MSc Automotive Engineering - Curriculum

Semester	1.	2.	3.
Credit Points	**30**	**30**	**30**

Advanced Automotive Engineering	**24**	**4**	
Adv. Car Body Engineering and Lightweight Design	6		
Vehicle Concepts and Integration	6		
Vehicle Dynamics and Automotive Chassis	6		
Vehicle Electronics and Communication	6		
Electives (1 to be selected)		4	
Adv. Combustion Engines			
FEA in Car Body Engineering			
NVH Systems Engineering			
Adv. Vehicle Safety			

Advanced Scientific Methods	**6**	**14**	
Numerical Methods in Engineering Sciences	6		
Adv. Materials - Selection and Life Cycle Assessment		6	
Electives (2 to be selected)		8	
Adv. Thermodynamics			
Control System Design			
Modelling of Multi-Body Systems			
Optimal Control and Estimation			
Statistical Optimisation			
Structural Durability			

General and Engineering Courses (2 to be selected)		**8**	
Automotive Manufacturing Processes			
Corporate Management			
Digital Factory			
Legal Requirements and Homologation			
Sustainability			

Scientific and Interdisciplinary Seminar (1 to be selected)			**4**	
Leadership Application				
Scientific Engineering Project	Adv. Technical English			
	Component Design, Materials and Manufacture			
	Vehicle Dynamics Simulation			
	Virtual Reality			
Team based Engineering Project	Cost-Efficient Product Design			
	Driver Assistance Systems			
	Mobility Concepts			
	Technology of Material Flow and Robotics			

Master Thesis			**30**
Thesis			28
Colloquium			2