University of Stuttgart
Germany

Air Quality Control, Solid Waste and Waste Water Process Engineering

Andreas Kronenburg

WASTE office & Committees

Carolina Acuña Caro (IFK)

Head of the WASTE office

Carsten Mehring (IFK/VT)

Chair of the Prüfungsausschuss = examinations committee

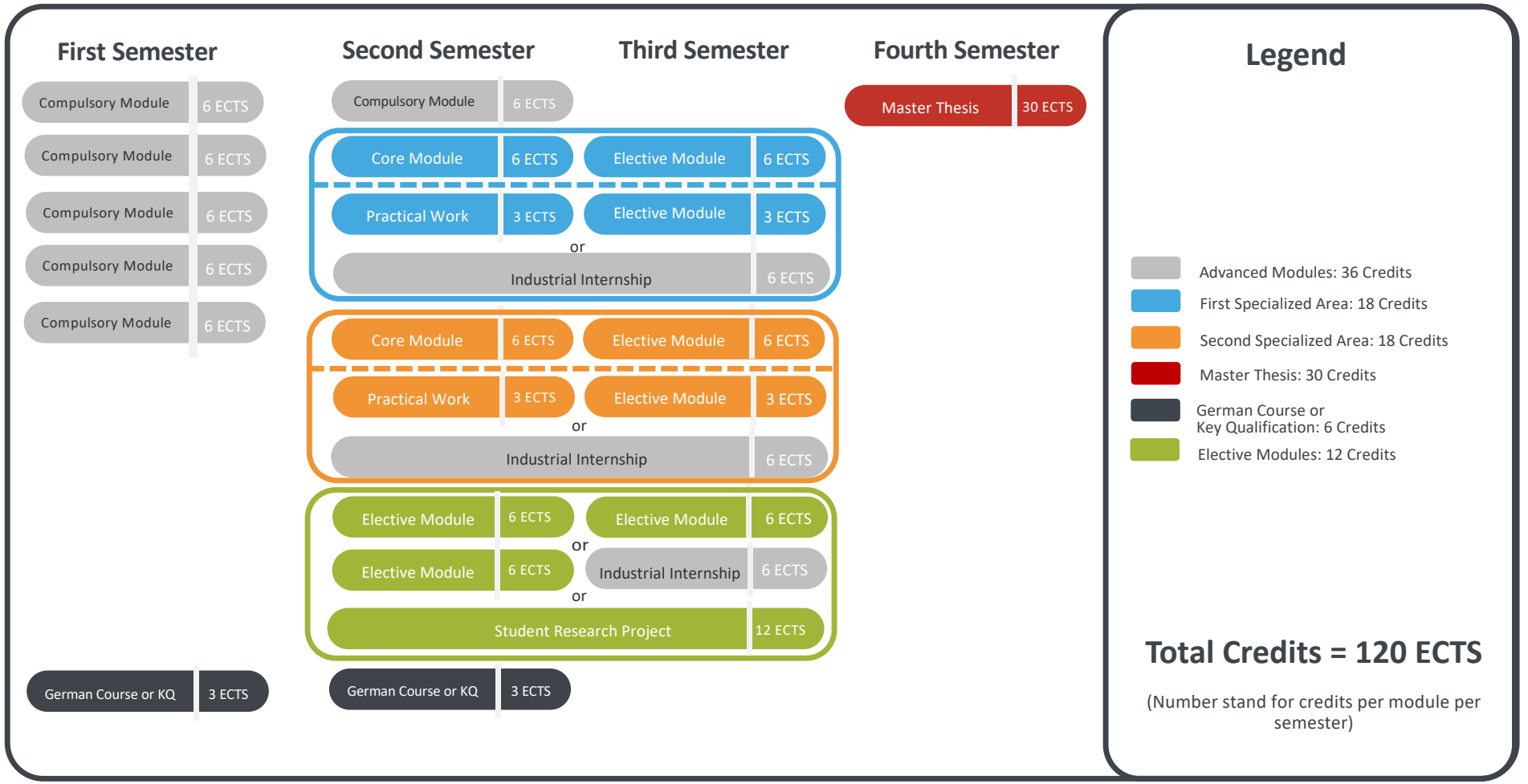
≠ Prüfungsamt (examinations office, Pfwr. 5c, 3rd floor)

