Detailed study schedule with changes according to faculty council decisions as well as detailed information

Status: 18.04.2024

Content:

Detailed study plan

Part 1

Module no.	Module name	1st Semester	2nd Semester	3rd Semester	4th Semester	5th Semester	6th Semester	7th Semester	8th Semester (M)	9th Semester (M)	10th Semester	LP
		V*)/Ü*)/S/ P/T	V*)/Ü*)/S/ P/T	V*)/Ü*)/S/ P/T	V*)/Ü*)/S/ P/T	V*)/Ü*)/S/ P/T	V*)/Ü*)/S/ P/T	V*)/Ü*)/S/ P/T	V*)/Ü*)/S/ P/T	V*)/Ü*)/S/ P/T	V*)/Ü*)/S/ P/T	
Compulsory modules												
MW-MB-01 [24, 36]	Fundamentals of Mathematics	4/2/0/1 PL										**6**
MW-MB-02 [36]	Engineering Mechanics - Statics	2/2/0/1 PL										**5**
MW-MB-03 [9]	Fundamentals of Natural Sciences - Physics - Chemistry	2/1/0/1 2xPL (4) 2/1/0/1/1	2/1/0/0/1 PL (3) 2/1/0/0/1									**7**
MW-MB-04 [9, 17, 24, 32, 42]	Design Theory	2/2/0/0/1 (4)	2/2/0/1 PL (4)									**8**
MW-MB-05 [17, 24, 32]	Computer Science - Computer Application in Mechanical Engineering - Software and Programming Technology	2/2/0/1 PL (4) 2/2/0/0/1	2/1/0/1 2xPL (4) 2/1/0/1/1									**8**

Module no.	Module name	1st Semester	2nd Semester	3rd Semester	4th Semester	5th Semester	6th Semester	7th Semester	8th Semester (M)	9th Semester (M)	10th Semester	LP
		V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	
MW-MB-06 47	Production Engineering	5/0/0/1 PL (5)	0/1/0/0/1 PL and optional 2 SWS Internship or professional Internship (1 week) (4)									**9**
MW-MB-07	Business Administration and Language Skills - Language Competence - Business Administration	0/0/0/0/0 2 SWS SK PL (2) 2 SWS SK	2/1/0/0/1 PL (3) 2/1/0/0/1									**5**
MW-MB-08 4, 5, 7, 9, 36, 42	Engineering Mathematics		4/2/0/1 PL									**6**
MW-MB-09 24, 36, 54	Engineering Mechanics - Strength of Materials		2/2/0/0/1 (4)	2/1/0/0/1 PL (3)								**7**
MW-MB-10 4, 36, 54	Fundamentals of Material Science		2/0/0/1/1 (3)	2/0/0/1/1 2xPL (3)								**6**
MW-MB-11 9, 36	Fundamentals of Electrical Engineering			2/2/0/2/1 2xPL								**7**

Module no.	Module name	1st Semester	2nd Semester	3rd Semester	4th Semester	5th Semester	6th Semester	7th Semester	8th Semester (M)	9th Semester (M)	10th Semester	LP
		V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	
MW-MB-12 1, 4, 6, 9, 42, 54	Engineering Thermodynamics/Heat Transfer - Technical Thermodynamics - Heat Transfer			2/2/0/1 PL (5) 2/2/0/0/1	2/2/0/1 PL (4) 2/2/0/0/1							**9**
MW-MB-13 4, 5, 36	Special Topics of Mathematics			2/2/0/0/1 (4)	2/2/0/1 PL (5)							**9**
MW-MB-14	Machine Elements			3/2/0/1 PL (5)	3/2/0/1 2xPL (7)							**12**
MW-MB-15	General and Engineering-Specific Qualifications in Mechanical Engineering			#/#/#/#/# 1) PL (3)	#/#/#/#/# 1) PL (2)							**5**
MW-MB-16 24, 36	Engineering Mechanics - Kinematics and Kinetics				3/2/0/1 PL							**6**
MW-MB-17 42, 54	Fundamentals of Fluid Mechanics				2/2/0/1 PL							**5**
MW-MB-18 4, 9, 36	Measurement and Automation Engineering					2/1/0/1/0 PL (4)	2/1/0/1/0 2xPL (4)					**8**
MW-MB-19	Extended Fundamentals for Mechanical Engineering					#/#/#/# PL 2)						**5**

Module no.	Module name	1st Semester	2nd Semester	3rd Semester	4th Semester	5th Semester	6th Semester	7th Semester	8th Semester (M)	9th Semester (M)	10th Semester	LP
		V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	
MW-MB-20	Subject-Related Internship						2/0/0/0/0 (2)	15-week Internship-Project Work 270 h (processing time 26 weeks) with presentation (28)				**30**
MW-MB-21	Research Internship								0/0/0/0/0 1 SWS Project (8)	0/0/0/0/0 1 SWS Project, Project Work425 h (processing time 26 weeks) with presentation 2xPL (8)		**16**
MW-MB-22	Interdisciplinary Technical Qualification of Mechanical Engineering								#/#/#/# PL 3) (4)	#/#/#/# PL 3) (4)		**8**
Compulsory elective area												
Compulsory and/or elective modules of the chosen field of study 4) according to Part 2						#/#/#/# PL (21)	#/#/#/# PL (26)		#/#/#/# PL (18)	#/#/#/# PL (18)		**83**
Diploma thesis											27	**27**
Colloquium											3	**3**
Credit points		**30**	**31**	**30**	**29**	**30**	**32**	**28**	**30**	**30**	**30**	**300**

Part 2 – Elective section
Assignment of compulsory and elective modules of the fields of study

Module no.	Module name	5th Semester	6th Semester	8th Semester (M)	9th Semester (M)	LP
		V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	
Field of study General and Structural Mechanical Engineering (AKM) [4)]						
Compulsory modules						
MW-MB-AKM-01 [17, 23, 24, 32] MW-MB-KST-28 [17, 23, 24, 32] MW-MB-VTMB-01 [17, 23, 24, 32]	Fundamentals of Construction and Dynamic Dimensioning of Machines - Constructive Development Process - Machine Dynamics	4/2/0/1/0 2xPL 2/0/0/1/0 2/2/0/0/0				**7**
MW-MB-AKM-02 MW-MB-KST-01	Fluid Power and Electrical Drive Systems - Basics of Fluid Power Drives and Controls - Electric Drives	4/2/0/0 PL 2/1/0/0/0 2/1/0/0/0				**7**
MW-MB-AKM-03	Mechanical Drives - Drive Elements - Design Document Drive Assembly	2/3/0/0 2xPL 2/1/0/0/0 0/2/0/0/0				**7**

Module no.	Module name	5th Semester	6th Semester	8th Semester (M)	9th Semester (M)	LP
		V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	
Elective modules						
Recommendation for profiling [1] Development Engineer Intralogistics [2] System Developer for Mobile Machines [3] Calculation Engineer [4] Drive Design [5] Product Development [6] Industrial Designer			MW-MB-AKM-04, -05, -07,- 09, -15, -16, -17, -22, -25 resp. -26 MW-MB-AKM-06, -07, -08, -09, -14, -15, -16, -23, -25 resp. -26 MW-MB-AKM-06, -07, -08, -09, -13, -15, -17, -23, -24 resp.-29 MW-MB-AKM-04, -05, -06, -07, -13, -17, -19, -23, -24 resp.-29 MW-MB-AKM-04, -05, -07, -09, -13, -16, -18, -22, -24 resp.-29 MW-MB-AKM-09, -10, -11, -12, -18, -20, -21, -27, -28 resp.-29			
Choice of 2 out of 5 modules						
MW-MB-AKM-04	Analysis and Dimensioning - Selected Analyses and Dimensioning - Operational Strength		3/1/0/1/0 PL 2/0/0/1/0 1/1/0/0/0			**6**
MW-MB-AKM-07	Fluid Power Components and Systems - Sealing Technology - Fluid Power Components and Systems		4/1/0/0 PL 2/0/0/0/0 2/1/0/0/0			**6**
MW-MB-AKM-08	Off-road Vehicle Technology - Systems - Construction Machinery Technology - Recycling Technology - Engines and Steering Systems		5/0/0/0 PL 2/0/0/0/0 1/0/0/0/0 2/0/0/0/0			**6**
~~MW-MB-AKM-10~~ [20]	~~Industrial Design Methodology~~ ~~- Introduction to Design Process and -Tools~~ ~~- Internship Design Process and -Tools~~		2/0/0/2/0 2xPL 2/0/0/0/0 0/0/0/2/0			~~**6**~~
~~MW-MB-AKM-11~~ [20]	~~Two-Dimensional Design Fundamentals~~ ~~- Colour and Material~~ ~~- Graphic~~		2/0/0/3/0 PL 1/0/0/1/0 1/0/0/2/0			~~**6**~~
MW-MB-AKM-30 [20]	Industrial Design Methodology in Product Development - Introduction to Design Process and -Tools - Internship Design Process and -Tools		2/0/0/2/0 2xPL 2/0/0/0/0 0/0/0/2/0			**6**

Module no.	Module name	5th Semester	6th Semester	8th Semester (M)	9th Semester (M)	LP
		V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	
MW-MB-AKM-31 [20]	Two-Dimensional Design Fundamentals in Industrial Design - Colour and Material - Graphic		2/0/0/3/0 PL 1/0/0/1/0 1/0/0/2/0			**6**
Choice of 2 out of 4 modules						
MW-MB-AKM-05	Intralogistics - Fundamentals - Elements and Supporting Structures - Logistics Lab - Intralogistics Systems		3/1/0/2/0 2xPL 1/1/0/0/0 0/0/0/2/0 2/0/0/0/0			**7**
MW-MB-AKM-06	Fundamentals of Agricultural Systems Technology - Basics of the Functioning of Machines - Tractor Technology - Agricultural Processes and Machinery		4/2/0/0 2xPL 0/2/0/0/0 2/0/0/0/0 2/0/0/0/0			**7**
~~MW-MB-AKM-09~~ [17, 26] ~~MW-MB-KST-29~~ [17, 26]	~~Tools and Methods of Product Development~~ ~~- Digital MockUp in Product Development~~ - ~~Designing with CAD~~		2/4/0/0 2xPL 1/2/0/0/0 1/2/0/0/0			~~7~~
~~MW-MB-AKM-12~~ [20]	~~Three-Dimensional Design Fundamentals~~ ~~- Freehand Drawing~~ - ~~Plastic Design~~		2/0/0/4/0 PL 1/0/0/2/0 1/0/0/2/0			~~7~~
MW-MB-AKM-32 [20]	Three-Dimensional Design Fundamentals in Industrial Design - Freehand Drawing - Plastic Design		2/0/0/4/0 PL 1/0/0/2/0 1/0/0/2/0			**7**
MW-MB-AKM-37 [26, 32] MW-MB-KST-32 [26, 32]	Methodical Product Development and Selected Tools - Digital MockUp in Product Development - Designing with CAD		2/4/0/0 2xPL 1/2/0/0/0 1/2/0/0/0			**7**

Module no.	Module name	5th Semester	6th Semester	8th Semester (M)	9th Semester (M)	LP
		V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	
Choice of 3 out of 9 modules						
MW-MB-AKM-13	Simulation Methods in Drive Technology - CAE Applications/FEM - Modelling and Simulation of Electromechanical Drive Systems			3/2/0/0 PL 1/1/0/0/0 2/1/0/0/0		**6**
MW-MB-AKM-14	Design of Agricultural Systems Technology - Functioning of Machines - Product Development of Agricultural Machinery - Process Automation			4/1/0/0 2xPL 1/0/0/0/0 2/0/0/0/0 1/1/0/0/0		**6**
MW-MB-AKM-15	Fluid-Mechatronics in Industrial Applications - Electrohydraulic Drive Technology in Industrial Applications - Internship Fluid Power in Industrial Applications - Control Engineering of Pneumatic Drives			2/2/0/1/0 2xPL 1/1/0/0/0 0/0/0/1/0 1/1/0/0/0		**6**
MW-MB-AKM-16 [17, 32]	Product Modelling - Product Data Management - Synthesis and Analysis of Product Models			3/2/0/0 PL 1/1/0/0/0 2/1/0/0/0		**6**
MW-MB-AKM-17	Materials and Failure Analysis - Construction Materials - Friction, Wear and Damage			4/1/0/0 PL 2/1/0/0/0 2/0/0/0/0		**6**
MW-MB-AKM-18 [17, 25, 32, 46] MW-MB-SIM-10 [17, 25, 32, 46]	Virtual Methods and Tools Reverse Engineering and optionally - Free-form Modelling or - Hybrid Modelling			2/1/0/2/0 2xPL 1/1/0/0/0 and optionally 1/0/0/2/0 or 1/0/0/2/0		**6**

