

University of Stuttgart
Germany

Air Quality Control, Solid Waste and Waste Water Process Engineering

**Andreas
Kronenburg**

WASTE office & Committees



Laura Scheurer (IFK)

Carolina Acuña Car (IFK)

WASTE office



Carsten Mehlhorn (ILR/ITV)

Chair of the Interdisciplinary Ausschuss
= examinations committee

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



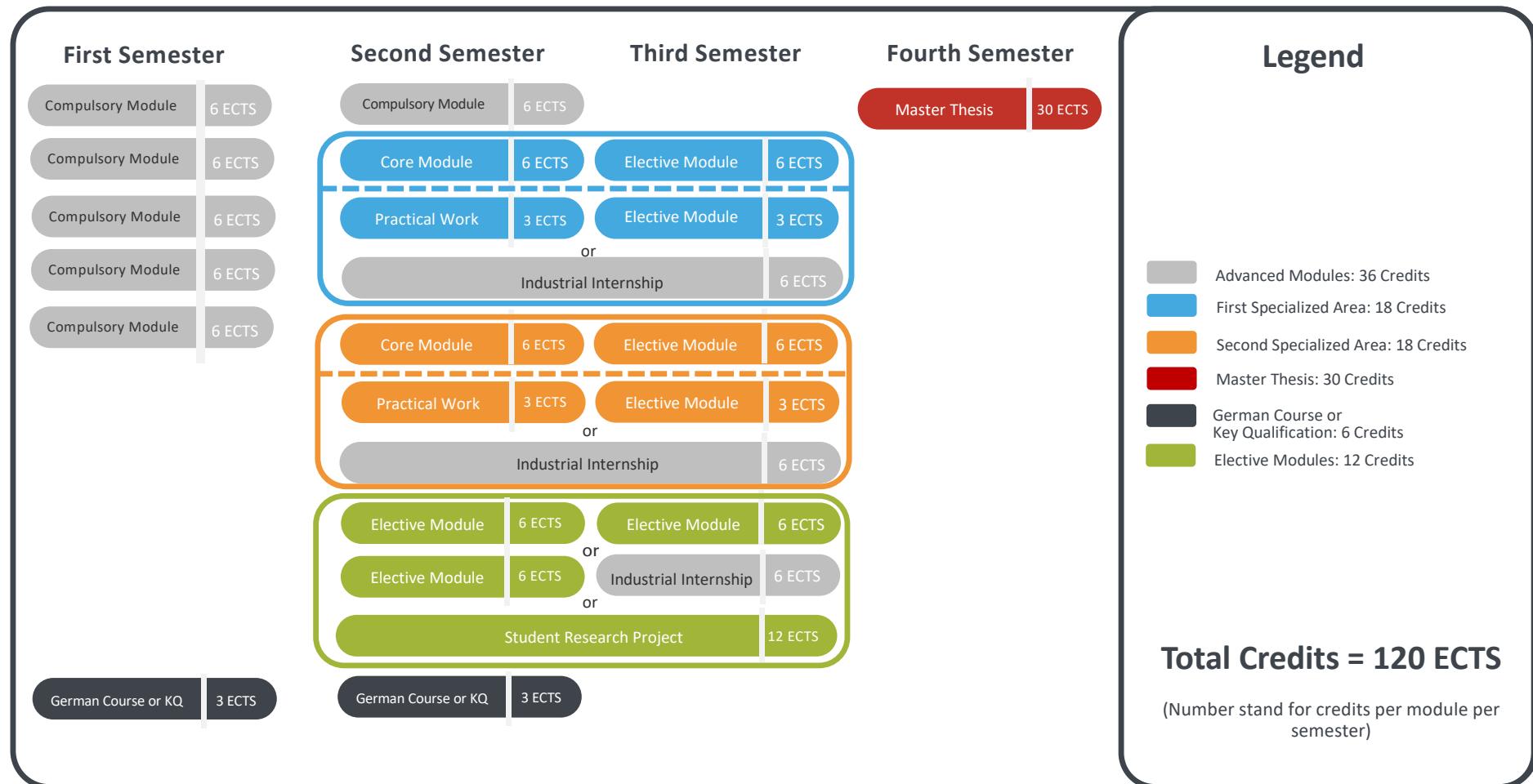
Andreas Kronenburg (ITV)