Andreas Kronenburg (ITV)

Chair of the Studienkommission = Study committee = programm structure committee

Participate

WASTE Programme



Courses

MSc WASTE – Program overview

Advanced modules (36 credits)

- Consolidation phase by 6 compulsory modules

3 Specialized Areas (18 credits each)

- Air Quality Control
- Solid Waste
- Waste Water Process Engineering

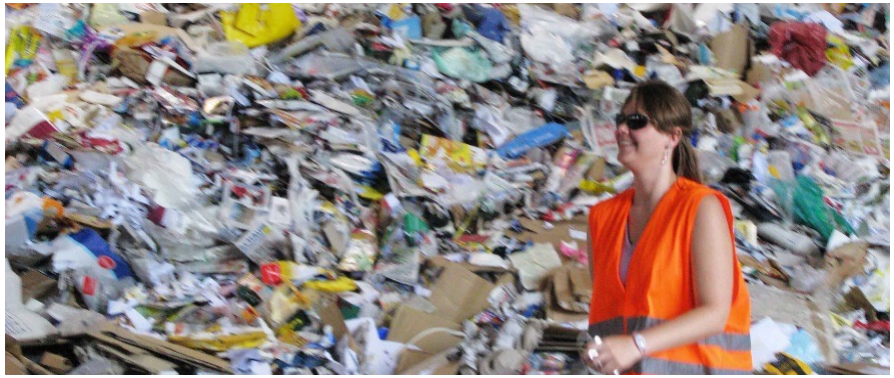
(select 2!)

Elective Modules (12 credits)

- Modules in English and German
- Student Research Project
- Industrial Internship

German Course or Key Qualifications (6 credits)

Master Thesis (30 credits)



