statutes, Chapter "Study Law", of Graz University of Technology, the Senate of Graz University of Technology issues the following curriculum for the Doctoral Programme in Technical Sciences.

§ 1 Objective and Qualification Profile

Curriculum 2019 // Instructional classes

- 1 SWS = 1.5 ECTS
- 14 SWS in total / (21 ECTS)
 - 6-8 SWS Subject specific courses
 - 4-6 SWS Scientific Methods and Communication
 - 2 SWS Scientific Methods + attending Colloquia
 - 2 SWS Doctoral Seminar = attend DocDay + present 2x
 - 0-2 SWS Soft-Skill courses (only LV allowed!)
 - 2 SWS Privatissimum

930.001	Fundamental and Applied Research: Third-Party Funding, Grant Proposal Collaboration, Resources and Impact
930.002	Inventions, Patents, and Technology Exploitation
940.085/086	Scientific Writing Skills for Master and PhD students
940.090/091	Scientific Presentation Skills for Master and PhD students
940.900	Writing Competence – A Success Factor
940.930	Finding Scientific Literature and Publishing your Texts
940.940	Successful Teamwork in Projects
940.941	Conflict Management
940.942/943	Communication Styles, Discussion Techniques and Rhetorics
940.950	Leadership
940.960	Diversity Management
940.965	Intercultural Social Competence for Work and Life
940.980	Self-Organization, Time Management and Working Techniques

An das / To Dekanat der Fakultät für Mathematik, Physik und Geodäsie
Studienrichtung Physik / Study Programme Physics

Meldung fachspezifische Basisfächer* für das Studienjahr /
Report subject specific basic courses* for the academic year:

*8 Semesterstunden (SSt) sind verpflichtend / 8 semester course hours (SSt) are obligatory

FAMILIENNAME, Vorname(n) / Surname, given name	
[]	
Matrikel-Nr. / Registration number	Studienkennzahl / Study Code
[]	[]
Beginn Doktoratsstudium / Beginning Doctoral Programme []	

Aktuelles Studienjahr / Current academic year:

LV-Nr. / Course no	LV-Titel / Course title	SSt	LV-Typ / Course type	Studienplanzuordnung / Curriculum version
[]	[]	[]	[]	[]
[]	[]	[]	[]	[]
[]	[]	[]	[]	[]
[]	[]	[]	[]	[]
[]	[]	[]	[]	[]

Vergangene Studienjahre / Past academic years:

LV-Nr. / Course no	LV-Titel / Course title	SSt	LV-Typ / Course type	Studienplanzuordnung / Curriculum version
[]	[]	[]	[]	[]
[]	[]	[]	[]	[]
[]	[]	[]	[]	[]
[]	[]	[]	[]	[]
[]	[]	[]	[]	[]
[]	[]	8,00	[]	[]

Unterschriften / Signatures

Datum / Date

DoktorandIn / Doctoral Student
BetreuerIn / Supervisor

Wird vom Dekanat eingeholt / To be collected by the Dean's Office
StudiendekanIn / Dean of Studies

*) Gesetzliche Grundlage / Legal basis
Curriculum für das Doktoratsstudium der Technischen Wissenschaften / Naturwissenschaften und Statuten der Doctoral School Physik / Curriculum for the Doctoral Programme in Technical / Natural Sciences and Statutes of the Doctoral School of Physics.

Curriculum 2019 // Thesis & Examination

- You will have to write a thesis
- At least 1 external examiner
 - (= outside of TU Graz) (more rules in Statutes!)
- ‘Normal’ thesis, or ‘cumulative’ thesis
 - (= collection of **multiple** publications with added chapters for context)
- Will be published (by TU) by default. Exceptions are possible (but sometimes complicated)

- There needs to be an examination, consisting of
 - A presentation by the student
 - An oral examination by the examiners (defence)

Statutes 2020 (to be updated in 2024?)

- Valid for DSP students only
- Contains
 - Its own organisation structure
 - Member institutes
 - Publication requirements
 - Examiner requirements
 - Curricular workload
 - Mentoring
 - Doctoral exam

Statutes of the Doctoral School of Physics

The curriculum for the Doctoral Programme in Engineering Sciences at Graz University of Technology and the curriculum for the Doctoral Programme in Natural Sciences shall apply in their currently valid version.