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)

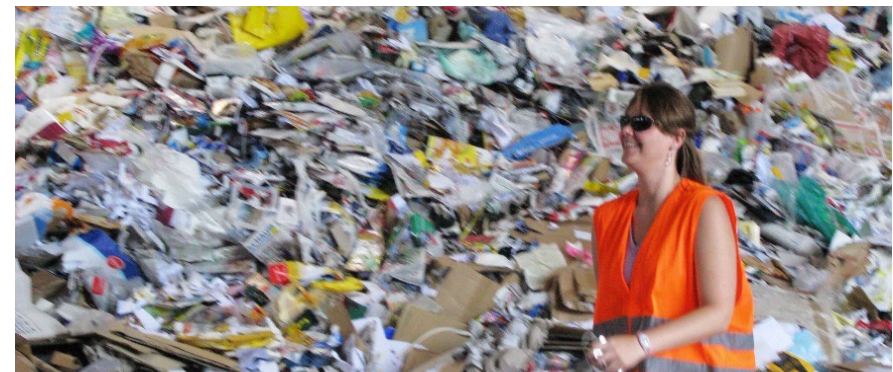
- Air Quality Control
- Solid Waste
- Waste Water Process Engineering
(select 2!)

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	
<input type="checkbox"/> [926-2015] Air Quality Control, Solid Waste and Waste Water Process Engineering	
<input type="checkbox"/> ▲ [100] Advanced Modules	
<input type="checkbox"/> ▲ [200] Specialized Area	
<input type="checkbox"/> ▲ [210] Air Quality Control	
<input type="checkbox"/> ▲ [211] Core Modules	
<input type="checkbox"/> M [15430] Measurement of Air Pollutants	
<input type="checkbox"/> M [15440] Firing Systems and Flue Gas Cleaning	
<input type="checkbox"/> ▲ [212] Elective Modules 6 CP	
<input type="checkbox"/> M [15430] Measurement of Air Pollutants	
<input type="checkbox"/> M [15440] Firing Systems and Flue Gas Cleaning	
<input type="checkbox"/> M [15970] Modellierung und Simulation von Technischen Feuerungsanlagen	
<input type="checkbox"/> M [59610] Primary Environmental Technologies and Emissions Reduction in Industrial Processes	
<input type="checkbox"/> M [105650] Raumklima	
<input type="checkbox"/> M [106900] Computational Fluid Dynamics	
<input type="checkbox"/> ▲ [213] Elective Modules or Industrial Internship (6 CP)	
<input type="checkbox"/> ▲ [2131] Elective Modules 3 CP	
<input type="checkbox"/> M [70430] Operational Technology for Waste Treatment	
<input type="checkbox"/> ▲ [21311] Elective Modules (in english language)	
<input type="checkbox"/> M [36550] Chemistry of the Atmosphere	
<input type="checkbox"/> M [39110] Air Quality Management	
<input type="checkbox"/> M [39130] Engine Combustion and Emissions	
<input type="checkbox"/> M [39660] Biological Waste Air Purification	
<input type="checkbox"/> M [41010] Modellierung von Zweiphasenströmungen	
<input type="checkbox"/> M [106670] Processing and Visualisation of Air Quality Data	
<input type="checkbox"/> ▲ [21312] Elective Modules (in german language)	
<input type="checkbox"/> ▲ [2132] Practical Work	
<input type="checkbox"/> M [67070] Industrial Internship	
<input type="checkbox"/> ▲ [220] Solid Waste	
<input type="checkbox"/> ▲ [230] Waste Water	
<input type="checkbox"/> ▲ [300] German Language Courses and Key Qualifications	
<input type="checkbox"/> M [81310] Master's Thesis WASTE	
<input type="checkbox"/> ▲ [DM] Doppelmaster-Programme	
<input type="checkbox"/> ▲ [DV] Drittversuche	
<input type="checkbox"/> ▲ [700] Zusatzmodule	

