

UNIVERSITY OF TECHNOLOGY

UNIVERSITY OF TECHNOLOGY



## **Double Master Degree**

Universität Stuttgart - Fahrzeug- und Motorentechnik Chalmers Tekniska Högskola - Automotive Engineering



## Learning Environment – Working Environment

#### Informality Independence Influence

#### International



# Informality







### Göteborg

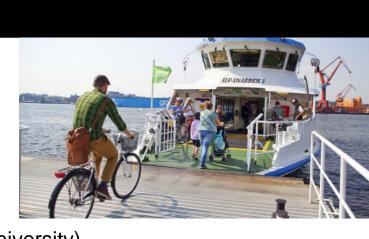


- Founded in 1621
- 2nd Largest City (Population: 565'000)
- Engineering city (Chalmers is the only engineering university)
- Home to some of Swedens largest companies, such as Volvo and SKF
- Vibrant cultural and social atmosphere with great food and music scenes
- Green city with parks and close proximity to the archipelago and woodlands
- Student City = Young City (60 000 students)
- Bike Friendly City



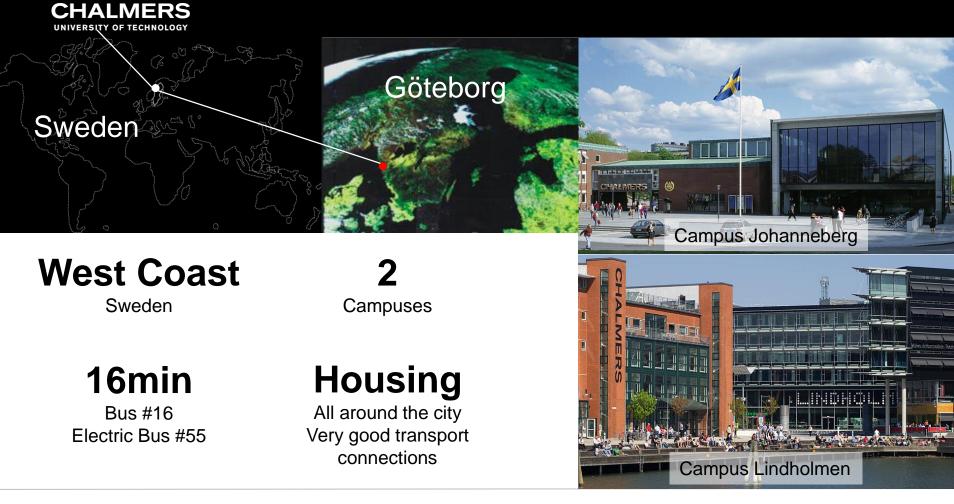






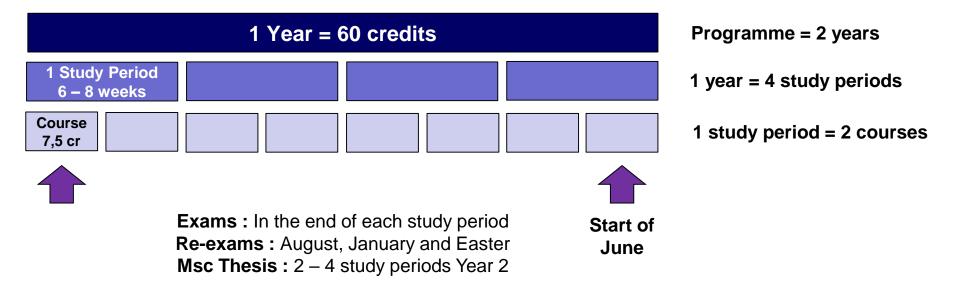
#### **Chalmers University of Technology**







#### **Academic Year**



#### **Academic Year / Studies**

- Projects, Assignments and Reports
- Group Work
- Study Visits
- Course Evaluations
- Grades, Failures, Improvements and Re-Examinations
- Summer jobs
- Career Fair
- Vacations and Breaks
- Master's thesis
- 24/7 access to labs, Group & Study Rooms and the Student Union Building (but also including spare time activities such as Billard, Sauna and Pool)
- Swedish lessons



