Studiengang: Mechanical Engineering
Vertiefung: Digital Product Development

Modul	Angaben zum Modul			LM VL	Angaben zu Prüfungen				Bemerk.
	FS	CP Semester	CP gesamt			Art	Form	CP Prüfung	Ggf. Angabe alternativer Formen
Compulsory modules: Scientific Basics									
Engineering Mathematics 1	1	10	10	-		PL	K	10	
Chemistry for Engineers	1	4	5	-	Theoretical (N)	PL	KP1	4	
	2	1			Practical			1	
Experimental Physics	1	4	5	-	Theoretical (N)	PL	KP1	4	
	2	1			Practical			1	
Engineering Mathematics 2	2	5	5	-		PL	K	5	
Engineering Mathematics 3	3	5	5	-		PL	K	5	
Compulsory modules: Engineering Fundamentals									
Statics	1	5	5	-		PL	K	5	
Mechanics of Materials	2	7	7	-		PL	K	7	
Materials Science	2	4	5	-	Theoretical (N)	PL	KP1	4	
	3	1			Practical			1	
Dynamics	3	5	5	-		PL	K	5	
Introduction to Electrical Engineering	3	5	5	-		PL	K / HA	5	
Programming Basics	3	5	5	-	Theoretical (N)	PL	KP1	2	
					Practical			3	
Thermodynamics	3	5	5	-		PL	K	5	
Control Technology	4	5	5	-	Theoretical (N)	PL	KP 1	4	
					Practical			1	
Fluid Mechanics	4	5	5	-		PL	K	5	
Measurement Technology and Sensors	4	3	5	-	Theoretical (N)	PL	KP1	3	
	5	2			Practical			2	
Machine Dynamics	6	5	5	-		PL	K / HA	5	
Compulsory modules: Engineering Applications									
Product representation and modelling	1	5	5	-	CAD Basics	PL	KP1	3	
					Machine elements Exercise			2	
Product Dimensioning	2	7	7	-	Theoretical (N)	PL	KP 1	6	
					Practical			1	
Product Development	3	3	5	-	Design methodology project	PL	P	3	
	4	2			Design task	SL	-	2	
Drive Systems and Components	5	5	5	-		PL	K	5	
Industry 4.0	5	2	2	NA*		SL	-	2	

Compulsory modules: Interdisciplinary Modules									
Business Administration for Engineers	2	5	5	-		PL	K	5	
Communication and Moderation	5	2	2	-		PL	M / K	2	
Compulsory modules: Specialist modules									
Engineering Materials	4	5	5	-		PL	K	5	
Digital Development Processes & PLM	4	5	5	-		PL	K	5	
Finite-Element-Method	5	5	5	-	Theoretical (N)	PL	KP1	3	
					Practical			2	
Mechatronic Systems	5	5	5	-	Theoretical (N)	PL	KP1	4	
					Practical			1	
Multibody Systems	5	6	6	-	Theoretical (N)	PL	KP1	4	
					Practical			2	
Development Project	6	4	4	-		PL	P	4	
Heat and Mass Transfer	6	5	5	-	Theoretical (N)	PL	KP1	4	
					Practical			1	
Introduction to Computational Fluid Dynamics	6	5	5	-	Theoretical (N)	PL	KP1	3	
					Practical			2	
Verification and Validation/System-Engineering	6	5	5	-	Theoretical (N)	PL	KP1	4	
					Practical			1	
Compulsory elective modules according to the compulsory elective catalog: Mechanical Engineering-Digital Product Development A total of 9 ECTS credits must be earned through compulsory elective modules									
Selection according to the compulsory electives catalog, § 7. In the accredited course of study, 5 ECTS are provided in the 4th semester and 4 ECTS in the 5th semester; the CP distribution over the semesters can be freely chosen in the individual course of study.	-	-	-	-		PL	depending on the selected modules	9	
Compulsory module group: Project, Practical Study Phase, Bachelor Thesis									
Project in Mechanical Engineering	5	1	8	NA*	Introduction to project management	SL	-	1	
	6	7		-	Mechanical engineering project	PL	P	7	
Internship	7	15	15	-		SL	P	15	
Bachelor Thesis	7	15	15	-	Bachelor Thesis	PL	BA	12	
				-	Colloquium	PL	KO	3	