

Course of Study Theoretical Mechanical Engineering (Study Cohort w20)

Sample course plan A Master Theoretical Mechanical Engineering (TMBMS)

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

Specialisation Energy Systems			
1	Finite Elements Methods		Numerical Treatment of Ordinary Differential Equations
2	Finite Element Methods	VL 2	Numerical Treatment of Ordinary Differential Equations
3	Finite Element Methods	HÜ 2	Numerical Treatment of Ordinary Differential Equations
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
9	Control Systems Theory and Design	GÜ 2	Lab Applied Dynamics
10			
11			
12			
13	Modelling and Optimization in Dynamics		Computational Fluid Dynamics II
14	Flexible Multibody Systems	VL 2	Computational Fluid Dynamics II
15	Optimization of dynamical systems	VL 2	Computational Fluid Dynamics II
16			
17			
18			
19	Control Lab C		Linear and Nonlinear System Identification
20	Control Lab VII	PR 1	Linear and Nonlinear System Identification
21	Control Lab VIII	PR 1	
22	Control Lab IX	PR 1	
23	Thermal Energy Systems		Design optimization and probabilistic approaches in structural analysis
24	Thermal Energy Systems	VL 3	Design Optimization and Probabilistic Approaches in Structural Analysis
25	Thermal Energy Systems	HÜ 1	Design Optimization and Probabilistic Approaches in Structural Analysis
26			
27			
28			
29			
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.

