

Master programme in Automotive Engineering of RWTH Aachen University

Compulsory Courses									
Modulverantwortliche	Academic	Module	CP	L	P/L	Σ CH	summer / winter	Σ CP	Σ CH
Eckstein / Pischinger	Eckstein / Pischinger	Alternative and Electrified Vehicle Propulsion Systems	5	2	1	3	s	74	28
Eckstein	Eckstein	Automotive Engineering III	5	2	1	3	w		
Hameyer	Hameyer	Electric Drives and Storage Systems	5	2	1	3	s		
Murrenhoff	Murrenhoff	Fundamentals of Fluid Power (Hydraulics and Pneumatics)	6	2	2	4	w		
Pischinger	Pischinger	Internal Combustion Engines I	6	2	2	4	s		
Hüsing	Hüsing	Machine Dynamics of Rigid Systems	6	2	2	4	s		
Schröder/Löwer	Schröder/Löwer	Processes and Principles for Lightweight Design	6	2	2	4	w		
Urban	Urban	Structural Design of Vehicles	5	2	1	3	s		
		Master Thesis	30				sw		
Elective Courses									
Modulverantwortliche	Academic	Module	CP	L	P/L	Σ CH	summer / winter	Σ CP	Σ CH
Itskov	Itskov	Advanced Finite Element Methods for Engineers	5	2	2	4	sw	16	*
Poprawe	Poprawe	Applications of Laser Technology	6	2	2	4	s		
Eckstein	Eckstein	Automotive Engineering - Practical Course I&II	6	0	4	4	sw		
Eckstein	Eckstein	Automotive Engineering IV - Automated Driving	5	2	1	3	s		
Schwalm	Schwalm	Automotive System Evaluation	5	2	1	3	s		
Abel	Abel	Control Engineering	5	2	1	3	w		
Oeser	Oeser	Environmental Sustainability in Transport Engineering	6	2	2	4	w		
Schröder	Schröder	Fatigue Design of Lightweight Structures	5	2	2	4	s		
Brecher/Klocke	Brecher/Klocke	Gear and Transmission Technology	6	2	2	4	w		
N.N.	N.N.	Industrial Engineering	5	2	2	4	w		
Pischinger	Pischinger	Internal Combustion Engines II	6	2	2	4	w		
Natour	Natour	Measurement and Testing Methods in Joining Technology	6	2	2	4	s		
Markert	Markert/Jenkouk	Mechanics of Forming Processes	5	2	2	4	w		
Brecher	Brecher	Mini Thesis **	9	0	0	270	sw		
Vallée	Vallée	Mobility Research and Transportation Modeling	6	2	2	4	s		
Markert	Markert	Molecular Mechanics and Multiscale Modelling of Materials	5	2	2	4	w		
Markert	Markert	Porous Media Mechanics	6	2	2	4	s		
Schmitt	Schmitt	Quality Management	6	2	2	4	w		
Eckstein	Eckstein	Self-Driving Lab - Programming Automated Vehicle	2	1	0	1	s		
Jacobs	Jacobs	Tribology	6	2	2	4	w		
Biermann	Biermann	Vehicle Acoustics	5	2	2	4	s		

* The total amount of weekly contact hours (SWS) depends on the modules selected.

** Only for Tsinghua University exchange Students