Details on Courses

Module Handbook

Knotenbeschreibung - Detailansicht

Deutsch Englisch

Moduldetails

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

Anmerkung
Anmerkung intern
ECTS-Credits 6
Gewichtungsfaktor 6
Dauer [nach SPOV] 6

Modul-Kennung **19200**
Versionskurzbezeichnung
Externe Zuordnung
Gültig Von 2008S
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)**

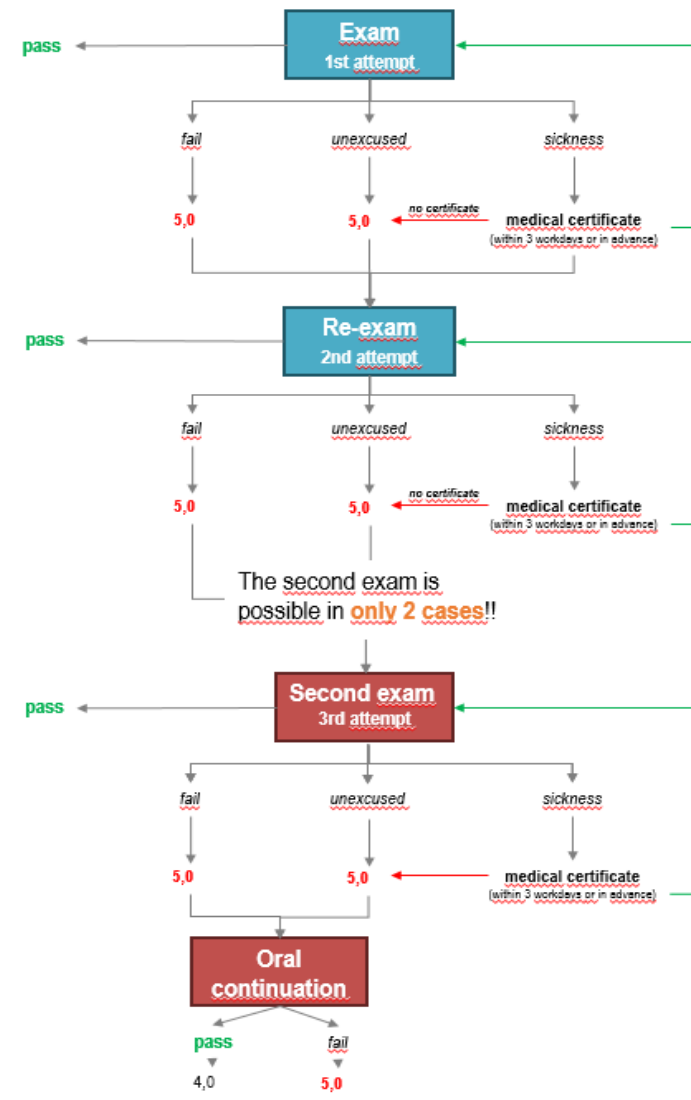
- **PL** = *Prüfungsleistung* → classical module examination (written or orally)
- **LBP** = *lehrveranstaltungsbegleitende Prüfung* → examination in the form of e.g. a seminar paper

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)

MSc WASTE – Examination Regulations 2015



Examinations

- How to register for an exam?

Where?

Online: [c@mpus](#)

When?

