

Master programme in Automotive Engineering of RWTH Aachen University

PO 2020

Compulsory Courses										
Responsible for Module	Lecturers	Module	CP	L	P/L	Σ SWS	Summer / Winter	Module ID	Σ CP	Σ SWS
Pischinger	Pischinger	Alternative Vehicle Propulsion Systems	5	2	1	3	s	4011731	68	24
Eckstein	Eckstein	Automotive Engineering III	5	2	1	3	w	4011413		
Sauer	Sauer	Battery Storage Systems	5	3	0	3	w	6015523		
Pischinger	Pischinger	Internal Combustion Engines: Design and Mechanics	6	2	2	4	s	4011417		
Corves	Corves	Machine Dynamics of Rigid Systems	6	2	2	4	s	4017428		
Jacobs / Schröder	Jacobs / Schröder	Processes and Principles for Lightweight Design	6	2	2	4	w	4011411		
Eckstein	Eckstein	Structural Design of Vehicles	5	2	1	3	s	4011465		
		Master Thesis	30				sw			

Elective Courses										
Responsible for Module	Lecturers	Module	CP	L	P/L	Σ SWS	Summer / Winter	Module ID	Σ CP	Σ SWS
Schleifenbaum	Schleifenbaum	Additive Manufacturing: Technologies and Processes	6	2	2	4	w	4017421	22	*
Itskov	Itskov	Advanced Finite Element Methods for Engineers	5	2	2	4	w	4013866		
Häfner	Häfner	Applications of Laser Technology	6	2	2	4	s	4011431		
Eckstein	Eckstein	Automated and Connected Driving Challenges - Course	4	0	2	2	w	4025905		
Eckstein	Lampe	Automated and Connected Driving Challenges - Research Project	5	0	1	1	s	4025906		
Eckstein	Eckstein	Automotive Engineering - Practical Course I&II	6	0	4	4	w&s	4011414		
Eckstein	Eckstein	Automated Driving	5	2	1	3	s	4020493		
Eckstein	Eckstein	Automotive System Evaluation	5	2	1	3	s	4011433		
Brunnert / Mütter	Brunnert / Mütter	Bots and Vehicles in Agriculture	5	3	0	3	s	4028584		
Schindler	Schindler	Digitalization in Rail Vehicle Technology	3	2	0	2	s	4028585		
Eckstein	Löwer/Böddeker	Cooperative Product Design in Vehicle Engineering	6	2	2	4	s	4017426		
Abel	Abel	Linear Control Systems	5	2	2	4	w	4011476		
Oeser	Oeser	Environmental Sustainability in Transport Engineering	6	2	2	4	w	3012215		
Schröder	Schröder	Fatigue Design of Lightweight Structures	5	2	2	4	s	4020486		
Schmitz	Schmitz	Fundamentals of Fluid Power (Hydraulics and Pneumatics)	6	2	2	4	w	4011410		
Trimpe	Trimpe	Fundamentals of Machine Learning	5	2	2	4	w	4018565		
Brecher / Bergs	Brimmers	Gear and Transmission Technology	6	2	2	4	w	4011427		
Andert	Bergheim / Fiedler / V	Hardware-in-the-Loop für mobile Antriebe	3	0	2	2	w	4027315		
Nitsch	Nitsch	Industrial Engineering	5	2	2	4	w	4014915		
Pischinger	Pischinger	Internal Combustion Engines: Thermodynamics and Emissions	6	2	2	4	w	4011415		
Natur	Natur	Mess- und Prüfverfahren in der Fügetechnik	6	2	2	4	s	4011514		
Markert	Markert	Mechanics of Forming Processes	5	2	2	4	w	4011512		
Bergs / Eckstein	Bergs / Eckstein	Mini Thesis **	9	0	0	270	sw	4014447		
Oeser	Kuhnimhof	Mobility Research and Transportation Modeling	6	2	2	4	s	3013294		
Markert	Markert	Molecular Mechanics and Multiscale Modelling of Materials	5	2	2	4	w	4011511		
Markert	Markert	Mechanik poröser Medien	6	2	2	4	s	4010870		
Pischinger	Neises	Powertrain Calibration: Propulsion Systems	5	2	2	4	w	4023499		
Schmitt	Schmitt	Quality Management	6	2	2	4	w	4011453		
Pischinger	Steinberg & Gastdo	Serienentwicklung von Triebsträngen für "On-Road" Nutzfahrzeuge	4	2	1	3	w	4025565		
Pischinger	Pischinger	Serienentwicklung von Getrieben für Pkw und leichte Nfz	5	2	1	3	s	4010866		
Jacobs	Jacobs	Tribology	6	2	2	4	w	4011475		
Eckstein / Biermann	Viehöfer	Vehicle Acoustics	5	2	0	2	s	4011421		

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

** Only for Tsinghua University exchange Students