Governing Body Responsible for Study Regulations

The governing body responsible for study regulations at the Doctoral School of Physics is the Dean of Studies responsible for the bachelor's and master's degree programmes in Technical Physics.






Objective of the Doctoral Programme


Beyond pre-professional education and training, the objective of the Doctoral Programmes in Engineering Sciences or Natural Sciences at Graz University of Technology is for students to acquire the ability to undertake consolidated, independent scientific work in the field of physics.

Academic Degree

DocSchool // Organisation

Information and Advice

- Head of the Doctoral School of Physics
Markus AICHHORN
Assoc.Prof. Dipl.-Ing. Dr.techn.
Tel.: +43 316 873 8191
aichhorn@tugraz.at 
- Dean of Studies
Wolfgang VON DER LINDEN
Univ.-Prof. Dipl.-Phys. Dr.rer.nat.
Phone: +43 316 873 8170
vonderlinden@tugraz.at 
- Student representative
Robbin Steentjes
Dipl.-Ing. BSc
robbin.steentjes@tugraz.at 
- ~~▪ Andreas Jeindl
Dipl.-Ing.
jeindl@tugraz.at ~~
- Student representatives: PhD Union 



In addition:

- Peter Hadley: Deputy head
- Robert Schwarzl: Deputy student representative

Statutes 2020 // Publication requirements

Requirements:

- At least 1 publication on the subject of the thesis in an internationally refereed scientific journal.
- If no such publication exists, three reviewers for the thesis are needed.
 - This rarely happens. Contact us asap if you plan to finish the doctorate this way.
- Preferably, 1 first-author publication (but this is no hard rule)

NATURE | NEWS

Physics paper sets record with more than 5,000 authors

Detector teams at the Large Hadron Collider collaborated for a more precise estimate of the size of the Higgs boson.

[Davide Castelvecchi](#)

15 May 2015

Statutes 2024? // Cumulative dissertation

Requirements:

- Current: **multiple** publications
- Soon: ~ 3 publications with significant author share (to be specified)

Statutes 2024? // External examiners

Requirements:

- Current: unwritten rules
 - Outside of NAWI Graz
 - No collaborations with student or supervisor for the last 5 years (background check)
 - Must have successfully supervised at least 1 other PhD student (proof)
- Soon: incorporate unwritten rules in statutes

Mentoring

- All the students have the right to have a mentor
- A mentor is not your daily supervisor
- Submit a preference, or get one at random (since July 2022)

Data Management Plan

- Rules from the faculty
- All PhD students (registered after 01/07/2022) should have a DMP
- ``All data (and code) that is needed to reproduce results published in the thesis needs to be available for at least 10 years after publication.``
- FAIR principles
 - Findable, Accessible, Interoperable, Reusable
- There are courses available to help you
- DSP is collecting formats