15. Nov. 2023 – 7. Dec. 2023

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

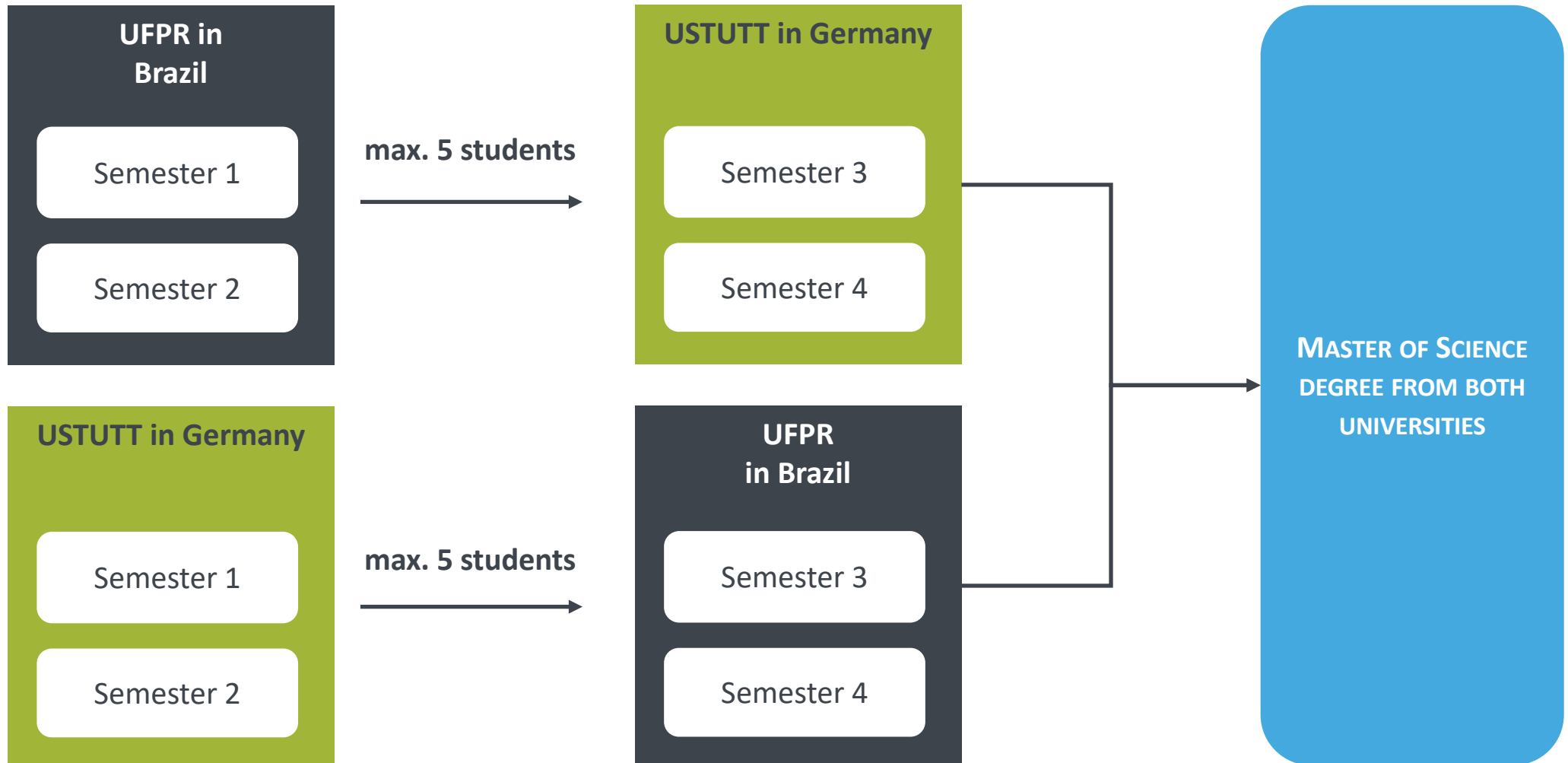
- Exam registration
 - You forgot to register during registration period
 - You must (!) re-take a failed exam asap (within 1 year)
 - You must (!) register for a re-exam and take it
- Withdrawal
 - Online up to 8 days prior to the exam
 - Up to 1 day prior to the exam only due to unforeseen circumstances (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 47 credits 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



You

- Where from?
 - **How did you hear about the programme?**
 - ~~**Who went to fairs? Which fairs?**~~

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



University of Stuttgart

H.S., Air Quality Control, Solid Waste and
Waste Water Process Engineering
(WASTE)

... and now

ENJOY