Module no.	Module name	5th Semester	6th Semester	8th Semester (M)	9th Semester (M)	LP
		V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	
MW-MB-AKM-19 MW-MB-SIM-12	Data Processing and Experimental Model Analysis - Experimental Modal Analysis - Measured Value Processing			3/2/0/1/0 PL 1/1/0/1/0 2/1/0/0/0		**6**
~~MW-MB-AKM-20~~ [20]	~~Design Research~~ ~~- Methods and Tools in Design Research~~ - ~~Product Experience~~			3/1/0/1/0 2xPL 2/1/0/0/0 1/0/0/1/0		~~**6**~~
~~MW-MB-AKM-21~~ [20]	~~Design of Product-Service-Systems~~ ~~- Design of Product Service Systems~~			1/0/0/4/0 PL 1/0/0/4/0		~~**6**~~
MW-MB-AKM-33 [20, 46, 61]	Design Research and Product Experience - Design Research and Product Experience			3/1/0/1/0 PL 3/1/0/1/0		**6**
MW-MB-AKM-34 [20, 46]	Product-Service-Systems - Product-Service-Systems			1/0/0/4/0 PL 1/0/0/4/0		**6**
Choice of 3 out of 8 modules						
MW-MB-AKM-22	Intralogistics - System Design - Analytical Methods - Simulation-based System Optimisation - System Design IL System				4/1/0/0 PL 2/0/0/0/0 2/0/0/0/0 0/1/0/0/0	**6**
MW-MB-AKM-23	Fluid-Mechatronics in Mobile Applications - Mobile Hydraulics - Internship Fluid Power in Mobile Applications - Controls, Software Development and Security in Mobile Applications				3/1/0/1/0 2xPL 2/1/0/0/0 0/0/0/1/0 1/0/0/0/0	**6**
MW-MB-AKM-24	Computational Engineering in Fluid Power - Modelling and Simulation of Fluid Power Components - Modelling and Simulation of Fluid Power Systems				2/3/0/0 PL 1/1/0/0/0 1/2/0/0/0	**6**

Module no.	Module name	5th Semester	6th Semester	8th Semester (M)	9th Semester (M)	LP
		V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	
MW-MB-AKM-25 [46]	Material Handling - Hoisting Machines - Design Document main Assembly of a Hoisting Machine				1/3/0/0 2xPL 1/1/0/0/0 0/2/0/0/0	**6**
MW-MB-AKM-26	Mobile Machinery/Off-road Vehicle Technology – Analysis - Experimental Analysis - Modelling and Simulation of Off-road Vehicle Systems				2/1/0/2/0 2xPL 0/0/0/2/0 2/1/0/0/0	**6**
~~MW-MB-AKM-27~~ [20]	~~Human-centered Product Design~~ ~~- Human-centered Product Design~~				~~1/0/0/4/0 PL~~ ~~1/0/0/4/0~~	~~**6**~~
~~MW-MB-AKM-28~~ [20]	~~Visualization Techniques~~ ~~- Information Visualisation and HMI~~ ~~- Rendering Techniques~~				2/0/0/3/0 PL 1/0/0/2/0 1/0/0/1/0	~~**6**~~
MW-MB-AKM-29 [17, 32, 52]	Systems Engineering - Design of Mechatronic Systems - Interdisciplinary Product Development				3/2/0/1/0 2xPL 2/1/0/0/0 1/1/0/1/0	**6**
MW-MB-AKM-35 [20, 46]	User-Centered Product Design - User-Centered Product Design				1/0/0/4/0 PL 1/0/0/4/0	**6**
MW-MB-AKM-36 [20]	Product and Information Visualization - Information Visualization and HMI - Rendering Techniques				2/0/0/3/0 PL 1/0/0/2/0 1/0/0/1/0	**6**

Module no.	Module name	5th Semester	6th Semester	8th Semester (M)	9th Semester (M)	LP
		V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	
Field of study Power Engineering (ET) [4)]						
Compulsory modules						
MW-MB-ET-01 [1, 42]	Fluid Mechanics and Simulation Methods - Simulation Tools in Power Engineering - Flow Simulation for Engineering Applications - Engineering Fluid Mechanics	4/2/0/1/0 PVL, PL 1/0/0/0/0 1/1/0/0/0 2/1/0/1/0				**7**
MW-MB-ET-02 [1, 9, 54]	Process Thermodynamics - Process Thermodynamics - Reaction Process Engineering	4/2/0/0 PL 2/1/0/0/0 2/1/0/0				**7**
MW-MB-ET-03 [1, 42]	Fundamentals of Heat and Mass Transfer - Combustion Technology - Heat and Mass Transfer	4/3/0/0 PL 2/1/0/0/0 2/2/0/0/0				**7**
MW-MB-ET-04 [1, 9, 32, 42, 54]	Fundamentals of Power Machinery - Turbomachinery Basics - Fundamentals of Piston Machines		4/2/0/0 2xPL 2/1/0/0/0 2/1/0/0/0			**6**
MW-MB-ET-06 [9, 17]	Fundamentals of Non-Fossil Primary Energy Use - Renewable Energy Sources - Fundamentals of Nuclear Energy Technology		4/2/0/1/0 2xPL 2/1/0/0/0 2/1/0/1/0			**7**
MW-MB-ET-07	Heat Exchanger, Pipings, Pressure Vessels and Energy Storage - Basics of Energy Storage Components - Pipelines, Apparatus and Containers - Heat Exchanger and Steam Generator		5/2/0/0 2xPL 1/0/0/0/0 2/1/0/0/0 2/1/0/0/0			**7**

Module no.	Module name	5th Semester	6th Semester	8th Semester (M)	9th Semester (M)	LP
		V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	
Elective modules						
	Selection of 1 out of 2 modules					
MW-MB-ET-05 [1, 39, 42]	Fundamentals of Refrigeration and Air Conditioning [8)] - Basics of Refrigeration Technology - Basics of Air Conditioning Technology		4/2/0/0 PL 2/2/0/0/0 2/0/0/0/0			**6**
MW-MB-ET-37 [39,42]	Principles of Refrigeration and Air Conditioning [8)] - Principles of Refrigeration - Principles of Air Conditioning	4/2/0/0 PL 2/2/0/0/0 2/0/0/0/0				**6**
Recommendation for profiling [1] Energy Machines [2] Building Energy Technology and Heat Supply [3] Refrigeration, Cryogenics and Compressor Technology [4] Renewable and Conventional Energy Supply [5] Analytical and Numerical Methods in Energy Technology [6] Hydrogen and Nuclear Energy Technology			MW-MB-ET-09, -20, -23, -24, -38; -44 MW-MB-ET-10, -11, -12, -26, -15 resp. -41, -39 MW-MB-ET-09, -27, -35 resp. -36, -38, -42, -43 MW-MB-ET-15, -16, -21, -38, -40, -41 MW-MB-ET-18, -19, -20, -30, -31 as well as one compulsory elective module of the field of study Power Engineering MW-MB-ET-15, -21, -22, -27, -32, -33			
	Choice of 3 out of 18 modules					
MW-MB-ET-08 [9, 32, 53]	Steam and Gas Turbines - Steam and Gas Turbines			4/2/0/0 2xPL 4/2/0/0/0		**6**
MW-MB-ET-09 [9, 32, 46]	Turbo Pumps and Piston Working Machines - Turbopumps and Reciprocating Machines			2/2/0/0 2xPL 2/2/0/0/0		**6**
MW-MB-ET-10 [9,]	Building Energy Systems - Basics of Building Energy Technology - Heat Pump Systems			3/3/0/0 PL 2/2/0/0/0 1/1/0/0/0		**6**
MW-MB-ET-11 [9]	Air Conditioning Systems/Supply Engineering - Indoor Air and Air-conditioning Technology - Gas and Sanitary Engineering			4/2/0/0 PL 2/1/0/0/0 2/1/0/0/0		**6**

Module no.	Module name	5th Semester	6th Semester	8th Semester (M)	9th Semester (M)	LP
		V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	
MW-MB-ET-12 [9]	Evaluation of Energy Efficiency and Economy - Energy Assessment			2/2/0/1/0 PL 2/2/0/1/0		**6**
MW-MB-ET-13 [9, 39, 46]	Refrigeration Systems - Refrigeration Systems and Components - Simulation of Refrigeration Systems and Components			3/2/0/1/0 2xPL 2/1/0/1/0 1/1/0/0/0		**6**
MW-MB-ET-36 [9, 39, 46]	International Refrigeration and Compressor Course - IRCC - International Refrigeration and Compressor Course Fundamentals			3/2/0/1/0 2xPL 3/2/0/1/0		**6**
~~MW-MB-ET-14 [9, 24, 43]~~ ~~MW-MB-KST-20 [9, 24, 43]~~	~~Mobile Refrigeration and Special Cooling Tasks~~ ~~- Mobile Refrigeration and Special Refrigeration Tasks~~			~~3/1/0/1/0 2xPL~~ ~~3/1/0/1/0~~		~~**6**~~
MW-MB-ET-15 [9, 17]	Renewable Energy Supply - Consolidation Renewable Energy Systems - Biomass Use			4/1/0/1/0 2xPL 2/1/0/0/0 2/0/0/1/0		**6**
MW-MB-ET-16 [9,]	Thermal Process Technology - Operation and Maintenance - Energy Conversion and Processes in the Primary Industry			4/2/0/0 PL 2/0/0/0/0 2/2/0/0/0		**6**
~~MW-MB-ET-17 [8]~~	~~Energy Systems Technology~~ ~~- Storage and Networks (Gas)~~ ~~- Storage and Grids (Electricity)~~ ~~- Hybrid Systems and Sector Coupling~~			~~4/2/0/0 PL~~ ~~1/0/0/0/0~~ ~~1/1/0/0/0~~ ~~2/1/0/0/0~~		~~**6**~~
MW-MB-ET-18	Applied Molecular Thermodynamics - Applied Molecular Thermodynamics			2/2/0/0 PL 2/2/0/0/0		**6**
MW-MB-ET-19 [9, 12, 27, 40]	Properties and Thermodynamic Simulation - Thermodynamic Material Data/Simulation - Thermomechanical Simulation Methods for Energy Machines			4/1/0/1/0 2xPL 2/1/0/1/0 2/0/0/0/0		**6**

Module no.	Module name	5th Semester	6th Semester	8th Semester (M)	9th Semester (M)	LP
		V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	
MW-MB-ET-20 [9]	Gas Dynamics and Numerical Fluid Mechanics - Computational Fluid Dynamics - Gas Dynamics			4/2/0/0 PL 2/1/0/0/0 2/1/0/0/0		**6**
MW-MB-ET-21 [9, 17]	Nuclear Reactor Engineering - Nuclear Reactor Technology - Radioactivity and Radiation Protection - Decommissioning of Nuclear Facilities			3/1/0/1/0 2xPL 1/1/0/0/0 1/0/0/1/0 1/0/0/0/0		**6**
MW-MB-ET-22 [9]	Reactor Physics - Reactor Physics Aspects			3/1/0/1/0 2xPL 3/1/0/1/0		**6**
MW-MB-ET-24 [9, 11]	Machine Laboratory - Higher Metrology in Mechanical Engineering - Machine Inspections			4/0/0/2/0 PL 2/0/0/1/0 2/0/0/1/0		**6**
MW-MB-ET-35 [9]	European Course of Cryogenics - ECC - European Course of Cryogenics - Cryogenic Fundamentals			3/2/0/0 PL 3/2/0/0/0		**6**
MW-MB-ET-40 [8, 9]	Energy Storage and Energy Systems - Electrical Energy Storage - Storage and Networks (Gas) - Control Engineering Problems Relating to Energy Storage Systems and Energy Systems			4/2/0/0 PL 2/1/0/0/0 1/0/0/0/0 1/1/0/0/0		**6**
MW-MB-ET-42 [43]	Refrigeration and heat pump technology for mobile applications - Refrigeration and heat pump technology for mobile applications			3/1/0/1/0 2xPL 3/1/0/1/0		**6**
MW-MB-ET-44, [53]	Thermal Turbines - Steam and Gas Turbines			4/2/0/0 2xPL 4/2/0/0/0		**6**
Choice of 3 out of 11 modules						
MW-MB-ET-23 [1, 9] MW-MB-LRT-33 [1, 9]	Turbocompressors - Turbocompressor				2/2/0/0 PL 2/2/0/0/0	**6**