- Useful for others AND for yourself



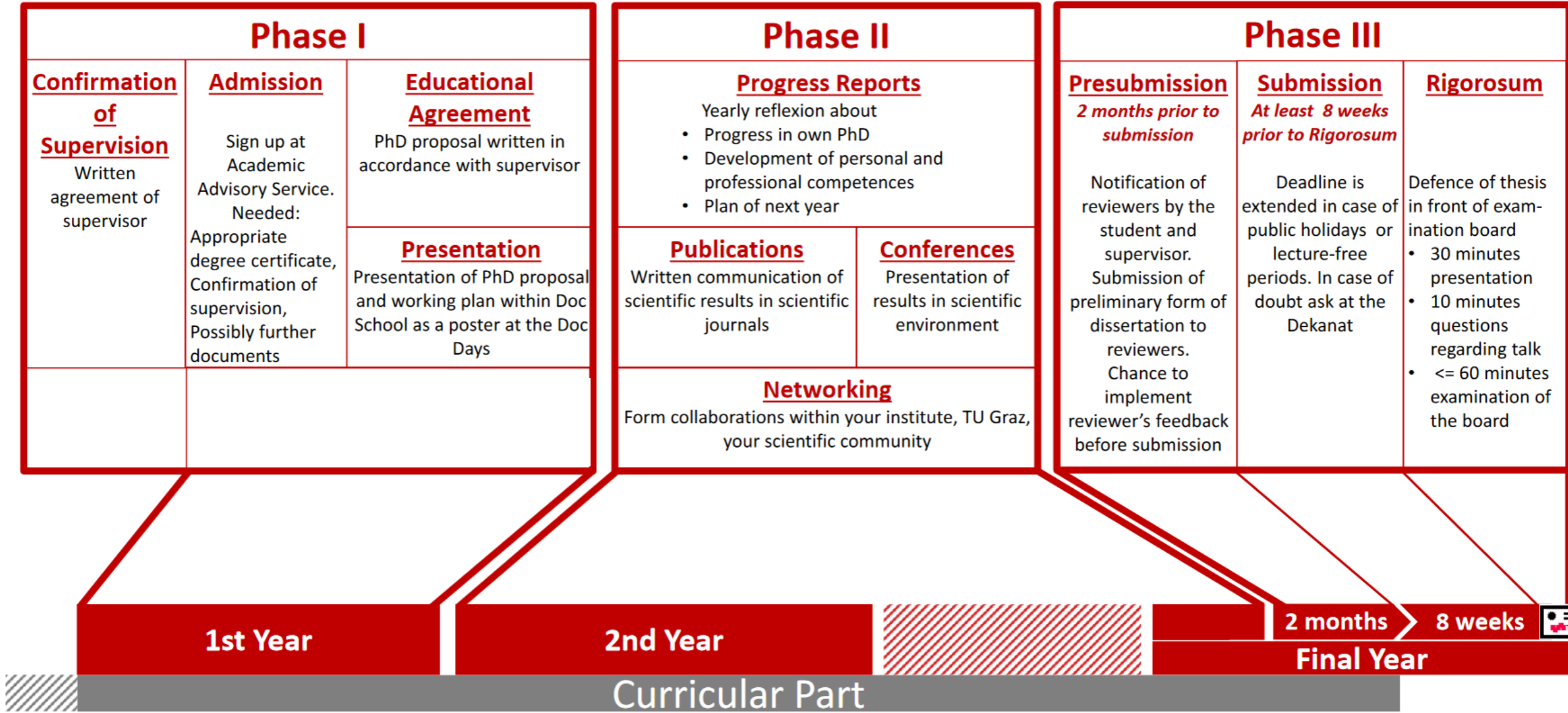
—
TU Graz RDM Policy:
—

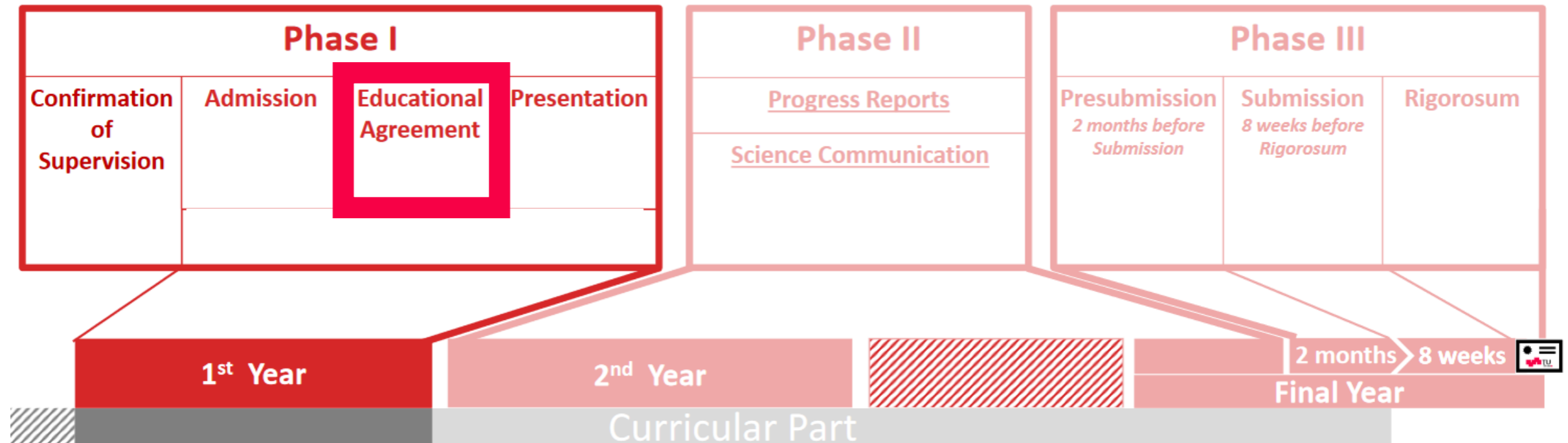
**Faculty-specific Implementation Strategy
Mathematics, Physics and Geodesy**

v1.2 (20.5.2022)

