

Curriculum Mechanical Engineering (M. SC.)
effective from study beginning in winter semester 2019/20

Focus on team research project (M-MB-T)

1. Semester	2. Semester	3. Semester
Advanced Basics 1 (4/5)	Advanced Basics 3 (4/5)	Master Thesis with Presentation (0/30)
Advanced Basics 2 (4/5)	Advanced Basics 4 (4/5)	
Specialisation Module 1 (4/5)	Specialisation Module 4 (4/5)	
Specialisation Module 2 (4/5)	Specialisation Module 5 (4/5)	
Specialisation Module 3 (4/5)	Specialisation Module 6 (4/5)	
Research and Development Project (4/10)		
24 SWS 30 Credits	24 SWS 30 Credits	0 SWS 30 Credits

Focus on individual research work (M-MB-I)

1. Semester	2. Semester	3. Semester
Advanced Basic 1 (4/5)	Advanced Basic 3 (4/5)	Master Thesis with Presentation (0/30)
Advanced Basic 2 (4/5)	Advanced Basic 4 (4/5)	
Specialisation Module 1 (4/5)	Specialisation Module 3 (4/5)	
Specialisation Module 2 (4/5)	Specialisation Module 4 (4/5)	
Research and Development Project 1 (4/10)		
Research and Development Project 2 (4/10)		
20 SWS 30 Credits	20 SWS 30 Credits	0 SWS 30 Credits

Sum Study Program: 90 Credits / 48 SWS

Expansion: (4/5) means 4 SWS und 5 ECTS-Credits

Sum Study programme: 90 Credits / 40 SWS

Selection List for Advanced Basics
Drive Technology Finite Element Method Engineering Design Materials Science Multi Body Dynamics Numerical Methods Numerical Fluid Mechanics Numerical Heat Transfer

Selection List for Specialisation Modules
Advanced Thermodynamics Aerospace-Technologie Alternative Energy Systems Calculation Methods for Lightweight Structures Computer-Aided Manufacturing Vehicle Aerodynamics Fundamentals of Systems Engineering Polymer Engineering in Automotive Multivariable Control Systems Modelling and Simulation of Combustion Engines Real Component Material States Simulation of Road Vehicles Thermofluid Dynamics

All compulsory elective modules are generally only offered once a year, divided into summer and winter semesters.