Module no.	Module name	5th Semester	6th Semester	8th Semester (M)	9th Semester (M)	LP
		V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	
~~MW-MB-ET-25~~ [3]	~~Heat Supply~~ ~~- District Heating Supply~~ - ~~Heating Technology~~				~~3/2/0/0 PL~~ ~~2/2/0/0/0~~ ~~1/0/0/0/0~~	~~6~~
MW-MB-ET-26 [9]	Energy and Load Management - Energy Management and Optimisation - Load Management				3/3/0/0 PL 2/2/0/0/0 1/1/0/0/0	**6**
MW-MB-ET-27 [9]	Cryogenics - Cryogenics				3/2/0/0 PL 3/2/0/0/0	**6**
~~MW-MB-ET-28~~ [3]	Heat Pumps, Organic Vapour Cycle Processes (ORC) and ORC Machines - ORC - Processes and Machines - Heat Pumps and Expansion Machines				~~4/1/0/1/0 2xPL~~ ~~2/1/0/0/0~~ ~~2/0/0/1/0~~	~~6~~
~~MW-MB-ET-29~~ [8]	Innovative Energy Storage Systems - Innovative Energy Storage Applications - Control and Optimisation of Energy Storage Systems				~~4/1/0/1/0 PL~~ ~~2/0/0/0/0~~ ~~2/1/0/1/0~~	~~6~~
MW-MB-ET-30 [9, 17]	Process Simulation and Validation in Power Engineering - Modelling and Simulation of Energy Storage Systems and Energy Converters using MATLAB/Simulink - Simulation of Thermal Processes				4/2/0/0 PL 2/1/0/0/0 2/1/0/0/0	**6**
MW-MB-ET-31 [9]	Process Measurement Technology and Mathematical Methods of Measurement Data Processing - Mathematical Methods of Signal and Image Data Processing - Process Measurement Technology and Sensors				4/0/0/1/0 PL 2/0/0/1/0 2/0/0/0/0	**6**
MW-MB-ET-32 [9, 17]	Thermo Hydraulics and Safety of Nuclear Facilities - Nuclear Safety Methods - Thermohydraulics of Nuclear Reactors				3/1/0/1/0 2xPL 2/1/0/1/0 1/0/0/0/0	**6**
MW-MB-ET-33 [9]	Hydrogen Energy Technology - Hydrogen Energy Technology				3/1/0/1/0 2xPL 3/1/0/1/0	**6**

Module no.	Module name	5th Semester	6th Semester	8th Semester (M)	9th Semester (M)	LP
		V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	
~~MW-MB-ET-34~~ [9, 43]	~~Load Management of Refrigeration Plants~~ ~~- Demand Side of Refrigeration and Air Conditioning Systems~~ ~~- Components and Control for variable Load Requirements~~				~~2/2/0/0 PL~~ ~~1/1/0/0/0~~ ~~1/1/0/0/0~~	~~6~~
MW-MB-ET-38 [3, 9, 39]	Processes and Machines for Low Temperature and Waste Heat Utilization - ORC - Processes and Machines - Heat Pumps and Expansion Machines				4/2/0/0 PL 2/1/0/0/0 2/1/0/0/0	**6**
MW-MB-ET-39 [3, 9]	District Heating Systems - District Heating Supply - Heating Technology				3/2/0/0 PL 2/2/0/0/0 1/0/0/0/0	**6**
MW-MB-ET-41 [8, 9]	Methods and System Concepts for Innovative Energy Storage Applications - Hybrid Storage Systems and Sector Coupling - Innovative Energy Storage Applications				4/2/0/0 PL 2/2/0/0/0 2/0/0/0/0	**6**
MW-MB-ET-43 [43]	Demand Side management of refrigeration systems and heat pumps - Demand Side Management of Refrigeration and Air Conditioning Systems - Control of Refrigeration and Heat Pump Systems				2/2/0/0/0 PL 1/1/0/0/0 1/1/0/0/0	**6**

Module no.	Module name	5th Semester	6th Semester	8th Semester (M)	9th Semester (M)	LP
		V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	
Field of study Automotive and Railway Vehicle Engineering (KST) [4)]						
Elective modules						
Recommendation for profiling [1] Vehicle Technology in Road Operations [2] Rail Vehicle Technology			MW-MB-KST-01, -02, -03 - -05, -06, -07, -08 - -14, -15, -16 - -19, -21, -23, -24 , -33, -35 **) MW-MB-KST -01, -03, -04 - -05, -09, -10, -11 - -17, -18, -19 - -25, -26, -27, -34**			
		Choice of 3 out of 5 modules				
MW-MB-KST-01 MW-MB-AKM-02	Fluid Power and Electrical Drive Systems - Basics of Fluid Power Drives and Controls - Electric Drives	4/2/0/0 PL 2/1/0/0/0 2/1/0/0/0				**7**
MW-MB-KST-02 [24]	Fundamentals of Automotive Engineering - Advanced Fundamentals Internal Combustion Engines - Automotive I - Components and Subsystems	3/2/0/1/0 PL 1/0/0/1/0 2/2/0/0/0				**7**
MW-MB-KST-03 [52]	Fundamentals of Internal Combustion Engines and Drive Systems - Drive Systems - Fundamentals of Combustion Engines - Design Document Drive Assembly	4/2/0/0 2xPL 2/0/0/0/0 2/0/0/0/0 0/2/0/0/0				**7**
MW-MB-KST-04	Fundamentals of Rail Vehicles - Fundamentals of Rail Vehicle Technology - Basics of Traction Unit Technology	4/1/0/0 PL 2/1/0/0/0 2/0/0/0/0				**7**

Module no.	Module name	5th Semester	6th Semester	8th Semester (M)	9th Semester (M)	LP
		V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	
MW-MB-KST-28 [17, 23, 24, 32] MW-MB-AKM-01 [17, 23, 24, 32] MW-MB-VTMB-01 [17, 23, 24, 32]	Fundamentals of Construction and Dynamic Dimensioning of Machines - Constructive Development Process - Machine Dynamics	4/2/0/1/0 2xPL 2/0/0/1/0 2/2/0/0/0				**7**
Choice of 2 out of 4 modules						
MW-MB-KST-05	Construction Materials and Structural Durability - Construction Materials - Operational Strength		3/1/0/0 PL 2/0/0/0/0 1/1/0/0/0			**6**
MW-MB-KST-07	Advanced Course: Internal Combustion Engines - Internal Combustion Engine Design - Selected Chapters of Internal Combustion Engines		4/0/0/0 PL 2/0/0/0/0 2/0/0/0/0			**6**
MW-MB-KST-11	Electrical Drive and Control Systems - Traction Motors - Rail Vehicle Control Technology		6/0/0/0 PL 4/0/0/0/0 2/0/0/0/0			**6**
MW-MB-KST-11 [44, 58] **(valid for the SoSe 2024)**	Electrical Drive and Control Systems - Electric vehicles - Traction Motors Theory of electric traffic systems (only part on asynchronous machine as preparation for "traction motors")		6/0/0/0 PL 3/0/0/0/0 (optional 1 SWS exercise) 2/0/0/0/0 (optional 2 SWS exercise) 1/0/0/0/0			**6**
MW-MB-KST-12	Diagnostics and Acoustics - Measured Value Processing and Diagnostic Technology - Machine and Vehicle Acoustics		4/2/0/1/0 PL 2/1/0/0/0 2/1/0/1/0			**6**

Module no.	Module name	5th Semester	6th Semester	8th Semester (M)	9th Semester (M)	LP
		V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	
Choice of 2 out of 5 modules						
MW-MB-KST-06	Connected Mechatronic Systems - Electronic Vehicle Systems and Automated Driving Functions - Laboratory Practical Course in Vehicle Electronics - Networked Systems and Vehicle Communication		4/0/0/1/0 PL 2/0/0/0/0 0/0/0/1/0/ 2/0/0/0/0			**7**
MW-MB-KST-08 [24]	Full Vehicle Functions in Automotive Engineering - KFZ II - Complete Vehicle Functions - Laboratory Practical Course Automotive Engineering		2/0/0/4/0 2xPL 2/0/0/0/0 0/0/0/4/0			**7**
MW-MB-KST-09	Traction Mechanics - Driving Dynamics - Traction Unit Configurations		4/1/0/1/0 PL 2/1/0/0/0 2/0/0/1/0			**7**
MW-MB-KST-09 [44, 58] **(valid for the SoSe 2024)**	Traction Mechanics - Driving Dynamics - Traction Unit Configurations		4/1/0/0/0 PL 2/1/0/0/0 2/0/0/0/0			**7**
MW-MB-KST-10	Supporting Structures of Rail Vehicles - Supporting Structures		3/1/0/0 PL 3/1/0/0/0			**7**
~~MW-MB-AKM-09~~ [17, 26] ~~MW-MB-KST-29~~ [17, 26]	~~Tools and Methods of Product Development~~ ~~- Digital MockUp in Product Development~~ ~~- Designing with CAD~~		~~2/4/0/0 2xPL~~ ~~1/2/0/0/0~~ ~~1/2/0/0/0~~			~~7~~
MW-MB-KST-32 [26] MW-MB-AKM-37 [26]	Methodical Product Development and Selected Tools - Digital MockUp in Product Development - Designing with CAD		2/4/0/0 2xPL 1/2/0/0/0 1/2/0/0/0			**7**

Module no.	Module name	5th Semester	6th Semester	8th Semester (M)	9th Semester (M)	LP
		V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	
Choice of 3 out of 9 modules						
MW-MB-KST-13 [24]	Dynamics of Vehicle Drives - Dynamics of Vehicle Drives			2/2/0/2/0 PL 2/2/0/2/0		**6**
MW-MB-KST-14 [24]	Simulation and Experimental Studies on Internal Combustion Engines - Experimental Studies on Combustion Engines - Simulation of Combustion Engines			2/0/4/0/0 PL 0/0/4/0/0 2/0/0/0/0		**6**
MW-MB-KST-15 [24]	Functional Design in Automotive Engineering - KFZ III - Functional Design - Selected Chapters of Automotive Engineering			4/0/0/0 PL 2/0/0/0/0 2/0/0/0/0		**6**
MW-MB-KST-16 [24]	Operations Safety in Connected, Automated Driving - Vehicle Concepts in Connected, Automated Driving - Human-machine Interaction and Modelling			4/2/0/0 PL 2/1/0/0/0 2/1/0/0/0		**6**
~~MW-MB-KST-17 [24, 56]~~	~~Brake Systems and Brake Operation - Braking of the Rail Vehicles~~			~~4/0/0/1/0 PL 4/0/0/1/0~~		~~**6**~~
MW-MB-KST-18 [24, 30]	Running Gears of Rail Vehicles - Running Gears of the Rail Vehicles			2/2/0/0 PL 2/2/0/0/0		**6**
MW-MB-KST-19 [12, 24, 27, 40, 57]	Rail Vehicle Design - Alternative Rail Vehicle Concepts - Project Work Rail Vehicle Technology			2/1/0/1/0 2xPL 2/0/0/0/0 0/1/0/1/0		**6**
MW-MB-KST-34 [45, 59] **(valid for the SoSe 2024)**	Quality and RAMS Management - Quality and RAMS Management			2/2/0/0/0 PL 2/2/0/0/0		**6**

Module no.	Module name	5th Semester	6th Semester	8th Semester (M)	9th Semester (M)	LP
		V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	
~~MW-MB-KST-20~~ [9, 24, 43] ~~MW-MB-ET-14~~ [9, 24, 43]	~~Mobile Refrigeration and Special Cooling Tasks~~ ~~- Mobile Refrigeration and Special Refrigeration Tasks~~			~~3/1/0/1/0 2xPL~~ ~~3/1/0/1/0~~		**~~6~~**
MW-MB-KST-33 [29]	Engineering Design - Concept Development of a Formula Student Vehicle - Engineering Design - Concept Development of a Formula Student Vehicle			0/0/1/3/0 PL 0/0/1/3/0		**6**
MW-MB-KST-35 [43]	Mobile Refrigeration and Heat Pump Technology - Mobile Refrigeration and Heat Pump Technology			3/0/0/1/0 2xPL 3/0/0/1/0		**6**
MW-MB-KST-36 [56]	Brakes on rail vehicles - Brakes on rail vehicles			3/1/0/0,5/0 PL 3/1/0/0,5/0		**6**
Choice of 3 out of 8 modules						
MW-MB-KST-21 [19, 24, 36, 51]	Design and Optimization of Vehicle Systems - Energy Management and Operating Strategies for Mobile and Stationary Energy Systems - Design of Mechatronic Systems				4/1/0/0 PL 2/0/0/0/0 2/1/0/0/0	**6**
MW-MB-KST-22 [19, 24, 36, 51]	Simulation Methods in Vehicle Development - Simulation Methods in Vehicle Development and optionally - Internship Vehicle Calculation KFZ or - Internship Vehicle Calculation SFZ				2/2/0/2/0 PL 2/2/0/0/0 and optionally 0/0/0/2/0 or 0/0/0/2/0	**6**
MW-MB-KST-23 [19, 24, 36, 51]	Vehicle Safety - Vehicle Safety of Automated Vehicles - Integral Safety				4/0/0/1/0 PL 2/0/0/1/0 2/0/0/0/0	**6**