If you are not convinced that this is necessary, here is a 5 minute video worth watching:
<https://www.youtube.com/watch?v=N2zK3sAtr-4>

Timeline of your PhD





Favourites

 My Degree Programme	 My Courses	 My Exam Dates	 Calendar	 My bookmarked courses	 TeachCenter
 Transcripts	 SBOX Webmail	 My Doctoral Project			

Show only Favourites ^

All applications

Filter by application title...

Recommendation

My Degree Programme	My Courses	My bookmarked courses	My Exam Dates
My Achievements	Recognitions / Achievement supplements	My Theses	My Doctoral Project
Registration Documents	Transcripts	Student Files	Tuition Fees
Current/Home Address	My Applications	Calendar	Evaluations

Details



Dipl.-Ing.
Steentjes Robbin

Matr.Num.: 11829409

 robbin.steentjes@tugraz.at 

Registration status: progress valid
Supervisor: [Zojer Egbert](#)

Mentors:


 Add mentor

Phase overview

Welcome to the doctoral studies portal! You can organise all matters related to your doctoral studies here.

Phase 1 - Educational agreement

After submitting your educational agreement, you can start working on your doctoral thesis. Once the educational agreement has been accepted, you can upload progress reports.

 Educational agreement
Doctoral research proposal confirmed

Phase 2 - Progress reports

A progress report is to be delivered every year. The goal for the PhD student is to reflect on their own work as well as new skills and knowledge they acquired. By writing the reports, the student should deal with the question of how well and how far the work on the thesis has progressed each year. This makes it possible to identify any problems and counteract early enough. After submission, the progress report can be viewed by the student's supervisor as well as the members of their doctoral school with a teaching qualification.

 Complete progress report

Phase 3 - Submission and assessment

At least two months before submitting the doctoral thesis, the student has to determine the desired submission date. In the course of this process, the student can propose assessors for the assessment of the thesis as well as the oral examination.

 Please contact the Dean's Office prior to starting the pre-assessment process.

Current task:

 Complete progress report

 complete S1

 Student Dossier

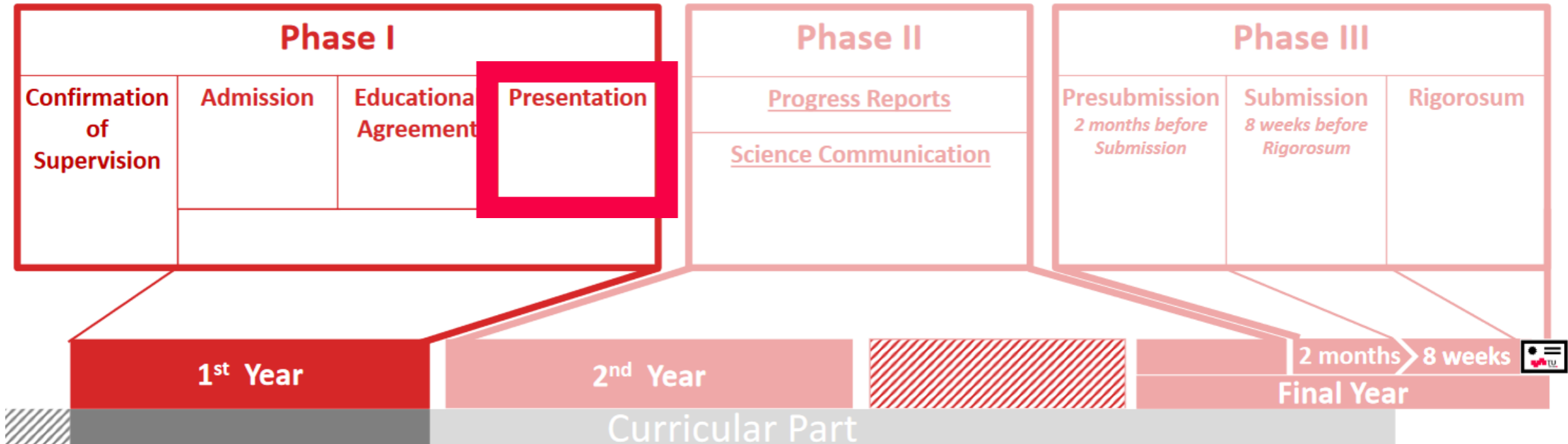
 Academic progress

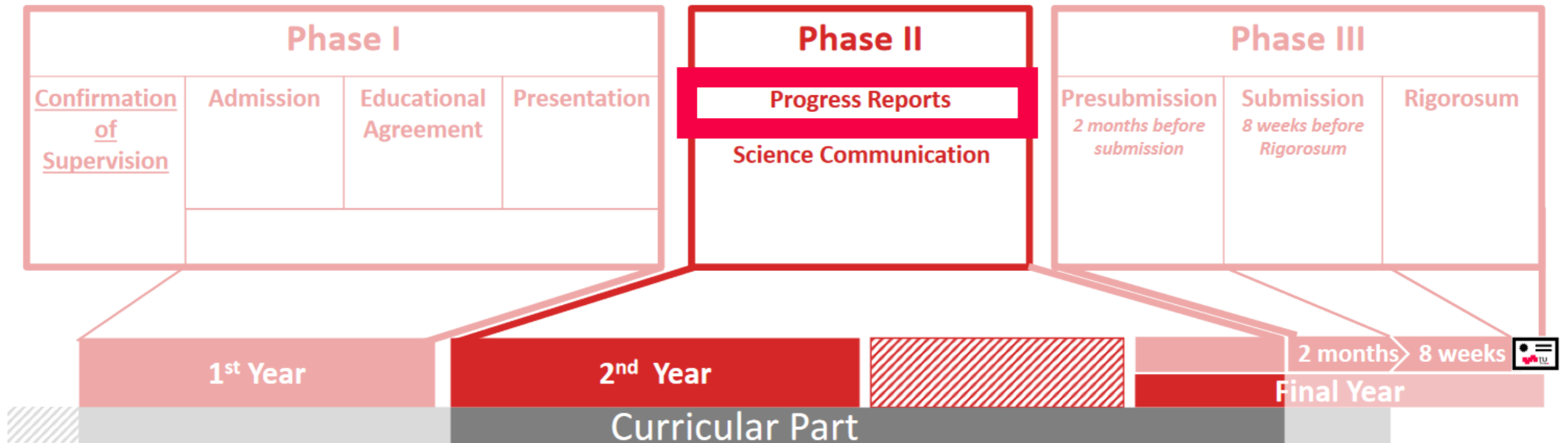
 Go to phase overview

 Other doctoral students

You can find more information about your studies here:

Next DocDay:
 Thursday 08/02/2024
 talks from nearly finished students
 posters from beginning students





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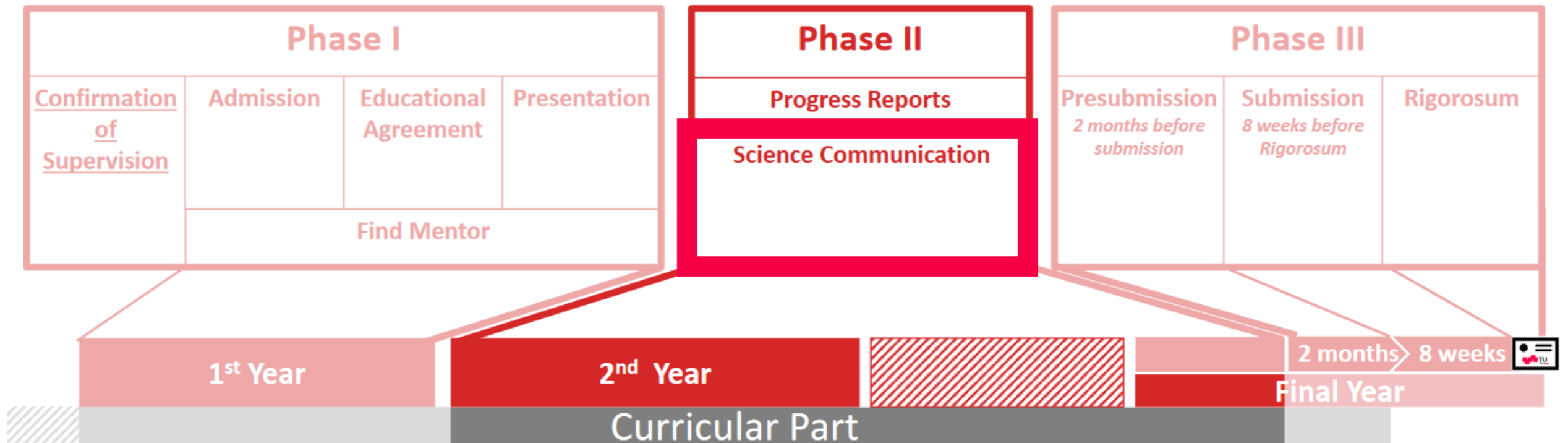
 Student Dossier