Details on Courses

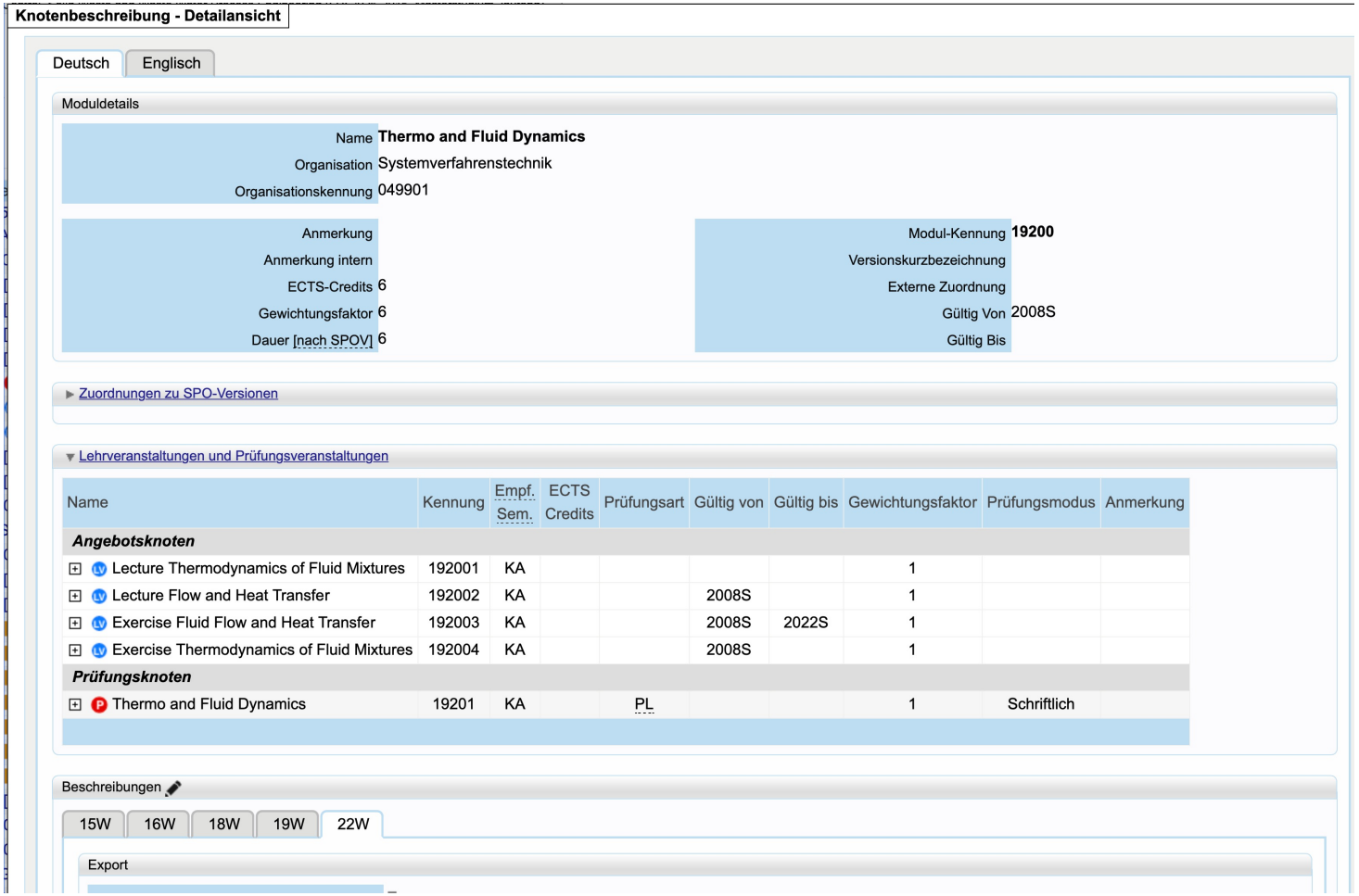
Example: Air Quality Control

Knotenfilter-Bezeichnung

- [926-2015] Air Quality Control, Solid Waste and Waste Water Process Engineering
  - [100] Advanced Modules
  - [200] Specialized Area
    - [210] Air Quality Control
      - [211] Core Modules
        - [15440] Firing Systems and Flue Gas Cleaning
      - [212] Elective Modules 6 CP
        - [15430] Measurement of Air Pollutants
        - [15970] Modellierung und Simulation von Technischen Feuerungsanlagen
        - [30580] Einführung in die numerische Simulation von Verbrennungsprozessen
        - [30590] Modellierung und Simulation turbulenter reaktiver Strömungen
        - [59610] Primary Environmental Technologies and Emissions Reduction in Industrial Processes
        - [105650] Raumklima
        - [106900] Computational Fluid Dynamics
      - [213] Elective Modules or Industrial Internship (6 CP)
        - [2131] Elective Modules 3 CP
        - [2132] Practical Work
        - [67070] Industrial Internship
    - [220] Solid Waste
    - [230] Waste Water
  - [300] German Language Courses and Key Qualifications
  - [81310] Master's Thesis WASTE
  - [DV] Drittversuche
  - [700] Zusatzmodule

Details on Courses

Module Handbook



Knotenbeschreibung - Detailansicht

Deutsch | Englisch

Moduldetails

Name	**Thermo and Fluid Dynamics**
Organisation	Systemverfahrenstechnik
Organisationskennung	049901

Anmerkung		Modul-Kennung	**19200**
Anmerkung intern		Versionskurzbezeichnung	
ECTS-Credits	6	Externe Zuordnung	
Gewichtungsfaktor	6	Gültig Von	2008S
Dauer [nach SPOV]	6	Gültig Bis	