Module no.	Module name	5th Semester	6th Semester	8th Semester (M)	9th Semester (M)	LP
		V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	
MW-MB-KST-24 [19, 24, 36, 51]	Motorcycle and Commercial Vehicle Technology - Motorbike Technology - Commercial Vehicle Technology				4/0/0/0 PL 2/0/0/0/0 2/0/0/0/0	**6**
MW-MB-KST-25 [18, 19, 24, 35, 36, 50, 51]	Design of Traction Units - Alternative Traction Unit Drives - Driving Dynamics Simulation - Project Work Traction Unit Technology				3/2/0/1/0 2xPL 2/0/0/0/0 1/1/0/0/0 0/1/0/1/0	**6**
MW-MB-KST-26 [19, 24, 36, 51]	Advanced Course: Rail Vehicles - Selected specialisations in Traction and Rail Vehicle Technology - Maintenance - Local Transport Vehicles				6/0/0/0 2xPL 2/0/0/0/0 2/0/0/0/0 2/0/0/0/0	**6**
MW-MB-KST-27 [19, 24, 36, 51]	Electrical Railway Systems - Electric Railways - Project Work Electrical Systems in Railway Vehicles				2/1/0/2/0 2xPL 2/0/0/1/0 0/1/0/1/0	**6**

Module no.	Module name	5th Semester	6th Semester	8th Semester (M)	9th Semester (M)	LP
		V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	
Field of study Lightweight Engineering (LB) [4)]						
Compulsory modules						
MW-MB-LB-01 [36]	Fundamentals of Lightweight Engineering - Basic Features of Lightweight Construction - Machine Dynamics	4/2/0/0 PL 2/1/0/0/0 2/1/0/0/0				**7**
MW-MB-LB-02	Lightweight Materials - Fundamentals of Polymer Materials - Plastics Testing - Non-ferrous Metals, Ceramics, Natural Materials	5/0/0/1/0 2xPL 2/0/0/0/0 1/0/0/1/0 2/0/0/0/0				**7**
MW-MB-LB-03 [1, 39]	Fiber-Reinforced Materials - Fibre Composites - Textile semi-finished Products and Process	4/1/0/1/0 PL 2/1/0/0/0 2/0/0/1/0				**7**
MW-MB-LB-04	Calculation of Lightweight Structures - Calculation of Lightweight Structures 1 - Simulation Technology		3/1/0/2/0 PL 2/1/0/0/0 1/0/0/2/0			**7**
MW-MB-LB-05 [39]	Fiber Composites Technology - Fiber Composites Technologies - Connection Techniques		3/2/0/0 PL 1/1/0/0/0 2/1/0/0/0			**6**
MW-MB-LB-06	Fundamentals of Polymer Technology - Plastics Technology - Plastics Processing		4/2/0/0 PL 2/1/0/0/0 2/1/0/0/0			**7**
MW-MB-LB-07 [46]	Development of Lightweight Structures - Lightweight Construction Exercise - Lightweight Construction		2/2/0/0 PL 0/2/0/0/0 2/0/0/0/0			**6**

Module no.	Module name	5th Semester	6th Semester	8th Semester (M)	9th Semester (M)	LP
		V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	
Elective modules						
Recommendation for profiling [1] Lightweight Design Engineer [2] Lightweight Design Calculation Engineer [3] Lightweight Construction Engineer				MW-MB-LB-08, -09, -15, -17, -20, -21, -24 **) MW-MB-LB-08, -11, -12, -15, -17, -19, -21, -24 **) MW-MB-LB-09, -10, -13, -16, -18, -20, -21 **)		
			Choice of 3 out of 7 modules			
MW-MB-LB-08	Dimensioning of Lightweight Structures - Calculation of Composite Fibre Structures 1 - Calculation of Lightweight Structures 2			4/2/0/0 PL 2/1/0/0/0 2/1/0/0/0		**6**
MW-MB-LB-09	Design of Lightweight Structures - Designing with Fibre Composites 1 - Design of Lightweight Structures			4/1/0/0 PL 2/1/0/0/0 2/0/0/0/0		**6**
MW-MB-LB-10 [39]	Polymer Technologies - Process Design of Plastics Processing - Tool Design			3/2/0/0 PL 2/1/0/0/0 1/1/0/0/0		**6**
MW-MB-LB-11 [1] MW-MB-LRT-09 [1]	Vibration Technology and Structural Durability - Operational Strength - Vibration Technology			3/2/0/0 PL 1/1/0/0/0 2/1/0/0/0		**6**
MW-MB-LB-12	Continuum Mechanics and Structural Analysis - Continuum Mechanics - Beam and Shell Structures			4/1/0/0 2xPL 2/1/0/0/0 2/0/0/0/0		**6**
MW-MB-LB-13	Construction Materials and Surface Engineering - Construction Materials - Surface Technology			4/1/0/0 PL 2/0/0/0/0 2/1/0/0/0		**6**
~~MW-MB-LB-14~~ [34]	~~Function-Integrated Components~~ - Lightweight Mechanisms - Multifunctional Structures			~~4/2/0/0 PL~~ ~~2/1/0/0/0~~ ~~2/1/0/0/0~~		~~**6**~~

Module no.	Module name	5th Semester	6th Semester	8th Semester (M)	9th Semester (M)	LP
		V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	
MW-MB-LB-24 [34] MW-MB-LRT-36 [34]	Multifunctional Structures and Function-Integrated Components - Lightweight Mechanisms Multifunctional Structures			4/2/0/0 PL 2/1/0/0/0 2/1/0/0/0		**6**
Choice of 3 out of 8 modules						
MW-MB-LB-15	Calculation and Design with Fiber Composites - Calculation of Fibre Composite Structures 2 - Designing with Fibre Composites 2				3/2/0/0 PL 2/1/0/0/0 1/1/0/0/0	**6**
MW-MB-LB-16 [39] MW-MB-VTMB-29 [39]	Manufacturing of Fiber Composite Structures - Technologies for Thermoset Composites - Technologies for Thermoplastic Composites				3/2/0/0 PL 2/1/0/0/0 1/1/0/0/0	**6**
MW-MB-LB-17 [37] MW-MB-VTMB-28 [37]	Adaptive Structures for Lightweight Design - Active Compliant Structures - Function-integrative Lightweight Structures				3/2/0/0 PL 1/1/0/0/0 2/1/0/0/0	**6**
MW-MB-LB-18	Quality Assurance Management - Process Analysis - Quality Assurance				4/1/0/0 PL 2/0/0/0/0 2/1/0/0/0	**6**
MW-MB-LB-19	Damage and Fatique of Fiber Composites - Fatigue in Fibre Composites - Damage in Fibre Composites				3/2/0/0 PL 1/1/0/0/0 2/1/0/0/0	**6**
MW-MB-LB-20	Designing with Polymers - Design Suitable for Plastics - Special Problems in Plastics Technology				4/1/0/0 PL 2/1/0/0/0 2/0/0/0/0	**6**

Module no.	Module name	5th Semester	6th Semester	8th Semester (M)	9th Semester (M)	LP
		V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	
MW-MB-LB-21 [39]	Special Problems of Lightweight Engineering Selection of 2 out of 4 contents (upper Seminars) - FEM in Multi-material Design - Function-integrative Lightweight Construction - FVW and Plastics in Medical Technology - Lightweight Construction through Bionics				0/4/0/0 PL 0/2/0/0/0 0/2/0/0/0 0/2/0/0/0 0/2/0/0/0	**6**
MW-MB-LB-22	Sector-specific Lightweight Structures and Technologies Selection of 1 out of 3 contents - 3D CAE technique for Fibre-based Materials (MW-MB-VTMB-18) - Functionalisation and Boundary Layer Design (MW-MB-VTMB-20) - Assembly and Robotics (MW-MB-PT-25)				#/#/#/# PL [5)] 1/2/0/2/0 PL 2/0/0/3/0 PL 3/2/0/0 2xPL	**6**

Module no.	Module name	5th Semester	6th Semester	8th Semester (M)	9th Semester (M)	LP
		V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	
Field of study Aerospace Engineering (LRT) [4)]						
Compulsory modules						
MW-MB-LRT-01 [9]	Fundamentals of Aerodynamics and Flight Mechanics - Aerodynamics 1 - Fundamentals of Flight Mechanics	4/3/0/0 PL 2/2/0/0/0 2/1/0/0/0				**7**
MW-MB-LRT-02 [17]	Fundamentals of Aerospace Vehicles - Aircraft Design - Space Systems	4/3/0/0 PL 2/2/0/0/0 2/1/0/0/0				**7**
MW-MB-LRT-03	Fundamentals of Aerospace Engineering - Aerospace Materials - Fluid Mechanics Fundamentals of Turbomachinery	4/2/0/0 PL 2/0/0/0/0 2/2/0/0/0				**7**
MW-MB-LRT-04	Fundamentals of Flight Propulsion - Gas Dynamics - Aircraft Propulsion 1		4/2/0/0 PL 2/1/0/0/0 2/1/0/0/0			**7**
MW-MB-LRT-05	Numerical Methods of Fluid Mechanics and Structural Mechanics - Finite Element Method - Computational Fluid Dynamics		4/1/0/2/0 PVL, PL 2/0/0/1/0 2/1/0/1/0			**7**
Elective modules						
Recommendation for profiling [1] Aircraft Technology [2] Space Technology [3] Aircraft Engines			MW-MB-LRT-06, -09, -10, -13, -14, -15, -16, -17, -24, -28, -29, -35 ***) MW-MB-LRT-07, -09, -10, -13, -17, -18, -19, -20, -30, -31 ***) MW-MB-LRT-08, -09, -10, -21, -22, -23, -24, -26, -27, -32, -33 ***)			
Choice of 2 out of 4 modules						
MW-MB-LRT-06 [17, 46]	Aircraft Design - Aircraft Design 1 - Numerical Tools for Aircraft Design		2/3/0/0 2xPL 2/1/0/0/0 0/2/0/0/0			**6**
MW-MB-LRT-07	Space Technology - Basics of Space Propulsion - Satellite Technology		4/2/0/0 PL 2/1/0/0/0 2/1/0/0/0			**6**

Module no.	Module name	5th Semester	6th Semester	8th Semester (M)	9th Semester (M)	LP
		V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	
MW-MB-LRT-08	Turbomachines for Flight Propulsion - Turbomachinery Theory		2/2/0/0 PL 2/2/0/0/0			**6**
MW-MB-LRT-09 [1] MW-MB-LB-11 [1]	Vibration Technology and Structural Durability - Operational Strength - Vibration Technology		3/2/0/0 PL 1/1/0/0/0 2/1/0/0/0			**6**
Choice of 3 out of 14 modules						
MW-MB-LRT-10 [17, 46]	Design of Innovative Aerospace Structures - Design of Composite Aerospace Vehicles - Design Project Aerospace Structures			2/3/0/0 2xPL 2/2/0/0/0 0/1/0/0/0		**6**
~~MW-MB-LRT-11~~ [34]	~~Multifunctional Structures and Components~~ ~~- Lightweight Mechanisms~~ ~~- Multifunctional Structures~~			~~4/2/0/0 PL~~ ~~2/1/0/0/0~~ ~~2/1/0/0/0~~		~~6~~
MW-MB-LRT-12 MW-MB-SIM-11	Fracture Criteria and Fracture Mechanics - Fracture Criteria and Fracture Mechanics			2/2/0/0 PL 2/2/0/0/0		**6**
MW-MB-LRT-13 [12, 17, 46]	Interdisciplinary Design Project Aerospace Engineering - Interdisciplinary Design Project Aerospace Engineering			0/2/0/2/0 PL 0/2/0/2/0		**6**
MW-MB-LRT-14 [17, 46]	Aircraft Structures - Aircraft Design Project - Aircraft Design 2			2/3/0/0 2xPL 0/2/0/0/0 2/1/0/0/0		**6**
MW-MB-LRT-15 [46]	Aerodynamics of Aircraft - Aerodynamics 2 - Flow Practical Course			2/2/0/1/0 2xPL 2/1/0/0/0 0/1/0/1/0		**6**
MW-MB-LRT-16	Aircraft Manufacturing - Introduction to Aircraft Production - Special Manufacturing Processes			4/1/0/0 PL 2/1/0/0/0 2/0/0/0/0		**6**