 Academic progress

 Go to phase overview

 Other doctoral students

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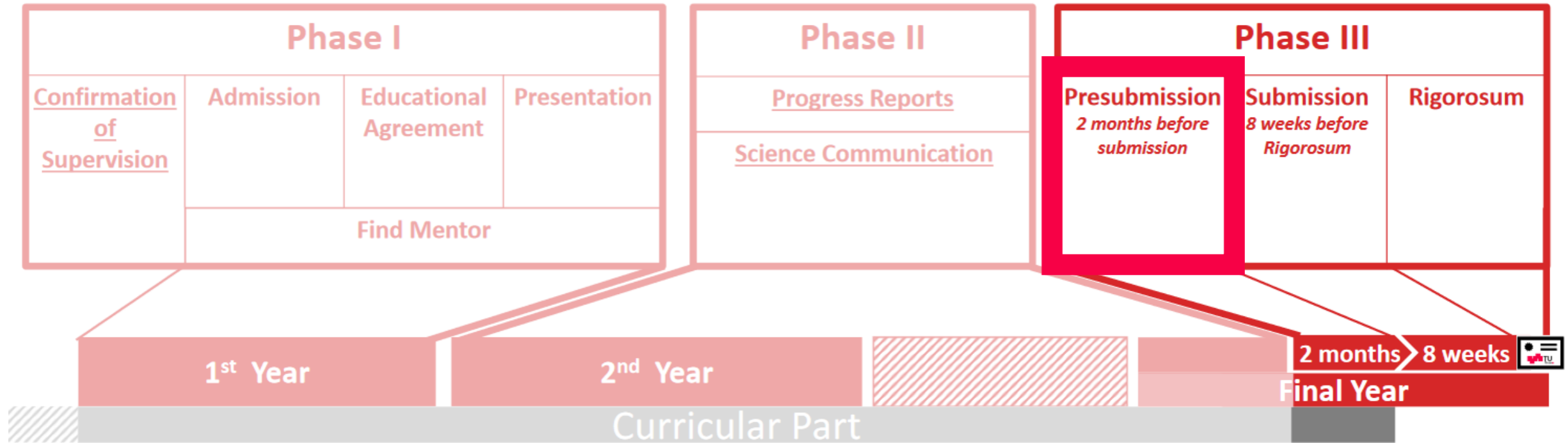
Timeline of your PhD

Faculty of Mathematics, Physics and Geodesy
www.mpug.tugraz.at/dekanat/dekanat
 Phone: 0316/873 8112, 0316/873 4457
 E-Mail: physik.mpug@tugraz.at

Forms can be found in [TU4U](#)

4 months before thesis defence

<input type="checkbox"/>	Introduction pre-assessment: The completed and signed form for the pre-assessment of the reviewers of the PhD thesis must be scanned and sent, including the required documents, to the Head of the Doctoral School of Physics (cc physik.mpug@tugraz.at)	Pre Assessment
<input type="checkbox"/>	After approval by the Head of the Doctoral School of Physics and the Dean of Studies the reviewers are to be provided with a preliminary version of the PhD thesis	
<input type="checkbox"/>	It has to be clarified whether the reviewers accept a PDF file of the thesis, or if they need a bound version. – if yes, the student has to send it to the reviewers.	