▸ Zuordnungen zu SPO-Versionen

▾ Lehrveranstaltungen und Prüfungsveranstaltungen

Name	Kennung	Empf. Sem.	ECTS Credits	Prüfungsart	Gültig von	Gültig bis	Gewichtungsfaktor	Prüfungsmodus	Anmerkung
Angebotsknoten									
⊞ Lecture Thermodynamics of Fluid Mixtures	192001	KA					1		
⊞ Lecture Flow and Heat Transfer	192002	KA			2008S		1		
⊞ Exercise Fluid Flow and Heat Transfer	192003	KA			2008S	2022S	1		
⊞ Exercise Thermodynamics of Fluid Mixtures	192004	KA			2008S		1		
Prüfungsknoten									
⊞ Thermo and Fluid Dynamics	19201	KA		PL			1	Schriftlich	

Beschreibungen

15W | 16W | 18W | 19W | 22W

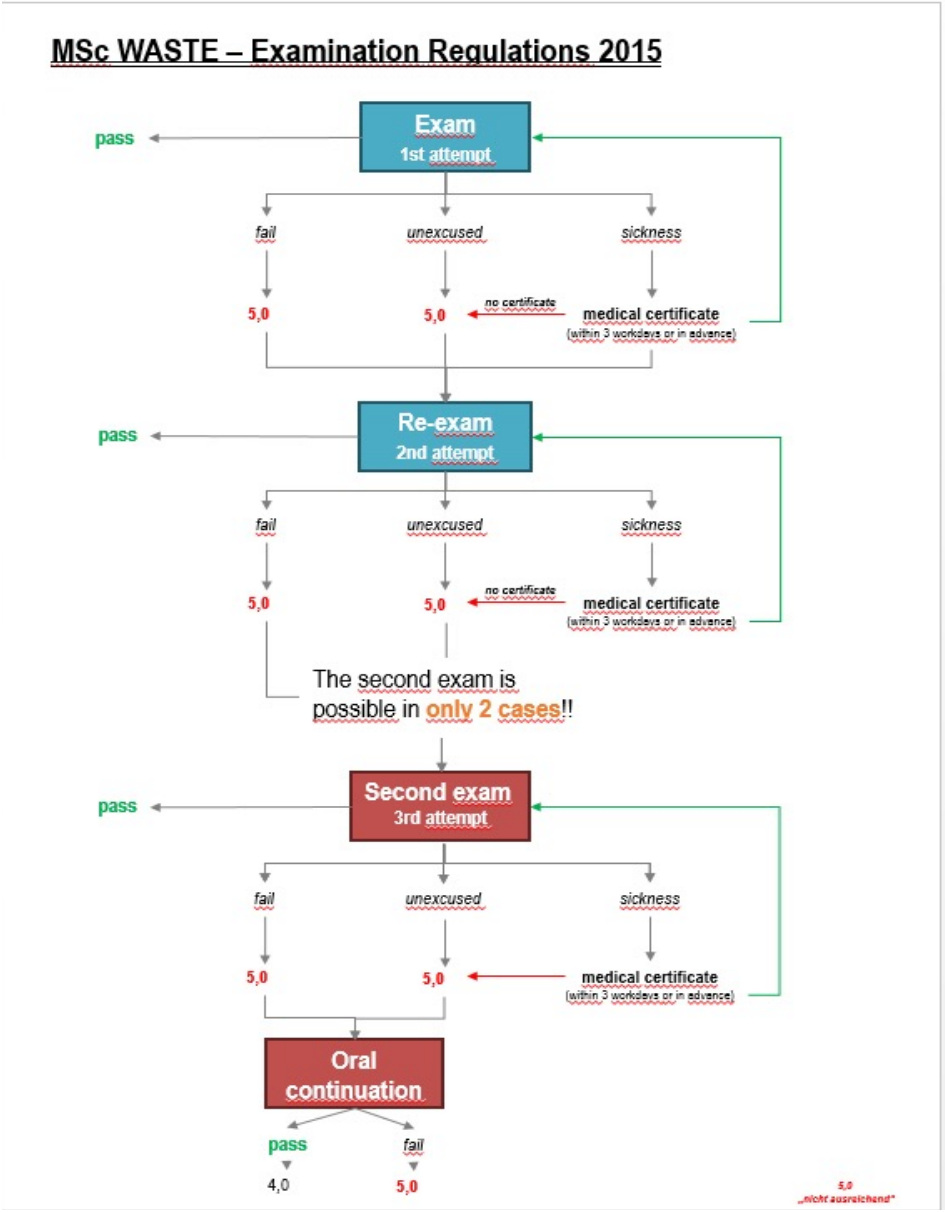
Export

Examinations

- **STUDIENLEISTUNGEN (SL)**
  - **USL** = *unbenotete Studienleistung* → form of examination with no grade (only pass or fail)
  - **USL-V** = *Zulassungsvoraussetzung für Prüfungsleistung* → pre-requisite for an examination
  - **BSL** = *benotete Studienleistung* → different forms of examination (e.g. exam, case studies, portfolio)
- **PRÜFUNGSLEISTUNGEN (PL)**
  - **PL =** *Prüfungsleistung* → classical module examination (written or orally)
  - **LBP =** *lehrveranstaltungsbegleitende Prüfung* → examination in the form of e.g. a seminar paper

Examinations

- German grading system:
  - Very good (1.0 and 1.3)
  - Good (1.7, 2.0 and 2.3)
  - Satisfactory (2.7, 3.0 and 3.3)
  - Pass (4.0)
  - Fail (5.0)



Examinations

- How to register for an exam?

  Where?

  Online: c@mpus

  When?

  16. Nov. 2022 – 8. Dec. 2022

  What?

  All exams – also compulsory exams

Examinations

Basic rules

- Each semester around 30 credits (+/- 10%)
  - You have to register
  - In total: 120 credits in 4 semesters (to be completed in max. 8 semesters!)
- Industrial Internship: usually longer than 6 weeks
  - → please inform yourselves about a sabbatical semester (FAQs)
- Master thesis
  - Duration: 6 months
  - extension by 3 months possible, approval by examinations officer (EO)
- Exceptions: Illness, pregnancy, child birth, single parent of child under 8, cttee member for more than 1 yr (consult exam rules)

Examinations

Your most popular pitfalls

- Exam registration
  - You forgot to register during registration period
  - You must (!) re-take a failed exam asap (within 1 year)
  - You must (!) register for a re-exam and take it

