Course of Study Theoretical Mechanical Engineering (Study Cohort w21)

Core Qualification Compulsory	Specialisation Compulsory	Focus Compulsory	Thesis Compulsory
Core Qualification Elective Compulsory	Specialisation Elective Compulsory	Focus Elective Compulsory	Interdisciplinary complement

Sample course plan A Master Theoretical Mechanical Engineering (TMBMS)

Specialisation Bio- and Medical Technology

Nr										
1	**Finite Elements Methods**			**Numerical Treatment of Ordinary Differential Equations**			**Research Project Theoretical Mechanical Engineering**		**Master Thesis**	
2	Finite Element Methods	VL	2	Numerical Treatment of Ordinary Differential Equations	VL	2				
3	Finite Element Methods	HÜ	2	Numerical Treatment of Ordinary Differential Equations	GÜ	2				
4										
5										
6										
7	**Control Systems Theory and Design**			**Applied Dynamics: Numerical and experimental methods**						
8	Control Systems Theory and Design	VL	2	Applied Dynamics	VL	2				
9	Control Systems Theory and Design	GÜ	2	Lab Applied Dynamics	PR	3				
10										
11										
12										
13	**Modelling and Optimization in Dynamics**			**Computational Fluid Dynamics II**			**Intelligent Systems in Medicine**			
14	Flexible Multibody Systems	VL	2	Computational Fluid Dynamics II	VL	2	Intelligent Systems in Medicine	VL	2	
15	Optimization of dynamical systems	VL	2	Computational Fluid Dynamics II	HÜ	2	Intelligent Systems in Medicine	GÜ	1	
16							Intelligent Systems in Medicine	PS	2	
17										
18										
19	**Control Lab C**			**Linear and Nonlinear System Identifikation**			**Microsystem Engineering**			
20	Control Lab VII	PR	1	Linear and Nonlinear System Identification	VL	2	Microsystem Engineering	VL	2	
21	Control Lab VIII	PR	1				Microsystem Engineering	PBL	2	
	Control Lab IX	PR	1							
22	**Applied Statistics**			**Design optimization and probabilistic approaches in structural analysis**						
23	Applied Statistics	VL	2	Design Optimization and Probabilistic Approaches in Structural Analysis	VL	2				
24	Applied Statistics	GÜ	1	Design Optimization and Probabilistic Approaches in Structural Analysis	HÜ	2				
	Applied Statistics	PBL	2							
25										
26										
27										
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30										

Business & Management (from catalogue) - 6LP
Non-technical Courses for Master (from catalogue) - 6LP

The choice of courses from the catalogue is flexible (depends on the semestral work load), provided the necessary number of required credits is reached.