Module no.	Module name	5th Semester	6th Semester	8th Semester (M)	9th Semester (M)	LP
		V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	
MW-MB-LRT-17 [17]	Flight Dynamics and Control - Flight Dynamics - Flight Control			4/2/0/0 PL 2/1/0/0/0 2/1/0/0/0		**6**
MW-MB-LRT-18 [32, 46]	Space Mission Design - Orbital Mechanics and Mission Planning - Spacecraft Attitude Control Systems - Mission Planning and Design			4/1/0/0 2xPL 2/0/0/0/0 1/0/0/0/0 1/1/0/0/0		**6**
MW-MB-LRT-19	Space Propulsion - Electric Space Propulsion and Future Concepts - Support Systems			4/1/0/0 PL 2/1/0/0/0 2/0/0/0/0		**6**
MW-MB-LRT-20 [38]	Space Enviroment - Astronautics and Life Support Systems - Interplanetary Space Travel - Space Environment and Space Weather			5/0/0/0 PL 1/0/0/0/0 2/0/0/0/0 2/0/0/0/0		**6**
MW-MB-LRT-21	Technology of Flight Propulsion - Aircraft Propulsion 2			2/2/0/0 PL 2/2/0/0/0		**6**
MW-MB-LRT-22	Thermofluiddynamics - Thermofluid Dynamics			2/2/0/0 PL 2/2/0/0/0		**6**
MW-MB-LRT-23 MW-MB-SIM-14	Turbulent Flows and their Modelling - Turbulent Flow and their Modelling			2/2/0/1/0 PL 2/2/0/1/0		**6**
MW-MB-LRT-36 [34] MW-MB-LB-24 [34]	Multifunctional Structures and Function-Integrated Components - Lightweight Mechanisms - Multifunctional Structures			4/2/0/0 PL 2/1/0/0/0 2/1/0/0/0		**6**

Module no.	Module name	5th Semester	6th Semester	8th Semester (M)	9th Semester (M)	LP
		V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	
Choice of 3 out of 12 modules						
MW-MB-LRT-24 [9, 17, 46] MW-MB-SIM-22 [9, 17, 46]	Aeroelastics - Basics of Aeroelasticity - Aeroelasticity Design Project - Structure-flow Coupling				4/1/0/0 2xPL 2/0/0/0/0 0/1/0/0/0 2/0/0/0/0	**6**
MW-MB-LRT-25 [9]	Communication Navigation Surveillance (CNS) - Communication Surveillance - Navigation				4/0/0/1 PL 2/0/0/0/1 2/0/0/0/0	**6**
MW-MB-LRT-26 [9]	Probabilistics and Robust Design - Probabilistic and Robust Design				3/2/0/0 PL 3/2/0/0/0	**6**
MW-MB-LRT-27 [9, 46] MW-MB-SIM-20 [9, 46]	Simulation Technology in Fluid Mechanics - Advanced Computational Fluid Dynamics - Flow Simulation on Supercomputers				3/1/0/1/0 2xPL 2/1/0/0/0 1/0/0/1/0	**6**
MW-MB-LRT-28 [9]	Aircraft Maintenance - Basics of Aircraft Maintenance - Repair Technologies for Aircraft Structures				4/1/0/0 PL 2/0/0/0/0 2/1/0/0/0	**6**
MW-MB-LRT-29 [9, 17]	Aircraft Systems - Introduction to Aircraft Systems - Aircraft Hydraulics				3/2/0/0 PL 2/1/0/0/0 1/1/0/0/0	**6**
MW-MB-LRT-30 [9, 46]	Space and Science - Design of Scientific Space Experiments - Seminar Space and Science				3/2/0/0 2xPL 1/1/0/0/0 2/1/0/0/0	**6**
MW-MB-LRT-31 [9]	Energy Supply in Space - Power Systems for Spacecraft - Space Electronics and Software				3/1/0/0 PL 2/1/0/0/0 1/0/0/0/0	**6**
MW-MB-LRT-32 [9, 46]	Design of Jet Engines - Jet Engine Design - Design Project ZTL				2/2/0/0 2xPL 2/1/0/0/0 0/1/0/0/0	**6**

Module no.	Module name	5th Semester	6th Semester	8th Semester (M)	9th Semester (M)	LP
		V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	
MW-MB-LRT-33 [1, 9] MW-MB-ET-23 [1, 9]	Turbocompressors - Turbocompressor				2/2/0/0 PL 2/2/0/0/0	**6**
MW-MB-LRT-34 [9, 46]	Fundamentals of Flight Operations within the Modern Cockpit - Air Traffic Facilities, Operations and Air Traffic Control - Cockpit Technologies				4/1/0/0 2xPL 2/0/0/0/0 2/1/0/0/0	**6**
MW-MB-LRT-35 [14, 46]	Optimal and Robust Flight Control - Optimal and Robust Flight Control				3/2/0/0 2xPL 3/2/0/0/0	**6**

Module no.	Module name	5th Semester	6th Semester	8th Semester (M)	9th Semester (M)	LP
		V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	
Field of study Production Engineering (PT) [4)]						
Compulsory modules						
MW-MB-PT-01 [1]	Production Engineering - Manufacturing Processes - Joining Technology - Surface and Coating Technology - Forming and Remoulding Technology - Cutting and Removal Technology	4/2/0/0 2xPL 1/0/0/0/0 1/0/0/0/0 1/1/0/0/0 1/1/0/0/0				**7**
MW-MB-PT-02 [54]	Production Engineering - Manufacturing and Planning - Occupational Science - Production Planning - Production and Logistics	4/1/0/0 PL 1/0/0/0/0 2/1/0/0/0 1/0/0/0/0				**7**
MW-MB-PT-03	Production Engineering - Machine Tools and Production Automatization - Production Automation - Machine Tools - Basics	4/2/0/0 PL 2/1/0/0/0 2/1/0/0/0				**7**
Elective modules						
Recommendation for profiling [1] Method and Machine 2] Procedure and Planning 3] Planning and People			MW-MB-PT- 04, -05, -06, -09, -10, -12, -13, -14, -15, -16, -20, -21, -23, -24, -26, -27, -29, -30, -31 ****) MW-MB-PT- 04, -05, -09, -12, -13, -14, -15, -16, -19, -23, -24, -25, -26, -27, -31, -33, -34 ****) MW-MB-PT- 04, -05, -11, -17, -18, -19, -25, -28, -29, -33, -34 ****)			
Selection of 2 out of 4 modules						
MW-MB-PT-04 [47]	Manufacturing Processes - Advanced Course - Welding Process - Forming Process Design		3/2/0/0 PL 2/1/0/0/0 1/1/0/0/0			**7**

Module no.	Module name	5th Semester	6th Semester	8th Semester (M)	9th Semester (M)	LP
		V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	
MW-MB-PT-05 [31]	Additive Manufacturing - Additive Manufacturing of Metallic Components - Additive Manufacturing of non-metallic Components - Original Mould Technology		4/2/0/0 2xPL 1/1/0/0/0 1/1/0/0/0 2/0/0/0/0			**7**
MW-MB-PT-06	Development of Machine Tools - Building Group Design - Controlled Drives		4/2/0/1/0 PL 2/1/0/1/0 2/1/0/0/0			**7**
~~MW-MB-PT-07~~ [8]	~~Industrial Engineering~~ ~~- Work Organisation~~ ~~- Ergonomics~~		~~4/2/0/0 2xPL~~ ~~2/1/0/0/0~~ ~~2/1/0/0/0~~			~~**7**~~
~~MW-MB-PT-32~~ [8, 53]	~~Industrial Engineering and Ergonomics~~ ~~- Work Organisation~~ ~~- Ergonomics~~		~~4/2/0/0 2xPL~~ ~~2/1/0/0/0~~ ~~2/1/0/0/0~~			~~**7**~~
MW-MB-PT-34 [53]	Ergonomics and Industrial Engineering - Work Organisation - Ergonomics		4/2/0/0 2xPL 2/1/0/0/0 2/1/0/0/0			**7**
Selection of 2 out of 4 modules						
~~MW-MB-PT-08~~ [47, 53]	~~Production Planning - Advanced Course~~ ~~- Production Planning - Assembly~~ ~~- Production Planning - Parts Production~~		~~2/2/0/0 2xPL~~ ~~1/1/0/0/0~~ ~~1/1/0/0/0~~			~~**6**~~
MW-MB-PT-09 [1, 46]	Laser and Plasma Technology - Laser Technology - Plasma Technology		3/2/0/0 2xPL 2/1/0/0/0 1/1/0/0/0			**6**
MW-MB-PT-10	Production Measurement Technology - Higher Metrology in Mechanical Engineering - Coordinate Measuring Technology		4/0/0/2/0 PL 2/0/0/1/0 2/0/0/1/0			**6**
MW-MB-PT-11 [48]	Production System and Intralogistics - Production System Planning - Intralogistics Systems		4/0/0/0 PL 2/0/0/0/0 2/0/0/0/0			**6**
MW-MB-PT-33 [53]	Production Planning - Parts Production and Assembly - Production Planning - Assembly - Production Planning - Parts Production		2/2/0/0 2xPL 1/1/0/0/0 1/1/0/0/0			**6**

Module no.	Module name	5th Semester	6th Semester	8th Semester (M)	9th Semester (M)	LP
		V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	
Selection of 3 out of 10 modules						
MW-MB-PT-12 [12, 27, 40, 46, 57]	Surface Engineering - Micro and Fine Machining - Thermal Surface Technology			2/2/0/0 2xPL 1/1/0/0/0 1/1/0/0/0		**6**
MW-MB-PT-13	Photonic Measurement Technology - Photonic Metrology - Practical Course Photonic Metrology			3/0/0/2/0 2xPL 3/0/0/0/0 0/0/0/2/0		**6**
MW-MB-PT-14 [47]	Joinability - Adhesive Bonding Technology - Soldering Technology - Mechanical Joining			3/2/0/0 PL 1/1/0/0/0 1/0/0/0/0 1/1/0/0/0		**6**
MW-MB-PT-15 [17]	Production Automatization - Advanced Course - Manufacturing Informatics - Multi-axis Technologies - Rapid Product Development			3/2/0/0 PL 1/1/0/0/0 1/1/0/0/0 1/0/0/0/0		**6**
MW-MB-PT-16	Methods to Simulate and Design Part Made by Prototyping, Blanking, and Forming Technology - Forming and Cutting Technology - Original Mould Technology			2/2/0/1/0 PL 2/1/0/0/0 0/1/0/1/0		**6**
MW-MB-PT-17 [48, 61]	Manufacturing Management - Strategic Production Logistics - Operative Production Logistics - Production Planning and Control (PPS) - Project Management			4/1/0/0 PL 1/0/0/0/0 1/0/0/0/0 0/1/0/0/0 2/0/0/0/0		**6**
MW-MB-PT-18	Material Flow Systems - Material Flow Statement - Simulation of Material Flow Systems			4/1/0/0 PL 2/0/0/0/0 2/1/0/0/0		**6**
MW-MB-PT-19 [10, 55]	Work Design - Occupational Safety and Risk Management - Working Environment - Work Science Process Design - Human Factors			4/0/0/0 PL 1/0/0/0/0 1/0/0/0/0 1/0/0/0/0 1/0/0/0/0		**6**

Module no.	Module name	5th Semester	6th Semester	8th Semester (M)	9th Semester (M)	LP
		V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	
MW-MB-PT-20 [46]	Conceptual Design of Machine Tools - Fundamentals of WZM Design - Exercise Conceptual Design			2/3/0/0 PL 2/0/0/0/0 0/3/0/0/0		**6**
MW-MB-PT-21 MW-MB-VTMB-10	Control of Production Machines and Plants - Motion Controls (NC/MC) - Basics of Machine Controls - Function Controls (PLC)			2/3/0/0 PL 0/1/0/0/0 2/0/0/0/0 0/2/0/0/0		**6**
Selection of 3 out of 9 modules						
~~MW-MB-PT-22~~ [3]	~~Micro and Nanotechnologies~~ ~~- Nanotechnologies~~ ~~- Ultra-precision Machining~~				~~3/0/0/1/0 PL~~ ~~1/0/0/1/0~~ ~~2/0/0/0/0~~	~~**6**~~
MW-MB-PT-23	Laser Precision Machining - Laser Precision Machining				2/1/0/1/0 PL 2/1/0/1/0	**6**
MW-MB-PT-24 [47]	Weldability - Welding Production and Microjoining Technology - Weld Calculation and Design				3/2/0/0 PL 2/1/0/0/0 1/1/0/0/0	**6**
MW-MB-PT-25 [46, 47]	Assembly and Robotics - Handling and Robotics - Assembly Technology and Systems				3/2/0/0 2xPL 2/1/0/0/0 1/1/0/0/0	**6**
MW-MB-PT-26 [21]	Cutting and Erosion Manufacturing Engineering - Material Removal Technology and Tool Design - Precision, Ultra-precision and Micro-Machining				3/2/0/0 PL 1/1/0/0/0 2/1/0/0/0	**6**
MW-MB-PT-27	Tools of Forming and Cutting/Splitting Technology - Forming and Cutting Technology Machines - Tool Design and Production				3/2/0/0 PL 1/0/0/0/0 2/2/0/0/0	**6**
MW-MB-PT-28 [32, 46]	Factory Systems - Factory Planning - Seminar Production System Planning				2/3/0/0 2xPL 2/1/0/0/0 0/2/0/0/0	**6**