2 months before thesis defence:

→ Submit the following documents to physik.mpug@tugraz.at

When all documents are complete, the Dean's Office will inform you that a date for the thesis defence can be arranged with the examination board.

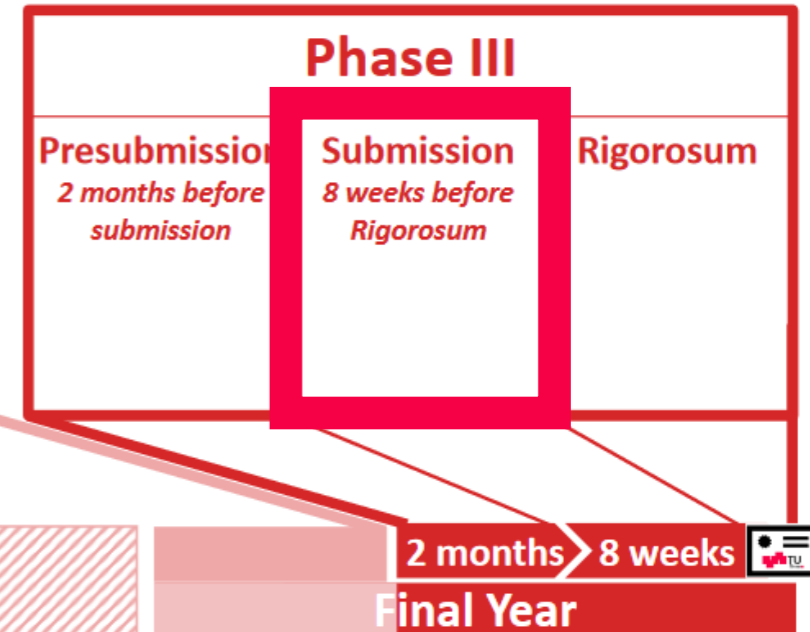
(approx. 8 weeks before the planned thesis defence).

The digital version of the thesis will be sent to the reviewers by the Dean's Office. The date for the thesis defence can only be fixed if the reviews have been received on time.

(approx. 3 weeks before the planned thesis defence).

<input type="checkbox"/>	Grades of the required courses according to the curricular part (6 SS) and the subject specific basic courses (8 SS) have to be completed	Report subject specific basic courses
<input type="checkbox"/>	The title page of your PhD thesis must be sent by e-mail to the Dean of Studies for approval (cc physik.mpug@tugraz.at)	Theses – Templates for title page and declaration of academic honesty
<input type="checkbox"/>	Upload your thesis in TUGRAZonline	TUGRAZonline → business card → "thesis"
<input type="checkbox"/>	If required: Filling in the "embargo" (restriction of use) of the PhD thesis and send the request to physik.mpug@tugraz.at for the approval of the Dean of Studies	Instructions for submitting a thesis in TUGRAZonline
<input type="checkbox"/>	Confirmation of the plagiarism check	verification of the plagiarism check
<input type="checkbox"/>	Confirmation of the filled out questionnaire	Statistic Austria
<input type="checkbox"/>	To fill out if you want to participate in the graduation ceremony	Dates for the graduation ceremony
<input type="checkbox"/>	Participation at graduation ceremony	40 €
<input type="checkbox"/>	Diploma roll without ceremony	10 €
<input type="checkbox"/>	Final documents without diploma roll	0 €
<input type="checkbox"/>	If desired: Tie or scarf	25 €
		<p>confirmation of payment or copy of bank transfer IBAN: AT96 1200 0516 5610 1801, BIC: BKAUATWW Receiver: TU Graz, usage: URKUNDENROLLE</p> <p>An appointment to pick up the documents must be made with the Dean's Office or an address for mailing via RSA letter must be communicated</p> <p>confirmation of payment or copy of bank transfer IBAN: AT20 2081 5002 0072 0324, BIC: STSPAT2G Receiver: alumniTUGraz1887 (or to buy it directly at alumniTUGraz 1887, Petersgasse 10, 8010 Graz)</p>

IMPORTANT: Please take note about the [time schedule of the examination before the committee](#)