#### **DMD** courses

Semester 1		Semester 2		Semester 3		Semester 4	
Chalmers Students at Chalmers Engineering of Automotive Systems (7.5 ECTS) (C) Internal Combustion Engines (7.5 ECTS) (C) Vehicle and Traffic Safety (7.5 ECTS) (C) Vehicle Dynamics (7.5 ECTS) (C)	Stuttgart Students in Stuttgart Basic Module Specialisa- tion 1 (Grundfach Spez. 1) <sup>1</sup> (6 ECTS) (C and E) Core / Supplementary Modules Specialisation 1 (Kern- / Ergânzungsfach Spez. 1) <sup>2</sup> (6 ECTS) (C and E) Basic Module Specialisa- tion 3 (Grundfach Spez. 3) <sup>1</sup> (6 ECTS) (C and E) Core / Supplementary Module Specialisation 3 (Kern- / Ergânzungsfach Spez. 3) <sup>2</sup> (6 ECTS) (C and E) Elective Compulsory Module (Pflichtfach mit Wahlmödlichkeit) <sup>3</sup>	Chalmers Students at Chalmers Road Vehicle Aerodynamics (7.5 ECTS) (SC) Hybrid Vehicles and Control (7.5 ECTS) (SC) Internal Combustion Engines Advanced (7.5 ECTS) (SC) Vehicle Dynamics Advanced (7.5 ECTS) (SC) Impact Biomechanics (7.5 ECTS) (SC)	Stuttgart Students in Stuttgart Core / Supplementary Modules Specialisation 1 (Kern- / Ergänzungsfach Spez. 1) <sup>2</sup> (12 ECTS) (C and E) Core / Supplementary Modules Specialisation 3 (Kern- / Ergänzungsfach Spez. 3) <sup>2</sup> (12 ECTS) (C and E) Elective Compulsory Module (Pflichtfach mit Wahlmöglichkeit) <sup>3</sup> (6 ECTS) (C and E)	Chalmers Students in Stuttgart Stutigart (Student research project) (12 ECTS) (C) FMT-Seminar (3 ECTS) (C) Industriepraktikum (Industrial internship) (12 ECTS) (C) Automobiltechnisches Fachpraktikum (3 ECTS) (E) or Vehicle Aerodynamics I (3 ECTS) (E) or Engine Combustion and Emissions (3 ECTS) (E)	Stuttgart Students at Chalmers Vehicle and Traffic Safety (7.5 ECTS) (C) Active Safety (7.5 ECTS) (SC)) or Powertrain Mechanics (7.5 ECTS) (SC) Automotive Engineering Project (15 ECTS) (C)	Chalmers Students in Stuttgart Master-Thesis (30 ECTS)	Stuttgart Students at Chalmers Master Thesis (30 ECTS)
Σ ECTS = 30	(6 ECTS) (C and E) Σ ECTS = 30	Σ ECTS = 30	Σ ECTS = 30	Σ ECTS = 30	Σ ECTS = 30	Σ ECTS = 30	Σ ECTS = 30
Course code: C = compulso	ory; E = elective: SC = semi con	npulsory; R = recommended	; else: <sup>1</sup> , <sup>2</sup> , <sup>3</sup> = see following pa	ges			
Version: 11.09.2014							

### Focus Area: Safety

- Crash Compatibility
- Infrastructure Design
- Vehicle Safety Systems
- Biomechanics
- Driver-Vehicle interaction





### **Industry Connection**

- Job fairs
- Industry Visits
- Assignments
- Projects
- Summer jobs
- Master's Thesis
- Jobs and Employment









Saving More Lives



#### **Courses in Sweden**

#### Automotive Engineering Project

- To enable a deepened specialization within your selected focus area by working in an automotive project connected to an industrial stakeholder (e.g. Volvo)
- Active Safety
  - To provide the students with insights on the design and evaluation of active safety systems both from an industrial and from an academic point of view. In this course, the focus will be on the current challenges and evaluation methodologies for the development of active safety systems. This course consists of four parts: safety-relevant events, active safety systems, human factors in active safety, and active safety evaluation.

#### Vehicle and Traffic Safety

- The objective of this course is to provide the student with a basic understanding of the role of active and passive safety in the context of traffic safety. The course prepare the students for the design and evaluation of active and passive safety systems.
- Master Thesis

#### What to not worry about

- One year of study experience abroad (resulting in 2 Master Degrees, not prolonged studies)
- Funding support available (BWS Stipendium, funds in Sweden)
- Student accommodation guaranteed (Located all around the city)
- Exams from Stuttgart can be taken in Sweden
- Courses in English (most Swedes are also very good in English)
- CIRC (Chalmers International Reception Committee) organize a lot of events especially in the first weeks





#### Keep in touch



www.uni-stuttgart.de/fmt/master/im\_studium/double\_master/ www.chalmers.se



bernhard.baeuerle@ivk.uni-stuttgart.de ron.schindler@chalmers.se



www.facebook.com/NextStopChalmers

**UNIVERSITY OF TECHNOLOGY** 

# Now it is your time to ask questions!



UNIVERSITY OF TECHNOLOGY