Course of Study Theoretical Mechanical Engineering (Study Cohort w18)

Sample course plan A Master Theoretical Mechanical Engineering (TMBMS)
Specialisation Aircraft Systems Engineering

Legend

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

LP	Semester 1	Form	Hrs/wk	Semester 2	Form	Hrs/wk	Semester 3	Form	Hrs/wk	Semester 4	Form	Hrs/wk
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	UE	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	UE	2	Lab Applied Dynamics	PR	3						
10												
11												
12												
13	**Modelling and Optimization in Dynamics**			**Computational Fluid Dynamics II**			**Aircraft Cabin Systems**					
14	Flexible Multibody Systems	VL	2	Computational Fluid Dynamics II	VL	2	Aircraft Cabin Systems	VL	3			
15	Optimization of dynamical systems	VL	2	Computational Fluid Dynamics II	HÜ	2	Aircraft Cabin Systems	HÜ	1			
16												
17												
18												
19	**Control Lab C**			**Linear and Nonlinear System Identifikation**								
20	Control Lab VII	PR	1	Linear and Nonlinear System Identification	VL	2						
21	Control Lab VIII	PR	1									
	Control Lab IX	PR	1									
22	**Aircraft Systems I**			**Design optimization and probabilistic approaches in structural analysis**								
23	Aircraft Systems I	VL	3	Design Optimization and Probabilistic Approaches in Structural Analysis	VL	2						
24	Aircraft Systems I	HÜ	2	Design Optimization and Probabilistic Approaches in Structural Analysis	HÜ	2						
25												
26												
27												
28				**Aircraft Systems II**								
29				Aircraft Systems II	VL	3						
30				Aircraft Systems II	HÜ	2						
31												
32												
33												

Business & Management (from catalogue) - 6LP

Nontechnical Elective Complementary 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.