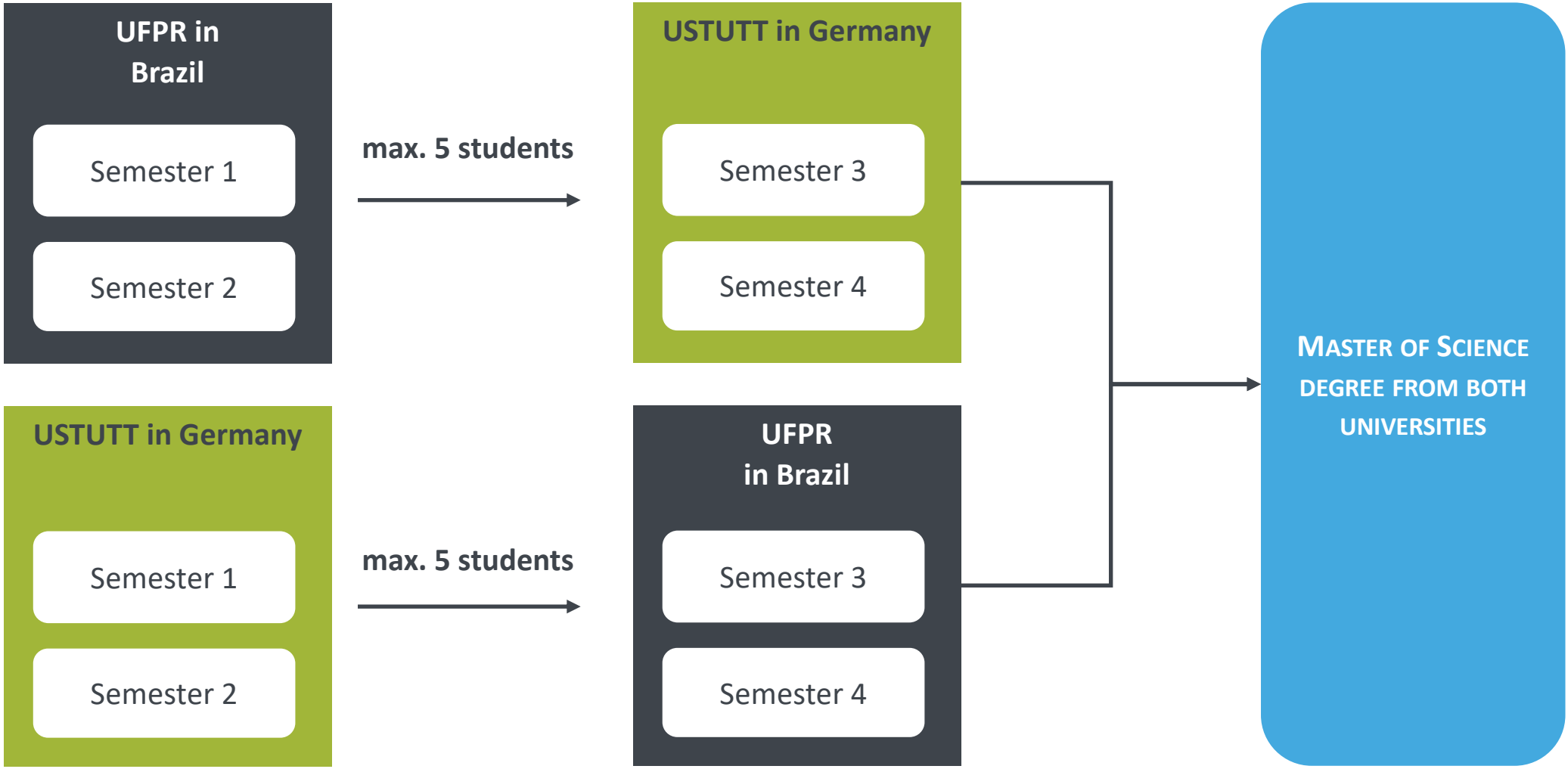
- Withdrawal
  - Online up to 8 days prior to the exam
  - Up to 1 day prior to the exam only due to unforeseen circumstances (illness, accident …) and (!) by approval by EO
  - On the day no withdrawal possible
  - Not possible for re-exams!

Examinations

Improve your GPA

- “Freischussregelung” (objective: you can give it a shot and try to study fast even if you are unprepared – dare and reduce your risk)
  - Condition: more than 47credits after 2 semesters, then you may (within the first 4 semesters)
  - Retake 1 exam
  - Delete 1 failed exam from your records
  - Lodge application with Prüfungsamt
- General rule:
  - once you have taken an exam – it stands and will be part of your degree.
  - There are 2 exceptions:
    - Freischussregelung
    - Zusatzmodul (additional module) – you must (!) inform the Prüfungsamt of your intentions prior to taking this exam. If not, it will count towards your GPA.

Double Degree UFPR – Uni Stuttgart



WASTE Club e.V.

Objectives of the WASTE Club are to:

- ✓ support the Master program as well as events and excursions
- ✓ keep in touch with graduates / alumni
- ✓ build a network between students, graduates, professors, lecturers, employees, organisations and promoters of the WASTE program
- ✓ give information and make public relation
- ✓ promote science, research and innovation

Understand our Philosophy

- We like rules
- We do not like to bend them (neither does the EO)
- We try to help

But it is your responsibility

- The first term may not be what you expect
- Terms 2 to 4 are much better
- You have the choice
- Do not necessarily stick to a topic, select courses that you like

Your life is full of surprises

Prediction is difficult – especially for the future (Niels Bohr)

We (and any future employer) expect you to have the capability to work independently on a topic close to your specialization using scientific methods

... and now

ENJOY