Module no.	Module name	5th Semester	6th Semester	8th Semester (M)	9th Semester (M)	LP
		V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	
MW-MB-PT-29 [2, 10, 46, 55]	Product Ergonomics and Product Safety - Product Ergonomics - Product Safety				3/1/0/0 2xPL 2/1/0/0/0 1/0/0/0/0	**6**
MW-MB-PT-30	Property and Behavior Analysis of Machine Tools - Basics of trait and Behaviour Analysis - Seminar experimental Behaviour Analysis - Seminar Model-Based Behavioural Analysis				2/3/0/0 PL 2/0/0/0/0 0/2/0/0/0 0/1/0/0/0	**6**
MW-MB-PT-31 [3]	Nano-Engineering and Ultraprecision Technologies - Nanotechnologies - Ultra-precision Machining				3/0/0/1/0 PL 1/0/0/1/0 2/0/0/0/0	**6**

Module no.	Module name	5th Semester	6th Semester	8th Semester (M)	9th Semester (M)	LP
		V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	
Field of study Simulation Methods in Mechanical Engineering (SIM) [4]						
Compulsory modules						
MW-MB-SIM-01 [42]	Numerical Methods and Structural Durability - Fatigue and operational Strength - Numerical Methods - Practical Course Numerical Methods/Fatigue and Operational Strength	4/2/0/1/0 2xPL 2/1/0/0/0 2/1/0/0/0 0/0/0/1/0				**7**
MW-MB-SIM-02	Machine Dynamics and Constructive Development Process - Constructive Development Process - Machine Dynamics	4/1/0/2/0 2xPL 2/0/0/1/0 2/1/0/1/0				**7**
MW-MB-SIM-03	Elastic Structures and Technical Fluid Mechanics - Elastic Structures - Engineering Fluid Mechanics	4/2/0/1/0 2xPL 2/1/0/0/0 2/1/0/1/0				**7**
MW-MB-SIM-04 [42]	Continuum Mechanics and Multifunctional Structures - Continuum Mechanics - Multifunctional Structures		4/2/0/0 2xPL 2/1/0/0/0 2/1/0/0/0			**7**
MW-MB-SIM-05	Multi-Body Dynamics and Computational Fluid Dynamics - Multi-body Dynamics - Computational Fluid Dynamics		4/3/0/0 PL 2/2/0/0/0 2/1/0/0/0			**7**
Elective modules						
Selection of 2, not already chosen modules, from 4 modules						
MW-MB-SIM-06	Gasdynamics - Gas Dynamics for Simulation Methods		2/2/0/1/0 2xPL 2/2/0/1/0			**6**
MW-MB-SIM-07	Experimental Fluid and Solid Mechanics - Experimental Solid Mechanics - Experimental Fluid Mechanics		4/0/0/2/0 2xPL 2/0/0/1/0 2/0/0/1/0			**6**

Module no.	Module name	5th Semester	6th Semester	8th Semester (M)	9th Semester (M)	LP
		V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	
MW-MB-SIM-08	Beam and Shell Structures - Beam and Shell Structures		2/2/0/0 PL 2/2/0/0/0			**6**
~~MW-MB-SIM-09~~ [17, 26]	~~Design with CAD-Systems/Product Modelling~~ ~~- Designing with CAD Systems~~ ~~and optionally~~ ~~- Product Data Management~~ ~~or~~ - ~~Synthesis and Analysis of Product Models~~		~~1/2/0/0/0~~ ~~and optionally~~ ~~1/1/0/0/0~~ ~~or~~ ~~2/1/0/0/0~~ ~~2xPL~~			~~**6**~~
MW-MB-SIM-25 [26, 32]	Product Modelling and Design with CAD-Systems - Designing with CAD Systems and optionally - Product Data Management or - Synthesis and Analysis of Product Models		1/2/0/0/0 and optionally 1/1/0/0/0 or 2/1/0/0/0 2xPL			**6**
Selection of 3, not already chosen modules, from 10 modules						
MW-MB-SIM-06	Gasdynamics - Gas Dynamics for Simulation Methods			2/2/0/1/0 2xPL 2/2/0/1/0		**6**
MW-MB-SIM-07	Experimental Fluid and Solid Mechanics - Experimental Solid Mechanics - Experimental Fluid Mechanics			4/0/0/2/0 2xPL 2/0/0/1/0 2/0/0/1/0		**6**
MW-MB-SIM-08	Beam and Shell Structures - Beam and Shell Structures			2/2/0/0 PL 2/2/0/0/0		**6**

Module no.	Module name	5th Semester	6th Semester	8th Semester (M)	9th Semester (M)	LP
		V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	
MW-MB-SIM-10 [17, 25, 32, 46] MW-MB-AKM-18 [17, 25, 32, 46]	Virtual Methods and Tools Reverse Engineering and optionally - Free-form Modelling or - Hybrid Modelling			2/1/0/2/0 2xPL 1/1/0/0/0 and optionally 1/0/0/2/0 or 1/0/0/2/0		**6**
MW-MB-SIM-11 MW-MB-LRT-12	Fracture Criteria and Fracture Mechanics - Fracture Mechanics			2/2/0/0 PL 2/2/0/0/0		**6**
MW-MB-SIM-12 MW-MB-AKM-19	Data Processing and Experimental Model Analysis - Experimental Modal Analysis - Measured Value Processing and Diagnostic Technology			3/2/0/1/0 PL 1/1/0/1/0 2/1/0/0/0		**6**
MW-MB-SIM-13	Dynamics of Mechanisms and Elastic Multi-Body Systems - Elastic Multi-body Systems - Mechanism Dynamics			3/3/0/0 PL 1/2/0/0/0 2/1/0/0/0		**6**
MW-MB-SIM-14 MW-MB-LRT-23	Turbulent Flows and their Modelling - Turbulent Flows and their Modelling			2/2/0/1/0 PL 2/2/0/1/0		**6**
MW-MB-SIM-15	Theory of Materials - Materials Theory			2/2/0/0 PL 2/2/0/0/0		**6**
MW-MB-SIM-16 [46]	Numerical Modelling of Multiphase Flows - Numerical Modelling of Multiphase Flows			2/1/0/1/0 2xPL 2/1/0/1/0		**6**
Selection of 2, not already chosen modules, from 4 modules						
MW-MB-SIM-17	Multiscale Material Modeling - Multi-scale Numerical Modelling - Damage Mechanics				3/2/0/0 PL 2/1/0/0/0 1/1/0/0/0	**6**

Module no.	Module name	5th Semester	6th Semester	8th Semester (M)	9th Semester (M)	LP
		V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	
MW-MB-SIM-18	Coupled Multifield Problems - Discretisation in Space and Time - Coupled Field Problems				3/2/0/0 PL 1/1/0/0/0 2/1/0/0/0	**6**
MW-MB-SIM-19	System Dynamics and Structural Vibrations - Vibration Theory - System Dynamics				4/2/0/0 PL 2/1/0/0/0 2/1/0/0/0	**6**
MW-MB-SIM-20 [9, 46] MW-MB-LRT-27 [9, 46]	Simulation Technology in Fluid Mechanics - Advanced Computational Fluid Dynamics - Flow Simulation on Supercomputers				3/1/0/1/0 2xPL 2/1/0/0/0 1/0/0/1/0	**6**
Selection of 1, not already chosen module, from 8 modules						
MW-MB-SIM-17	Multiscale Material Modeling - Multi-scale Numerical Modelling - Damage Mechanics				3/2/0/0 PL 2/1/0/0/0 1/1/0/0/0	**6**
MW-MB-SIM-18	Coupled Multifield Problems - Discretisation in Space and Time - Coupled Field Problems				3/2/0/0 PL 1/1/0/0/0 2/1/0/0/0	**6**
MW-MB-SIM-19	System Dynamics and Structural Vibrations - Vibration Theory - System Dynamics				4/2/0/0 PL 2/1/0/0/0 2/1/0/0/0	**6**
MW-MB-SIM-20 [9, 46] MW-MB-LRT-27 [9, 46]	Simulation Technology in Fluid Mechanics - Advanced Computational Fluid Dynamics - Flow Simulation on Supercomputers				3/1/0/1/0 2xPL 2/1/0/0/0 1/0/0/1/0	**6**
~~MW-MB-SIM-21~~ [34]	~~Rheology~~ ~~- Fundamentals of Rheology~~ ~~and optionally~~ ~~- Rheological Seminar or~~ ~~- Magnetic Liquids or~~ ~~- Polymer Theory~~				~~2/0/0/1/0~~ ~~and optionally~~ ~~0/0/0/2/0 or~~ ~~2/0/0/0 or~~ ~~2/0/0/0/0~~ ~~PL~~	~~6~~

Module no.	Module name	5th Semester	6th Semester	8th Semester (M)	9th Semester (M)	LP
		V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	
MW-MB-SIM-22 [9, 17, 46] MW-MB-LRT-24 [9, 17, 46]	Aeroelastics - Aeroelasticity Design Project - Basics of Aeroelasticity - Structure-flow Coupling				4/1/0/0 2xPL 0/1/0/0/0 2/0/0/0/0 2/0/0/0/0	**6**
~~MW-MB-SIM-23~~ [22, 33, 41]	~~Process and Structure Simulation~~ ~~- Process and Structure Simulation~~				~~2/1/0/1/0 PL~~ ~~2/1/0/1/0~~	~~**6**~~
MW-MB-SIM-24	Analytical Methods of Solid Mechanics - Analytical Methods in Solid Mechanics				2/2/0/0 PL 2/2/0/0/0	**6**
MW-MB-SIM-26 [34, 49]	Rheological Principles and Applications - Fundamentals of Rheology and optionally - Rheological Seminar or - Magnetic Liquids or - Polymer Rheology				2/0/0/1/0 and optionally 0/0/0/2/0 or 2/0/0/0 or 2/0/0/0/0 PL	**6**

Module no.	Module name	5th Semester	6th Semester	8th Semester (M)	9th Semester (M)	LP
		V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	
Field of study Processing Machines and Textile Machines Engineering (VTMB) [4)]						
Compulsory modules						
MW-MB-VTMB-01 [17, 23, 24, 32] MW-MB-AKM-01 [17, 23, 24, 32] MW-MB-KST-28 [17, 23, 24, 32]	Fundamentals of Construction and Dynamic Dimensioning of Machines - Constructive Development Process - Machine Dynamics	4/2/0/1/0 2xPL 2/0/0/1/0 2/2/0/0/0				**7**
MW-MB-VTMB-02	Fundamentals of Systematic Product Development for Processing and Textile Machinery - Constructive Development Processing and Textile Machines - Mechanism Technology	4/2/0/0 2xPL 2/1/0/0/0 2/1/0/0/0				**7**
MW-MB-VTMB-03 [1]	Fundamentals of Processing and Textile Mechanical Engineering - Fundamentals of Textile Mechanical Engineering - Basics of Processing Machine Construction	4/1/0/1/0 PL 2/0/0/1/0 2/1/0/0/0				**7**
MW-MB-VTMB-04 [1, 42]	Machine Design and Diagnostics - Design and Construction of Machines - Dynamic Behaviour and Diagnosis of Machines		3/1/0/2/0 2xPL 2/1/0/0/0 1/0/0/2/0			**7**
MW-MB-VTMB-05	Mechanism Synthesis and Multi-Body Systems - Mechanism Synthesis - Multibody Systems		4/2/0/0 PL 2/1/0/0/0 2/1/0/0/0			**6**
MW-MB-VTMB-06	Process Simulation for Processing Machines and Textile Machines - Selected Simulation Applications - Modelling and Simulation			3/2/0/0 2xPL 1/2/0/0/0 2/0/0/0/0		**6**

Module no.	Module name	5th Semester	6th Semester	8th Semester (M)	9th Semester (M)	LP
		V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	
Elective modules						
	Selection of 1 out of 2 modules					
MW-MB-VTMB-07	Machines and Technologies for High Performance, Functional and Biomedical Fibers - High performance, Functional and Biomedical Fibres - Machines and Technologies of Fibre-forming Polymer Materials		4/1/0/2/0 PL 2/0/0/1/0 2/1/0/1/0			**7**
MW-MB-VTMB-08 [46]	Processing Machines - Basics of Processing Technology - Processing Machines Construction Document		2/2/0/0 2xPL 2/0/0/0/0 0/2/0/0/0			**7**
	Selection of 1 out of 2 modules					
MW-MB-VTMB-09	Machines and Technologies for Yarn Structures, especially Composites - Machines and Technologies for yarn Constructions, especially for Composites		2/2/0/1/0 PL 2/2/0/1/0			**6**
MW-MB-VTMB-10 MW-MB-PT-21	Control of Production Machines and Plants - Motion Controls (NC/MC) - Basics of Machine Controls - Function Controls (PLC)		2/3/0/0 PL 0/1/0/0/0 2/0/0/0/0 0/2/0/0/0			**6**
	Choice of 2 out of 4 modules					
MW-MB-VTMB-11	Machines and Technologies for Textile Constructions - Machines and Technologies for Textile Constructions			3/0/0/2/0 2xPL 3/0/0/2/0		**6**