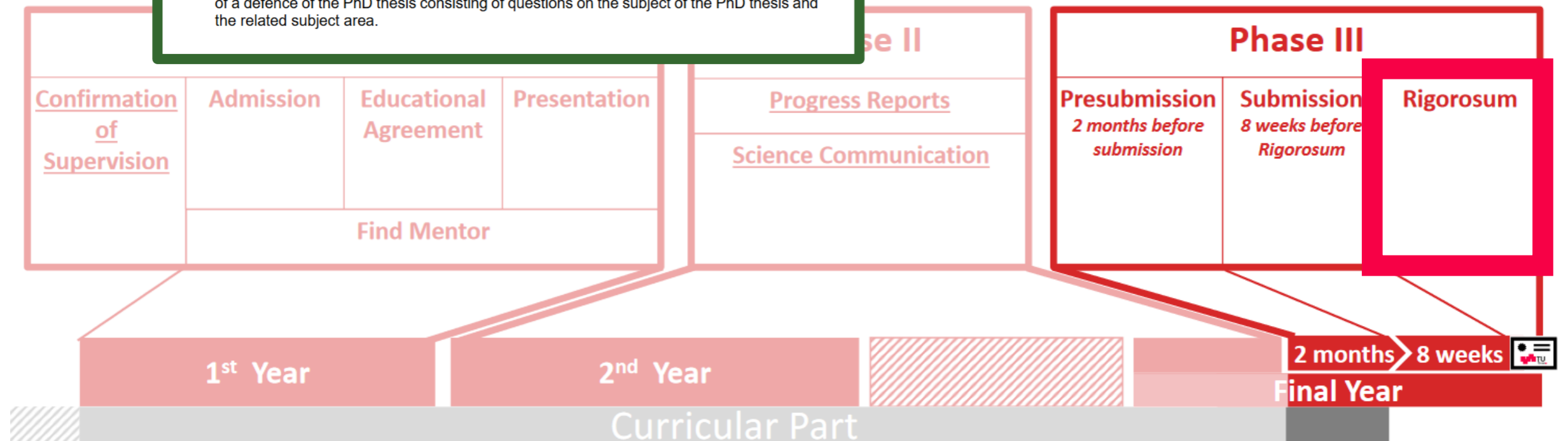


TIME TABLE PHD THESIS DEFENCE (Doctoral School Physics)

The thesis defence is an examination in two parts, consisting of

1. a **presentation** by the doctoral candidate of appropriate length on the scientific work conducted, and
2. an **oral examination** on the subject area of the PhD thesis by the board of examiners.

A **presentation time of 30 minutes** is considered to be sufficient. The **examination part** should be approx **20 to 25 minutes** per examiner. The examination part has the character of a defence of the PhD thesis consisting of questions on the subject of the PhD thesis and the related subject area.



Representative bodies

Doctoral School of Physics

Elections for Student Representative!

- during/around next DocDay
- Call for candidates! (send an email to Markus, Robert, or me)
- help shape the DocSchool
- grow your network
- gain experience in (academic) management

- Doctoral School of Physics
 - Contact: robbin.steentjes@tugraz.at
- PhD Union
 - Contact: doktorat@htugraz.at
 - Social & career activities
 - Help with issues
 - Wants to make your life as PhD better
- Dean's office
 - Contact: physik.mpug@tugraz.at



Tips and tricks

Student

- Student discounts
- Student events
- Student help & organisations
- Free courses
- University Sports (KFU)
 - <https://sportinstitut.uni-graz.at/de/>



Employee

- TU Graz bicycle, discounted public transport tickets & more
- Works council (BRwiss) discounts and benefits

Travel funds

- UA: 1100 EUR/yr (Faculty)
- UPA: 800 EUR once (Faculty) (aichhorn@tugraz.at)
- Many other scholarships (National, EU, Private, event-specific)

Travel reporting tips:

- Apply before you go
- Save every invoice, bill, email...
- Report as soon as possible

Awards, prizes, scholarships, hackathons, ...

TU Graz infrastructure

- PhiLab, FabLab
- 3D printing, laser cutting
- Carsharing
- Copyshop
- In-house training
 - Leadership
 - Teaching
 - First-aid
 - Scientific skills



Questions