Module no.	Module name	5th Semester	6th Semester	8th Semester (M)	9th Semester (M)	LP
		V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	
MW-MB-VTMB-12 [32]	Machines and Technologies of Textile Finishing and the Assembly of Textile Products - Confection Machines and Technologies - Textile Finishing Machines and Technologies			3/0/0/3/0 PL 2/0/0/1/0 1/0/0/2/0		**6**
MW-MB-VTMB-13 [15]	Processing Technology - Parameters/Values of the Processing Technology - Optimisation of Processing Operations			2/1/0/1/0 2xPL 1/0/0/0/0 1/1/0/1/0		**6**
MW-MB-VTMB-14 [15]	Planning and Optimizing of Processing Lines - Operating Behaviour - Project Planning			4/1/0/0 PL 2/0/0/0/0 2/1/0/0/0		**6**
Choice of 3 out of 15 modules						
MW-MB-VTMB-15 [32]	Joining Technologies for Flexible Materials - Joining Technology of flexible Materials				2/1/0/2/0 PL 2/1/0/2/0	**6**
MW-MB-VTMB-16	Development of Complex Textile Constructions - Development of complex Textile Constructions				0/4/0/1/0 PL 0/4/0/1/0	**6**
MW-MB-VTMB-17	Machines and Technologies for Technical Textiles - Assembly of Technical Textiles - Technical Textiles				4/0/0/1/0 PL 2/0/0/0/0 2/0/0/1/0	**6**
MW-MB-VTMB-18 [32]	3D CAE Technology for Fiber-Based Materials - 3D CAE Technology for Fibre-based Materials				1/2/0/2/0 PL 1/2/0/2/0	**6**
MW-MB-VTMB-19	Machines and Technologies for the Manufacture of Nonwovens, Textile Recycling and Resource Efficiency - Textile Recycling and Resource Efficiency - Nonwovens Technology				4/0/0/1/0 PL 2/0/0/0/0 2/0/0/1/0	**6**

Module no.	Module name	5th Semester	6th Semester	8th Semester (M)	9th Semester (M)	LP
		V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	
MW-MB-VTMB-20	Functionalisation and Interface Design - Functionalisation and Boundary Layer Design				2/0/0/3/0 PL 2/0/0/3/0	**6**
MW-MB-VTMB-21 [46, 48]	Textile Management - Project and Innovation Management - Quality and Environmental Management				2/2/0/1/0 PL 1/1/0/0/0 1/1/0/1/0	**6**
MW-MB-VTMB-22	Fiber-Based Implants and Tissue Engineering - Fibre-based Implants and Tissue Engineering				2/0/0/2/0 PL 2/0/0/2/0	**6**
MW-MB-VTMB-23 [15]	Packaging Technology - Packaging Material/Packaging - Packaging Machine				4/1/0/0 PL 2/1/0/0/0 2/0/0/0/0	**6**
MW-MB-VTMB-24 [15]	Food Machines and Pharmaceutical Machines - Hygienic Behaviour of Processing Machines - Directive-Compliant Machine Design				3/2/0/0 2xPL 2/1/0/0/0 1/1/0/0/0	**6**
MW-MB-VTMB-25	Tool - Material - Interaction Simulation - Methods and Tools - Special Simulation Applications				1/3/0/0 PL 1/0/0/0/0 0/3/0/0/0	**6**
MW-MB-VTMB-26 [46]	Drive Technology in Processing Machines - Movement Technology and Design - Mechanisms in Processing Machines				2/2/0/0 2xPL 1/1/0/0/0 1/1/0/0/0	**6**
MW-MB-VTMB-27	CAE Cases for the Machine Development - CAE Application				1/3/0/0 PL 1/3/0/0/0	**6**
MW-MB-VTMB-28 [37] MW-MB-LB-17 [37]	Adaptive Structures for Lightweight Design - Active Compliant Structures - Function-integrative Lightweight Structures				3/2/0/0 PL 1/1/0/0/0 2/1/0/0/0	**6**

Module no.	Module name	5th Semester	6th Semester	8th Semester (M)	9th Semester (M)	LP
		V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	V*)/Ü*)/S/P/T	
MW-MB-VTMB-29 [39] MW-MB-LB-16 [39]	Manufacturing of Fiber Composite Structures - Technologies for Thermoset Composites - Technologies for Thermoplastic Composites				3/2/0/0 PL 2/1/0/0/0 1/1/0/0/0	**6**
Credit points		**21**	**26**	**18**	**18**	**83**

Annex

V	Lecture*)
Ü	Exercise*)
P	Practical course
S	Seminar
SK	Language course
T	Tutorial
PL	Exam performance(s)
PVL	Preliminary examination(s)
LP	Credit Points - in brackets ( ) pro rata allocation to individual semesters according to Workload
M	Mobility window according to § 6 Paragraph 1 Sentence 4 Study Regulations
SWS	Lecture hours per week

*) Pursuant to § 5 Paragraph 1 Sentence 3 Study Regulations, the teaching and learning forms of lecture and tutorial in distance learning are each replaced by the teaching and learning form of consultation.

**) 3 modules are to be selected in the 8th and 9th semester respectively.

***) 2 modules are to be selected in the 6th semester and 3 modules each in the 8th and 9th semester.

****) 2 times 2 modules are to be selected in the 6th semester and 3 modules each in the 8th and 9th semester.

1) Alternatively, at the student's choice, Courses totalling 4 SWS according to the catalogue General and Engineering-Specific Qualifications in Mechanical Engineering.

2) Alternatively, at the student's choice, Courses with a total volume of 5 SWS including the examination performances specified according to the catalogue Advanced Fundamentals in Mechanical Engineering.

3) Alternatively, at the student's choice, Courses with a total volume of at least 4 SWS including the examination performances specified according to the catalogue Interdisciplinary Technical Qualification of Mechanical Engineering.

4) Alternatively, at the student's choice, one of eight fields of study and, taking into account § 25 Paragraph 2 Sentence 4, one of four fields of study.

5) Alternatively, at the student's choice, Courses with a total volume of at least 5 SWS including the examination performances specified according to the catalogue Industry-Specific Lightweight Structures and Technologies.

6) Alternatively, at the student's choice, either the module MW-MB-ET-13 Refrigeration Systems or the module MW-MB-ET-36 International Refrigeration and Compressor Course can be chosen.

7) Alternatively, at the student's choice, either the module MW-MB-ET-27 Cryogenics or the module MW-MB-ET-35 European Course of Cryogenics can be chosen.

8) Alternatively, at the student's choice, either the module MW-MB-ET-05 Fundamentals of Refrigeration and Air Conditioning or the module MW-MB-ET-37 Principles of Refrigeration and Air Conditioning can be chosen.

1 Extension in accordance with § 6 para. 6 and § 10 para. 2 Study Regulations for the Diploma degree programme in Mechanical Engineering of 17.05.2019 or Bachelor's degree programme in Mechanical Engineering of 17.05.2019 according to the resolution of the Faculty Council of 15.04.2020 Adjustment in the field Usability.

[2] Extension in accordance with § 6 para. 6 and § 10 para. 2 Study Regulations for the Diploma degree programme in Mechanical Engineering of 17.05.2019 or Bachelor's degree programme in Mechanical Engineering of 17.05.2019 according to the resolution of the Faculty Council of 15.04.2020 Adjustment in the field Requirements for participation.

[3] Extension in accordance with § 6 para. 6 and § 10 para. 2 Study Regulations for the Diploma degree programme in Mechanical Engineering of 17.05.2019 or Diploma-postgraduate degree programme in Mechanical Engineering of 17.01.2020 in accordance with the resolution of the Faculty Council of 15.04.2020 Replacement of the teaching offer.

[4] Extension in accordance with § 6 para. 6 and § 10 para. 2 Study Regulations for the Diploma degree programme in Process Engineering and Natural Materials Technology of 29 April 2019, the Bachelor's degree programme in Process Engineering and Natural Materials Technology of 28.04.2019 or Diploma-postgraduate degree programme in Process Engineering and Natural Materials Technology of 15.02.2020 according to the decision of the Faculty Council of 15 April 2020 Adjustment in the field Usability.

[5] Extension in accordance with § 6 para. 6 and § 10 para. 2 Study Regulations for the Diploma degree programme in Materials Science of 29 April 2019 or Bachelor's degree programme in Materials Science of 28.04.2019 according to the resolution of the Faculty Council of 15.04.2020 Adjustment in the field Usability.

[6] Extension in accordance with § 6 para. 6 and § 10 para. 2 Study Regulations for the Diploma degree programme in Process Engineering and Natural Materials Technology of 29 April 2019, the Bachelor's degree programme in Process Engineering and Natural Materials Technology of 28.04.2019 and the Diploma-postgraduate degree programme in Process Engineering and Natural Materials Technology of 15.02.2020 in accordance with the resolution of the Faculty Council of 17.03.2021 Adjustment in the field Usability.

[7] Extension in accordance with § 6 para. 6 and § 10 para. 2 Study Regulations for the Diploma degree programme in Materials Science of 29 April 2019 or Bachelor's degree programme in Materials Science of 28.04.2019 according to the resolution of the Faculty Council of 21.04.2021 Adjustment in the field Usability.

[8] Extension in accordance with § 6 para. 6 and § 10 para. 2 Study Regulations for the Diploma degree programme in Mechanical Engineering of 17.05.2019 or Diploma-postgraduate degree programme in Mechanical Engineering of 17.01.2020 in accordance with the resolution of the Faculty Council of 21.04.2021 Replacing the teaching offer.

[9] Extension in accordance with § 6 para. 6 and § 10 para. 2 Study Regulations for the Diploma degree programme in Mechanical Engineering of 17.05.2019 or Bachelor's degree programme in Mechanical Engineering of 17.05.2019 or Diploma-postgraduate degree programme in Mechanical Engineering of 17.01.2020 in accordance with the resolution of the Faculty Council of 21.04.2021 Adjustment in the field Usability.

[10] Extension in accordance with § 6 para. 6 and § 10 para. 2 Study Regulations for the Diploma degree programme in Mechanical Engineering of 17.05.2019 or or Diploma-postgraduate degree programme in Mechanical Engineering of 17.01.2020 in accordance with the resolution of the Faculty Council of 21.04.2021 Adjustment in the field Requirements for participation.

[11] Extension in accordance with § 6 para. 6 and § 10 para. 2 Study Regulations for the Diploma degree programme in Mechanical Engineering of 17.05.2019 or or Diploma-postgraduate degree programme in Mechanical Engineering of 17.01.2020 according to the resolution of the Faculty Council of 21.04.2021 Adjustment in the field Frequency of the module.

[12] Extension in accordance with § 6 para. 6 and § 10 para. 2 Study Regulations for the Diploma degree programme in Mechanical Engineering of 17.05.2019 or Diploma-postgraduate degree programme in Mechanical Engineering of 17.01.2020 according to the decision of the Faculty Council of 21.04.2021 - will not be offered in summer semester 2021.

[13] Adjustment of the semester-based lecture hours per week allocation in summer semester 2021 due to the departure of the lecturer and pending replacement of the professorship.

[14] Extension in accordance with § 6 para. 6 and § 10 para. 2 Study Regulations for the Diploma degree programme in Mechanical Engineering of 17.05.2019 or Diploma-postgraduate degree programme in Mechanical Engineering of 17.01.2020 in accordance with the resolution of the Faculty Council of 21.04.2021 Extension of the range of courses.

[15] Extension in accordance with § 6 para. 6 and § 10 para. 2 Study Regulations for the Diploma degree programme in Mechanical Engineering dated 17.05.2019 or Diploma-postgraduate degree programme in Mechanical Engineering dated 17.01.2020 according to the resolution of the Faculty Council dated 21.07.2021 Adjustment in the field Prerequisites for participation.

[16] Extension in accordance with § 6 para. 6 and § 10 para. 2 Study Regulations for the Diploma-postgraduate Course in Mechanical Engineering dated 17.01.2020 in accordance with the res-olution of the Faculty Council dated 21.07.2021 Replacing the course offerings.

[17] Extension in accordance with § 6 para. 6 and § 10 para. 2 Study Regulations for the Diploma degree programme in Mechanical Engineering of 17.05.2019 or Bachelor's degree programme in Mechanical Engineering of 17.05.2019 or Diploma-postgraduate degree programme in Mechanical Engineering of 17.01.2020 according to the resolution of the Faculty Council of 21.07.2021 Adjustment in the field responsible lecturer.

18 Extension in accordance with § 6 para. 6 and § 10 para. 2 Study Regulations for the Diploma degree programme in Mechanical Engineering from 17.05.2019 or Diploma-postgraduate degree programme in Mechanical Engineering from 17.01.2020 according to the resolution of the Faculty Council from 21.07.2021 Replacement of the course offering in WiSe 2021/2022 - Replacement will only be offered in WiSe 2021/2022.

19 Extension in accordance with § 6 para. 6 and § 10 para. 2 Study Regulations for the Diploma degree programme in Mechanical Engineering of 17.05.2019 or Diploma-postgraduate degree programme in Mechanical Engineering of 17.01.2020 according to the resolution of the Faculty Council of 21.07.2021 Adjustment in the field Usability.

20 Extension in accordance with § 6 para. 6 and § 10 para. 2 Study Regulations for the Diploma degree programme in Mechanical Engineering dated 17.05.2019 or Bachelor's degree programme in Mechanical Engineering dated 17.05.2019 or Diploma-postgraduate degree programme in Mechanical Engineering dated 17.01.2020 according to the resolution of the Faculty Council dated 20.10.2021 Replacement of the course offering.

21 Extension in accordance with § 6 para. 6 and § 10 para. 2 Study Regulations for the Diploma degree programme in Mechanical Engineering of 17.05.2019 or Diploma-postgraduate degree programme in Mechanical Engineering of 17.01.2020 according to the resolution of the Faculty Council of 20.10.2021 Adjustment in the field responsible lecturer.

22 Extension in accordance with § 6 para. 6 and § 10 para. 2 Study Regulations for the Diploma degree programme in Mechanical Engineering from 17.05.2019 or Diploma-postgraduate degree programme in Mechanical Engineering from 17.01.2020 according to the resolution of the Faculty Council from 20.10.2021 - will not be offered in WiSe 2021/2022.

23 Extension in accordance with § 6 para. 6 and § 10 para. 2 Study Regulations for the Diploma degree programme in Mechanical Engineering dated 17.05.2019 or Bachelor's degree programme in Mechanical Engineering dated 17.05.2019 or Diploma-postgraduate degree programme in Mechanical Engineering dated 17.01.2020 according to the resolution of the Faculty Council dated 20.10.2021 Adjustment in the field Usability.

24 Extension in accordance with § 6 para. 6 and § 10 para. 2 Study Regulations for the Diploma degree programme in Mechanical Engineering dated 17.05.2019 or Bachelor's degree programme in Mechanical Engineering dated 17.05.2019 or Diploma-postgraduate degree programme in Mechanical Engineering dated 17.01.2020 according to the resolution of the Faculty Council dated 20.04.2022 Adjustment in the field Usability.

25 Extension in accordance with § 6 para. 6 and § 10 para. 2 Study Regulations for the Diploma degree programme in Mechanical Engineering of 17.05.2019 or Diploma-postgraduate degree programme in Mechanical Engineering of 17.01.2020 according to the resolution of the Faculty Council of 20.04.2022 Adjustment in the field Prerequisites for participation.

26 Extension in accordance with § 6 para. 6 and § 10 para. 2 Study Regulations for the Diploma degree programme in Mechanical Engineering of 17.05.2019 or Bachelor's degree programme in Mechanical Engineering of 17.05.2019 or Diploma-postgraduate degree programme in Mechanical Engineering of 17.01.2020 according to the resolution of the Faculty Council of 20.04.2022 Replacement of the course offerings.

27 Extension in accordance with § 6 para. 6 and § 10 para. 2 Study Regulations for the Diploma degree programme in Mechanical Engineering from 17.05.2019 or Diploma-postgraduate degree programme in Mechanical Engineering from 17.01.2020 according to the resolution of the Faculty Council from 20.04.2022 - will not be offered in SoSe 2022.

29 Extension in accordance with § 6 para. 6 and § 10 para. 2 Study Regulations for the Diploma degree programme in Mechanical Engineering of 17.05.2019 or Diploma-postgraduate degree programme in Mechanical Engineering of 17.01.2020 according to the resolution of the Faculty Council of 20.04.2022 Extension of the course offerings.

30 Extension in accordance with § 6 para. 6 and § 10 para. 2 Study Regulations for the Diploma degree programme in Mechanical Engineering from 17.05.2019 or Diploma-postgraduate degree programme in Mechanical Engineering from 17.01.2020 according to the resolution of the Faculty Council from 20.04.2022 Replacement of the course offering in SoSe 2022 - Replacement is only offered in SoSe 2022.

31 Correction of SWS distribution and merging of courses.

32 Extension in accordance with § 6 para. 6 and § 10 para. 2 Study Regulations for the Diploma degree programme in Mechanical Engineering dated 17.05.2019 or Diploma-postgraduate degree programme in Mechanical Engineering dated 17.01.2020 according to the resolution of the Faculty Council dated 15.06.2022 Adjustment in the field responsible lecturer.

33 Extension in accordance with § 6 para. 6 and § 10 para. 2 Study Regulations for the Diploma degree programme in Mechanical Engineering from 17.05.2019 or Diploma-postgraduate degree programme in Mechanical Engineering from 17.01.2020 according to the resolution of the Faculty Council from 19.10.2022 - will not be offered in WiSe 2022/2023.

34 Extension in accordance with § 6 para. 6 and § 10 para. 2 Study Regulations for the Diploma degree programme in Mechanical Engineering dated 17.05.2019 or Diploma-postgraduate degree programme in Mechanical Engineering dated 17.01.2020 according to the resolution of the Faculty Council dated 19.10.2022 Replacement of the course offering.

36 Extension in accordance with § 6 para. 6 and § 10 para. 2 Study Regulations for the Diploma degree programme in Mechanical Engineering dated 17.05.2019 or Bachelor's degree programme in Mechanical Engineering dated 17.05.2019 or Diploma-postgraduate degree programme in Mechanical Engineering dated 17.01.2020 according to the resolution of the Faculty Council dated 19.10.2022Adjustment in the field Usability.

37 Extension in accordance with § 6 para. 6 and § 10 para. 2 Study Regulations for the Diploma degree programme in Mechanical Engineering of 17.05.2019 or Diploma-postgraduate degree programme in Mechanical Engineering of 17.01.2020 according to the resolution of the Faculty Council of 19.10.2022 Adjustment in the field Prerequisites for participation.

38 Correction of assigned courses, 19.10.2022.

39 Extension in accordance with § 6 para. 6 and § 10 para. 2 Study Regulations for the Diploma degree programme in Mechanical Engineering of 17.05.2019 or Bachelor's degree programme in Mechanical Engineering of 17.05.2019 or Diploma-postgraduate degree programme in Mechanical Engineering of 17.01.2020 according to the resolution of the Faculty Council of 19.04.2023 Adjustment in the field responsible lecturer.

40 Extension in accordance with § 6 para. 6 and § 10 para. 2 Study Regulations for the Diploma degree programme in Mechanical Engineering from 17.05.2019 or Diploma-postgraduate degree programme in Mechanical Engineering from 17.01.2020 according to the resolution of the Faculty Council from 19.04.2023 - will not be offered in SoSe 2022.

41 Extension in accordance with § 6 para. 6 and § 10 para. 2 Study Regulations for the Diploma degree programme in Mechanical Engineering from 17.05.2019 or Diploma-postgraduate degree programme in Mechanical Engineering from 17.01.2020 according to the resolution of the Faculty Council from 19.04.2023 - Cancellation of the course offering.

42 Extension in accordance with § 6 para. 6 and § 10 para. 2 Study Regulations for the Diploma degree programme in Mechanical Engineering dated 17.05.2019 or Bachelor's degree programme in Mechanical Engineering dated 17.05.2019 or Diploma-postgraduate degree programme in Mechanical Engineering dated 17.01.2020 according to the resolution of the Faculty Council dated 19.04.2023 Adjustment in the field Usability.

43 Extension in accordance with § 6 para. 6 and § 10 para. 2 Study Regulations for the Diploma degree programme in Mechanical Engineering from 17.05.2019 or Diploma-postgraduate degree programme in Mechanical Engineering from 17.01.2020 according to the resolution of the Faculty Council from 19.04.2023 Replacement of the course offering.

44 Adjustment of the semester-wise SWS allocation in SoSe 2023 due to the departure of the lecturer and pending replacement of the professorship.

45 Extension in accordance with § 6 para. 6 and § 10 para. 2 Study Regulations for the Diploma degree programme in Mechanical Engineering from 17.05.2019 or Diploma-postgraduate degree programme in Mechanical Engineering from 17.01.2020 according to the resolution of the Faculty Council from 19.04.2023 Replacement of the course offering in SoSe 2023 - Replacement is only offered in SoSe 2023.

46 Extension in accordance with § 6 para. 6 and § 10 para. 2 Study Regulations for the Diploma degree programme in Mechanical Engineering of 17.05.2019 or Bachelor's degree programme in Mechanical Engineering of 17.05.2019 or Diploma-postgraduate degree programme in Mechanical Engineering of 17.01.2020 according to the resolution of the Faculty Council of 17.05.2023 Specify in the field requirements for the award of credit points according to the requirements of the accreditation process.

47 Extension in accordance with § 6 para. 6 and § 10 para. 2 Study Regulations for the Diploma degree programme in Mechanical Engineering of 17.05.2019 or Bachelor's degree programme in Mechanical Engineering of 17.05.2019 or Diploma-postgraduate degree programme in Mechanical Engineering of 17.01.2020 according to the resolution of the Faculty Council of 17.05.2023 Adjustment in the field responsible lecturer.

48 Extension in accordance with § 6 para. 6 and § 10 para. 2 Study Regulations for the Diploma Program in Mechanical Engineering, May 17, 2019, or Diploma Postgraduate Program in Mechanical Engineering, January 17, 2020, according to the resolution of the Faculty Council, 10/18/2023 Adjustment in the Responsible Lecturer field.

49 Adjustment of assigned courses, 10/18/2023.

50 Extension in accordance with § 6 para. 6 and § 10 para. 2 Study Regulations for the Diploma Program in Mechanical Engineering, May 17, 2019, or Diploma Postgraduate Program in Mechanical Engineering, January 17, 2020, according to the resolution of the Faculty Council, 10/18/2023 Replacing the course offered in WiSe 2023/2024 - Replacement will only be offered in WiSe 2023/2024.

51 Extension in accordance with § 6 para. 6 and § 10 para. 2 Study Regulations for the Diploma Program in Mechanical Engineering dated May 17, 2019 or Bachelor Program in Mechanical Engineering dated May 17, 2019 or Diploma Postgraduate Program in Mechanical Engineering dated January 17, 2020 according to the resolution of the Faculty Council dated 10/18/2023 Adjustment in the field Applicability.

52 Extension in accordance with § 6 para. 6 and § 10 para. 2 Study Regulations for the Diploma degree program in Mechanical Engineering dated 17 May 2019 or Bachelor's degree program in Mechanical Engineering dated 17 May 2019 or Diploma postgraduate degree program in Mechanical Engineering dated 17 January 2020 in accordance with the

resolution of the Faculty Council dated 15.11.2023 Specification in the field Requirements for the awarding of credit points in accordance with the requirements of the accreditation procedure.

53 Extension in accordance with § 6 para. 6 and § 10 para. 2 of the Study Regulations for the Diploma degree program in Mechanical Engineering of 17 May 2019 or the Bachelor's degree program in Mechanical Engineering of 17 May 2019 or the Diploma postgraduate degree program in Mechanical Engineering of 17 January 2020 in accordance with the resolution of the Faculty Council of 15 November 2023 Replacement of the course offerings.

54 Extension in accordance with § 6 para. 6 and § 10 para. 2 Study Regulations for the Diploma degree program in Mechanical Engineering of 17 May 2019 or Bachelor's degree program in Mechanical Engineering of 17 May 2019 or Diploma postgraduate degree program in Mechanical Engineering of 17 January 2020 in accordance with the decision of the Faculty Council of 15 November 2023 Adaptation in the applicability field.

55 Extension in accordance with § 6 para. 6 and § 10 para. 2 Study Regulations for the Diploma Program in Mechanical Engineering of 17 May 2019 and Diploma Postgraduate Program in Mechanical Engineering of 17 January 2020 in accordance with the resolution of the Faculty Council of 15 November 2023 Adjustment in the field Requirements for participation.

56 Extension in accordance with § 6 para. 6 and § 10 para. 2 Study Regulations for the Diploma degree programme in Mechanical Engineering from 17.05.2019 or Diploma-postgraduate degree programme in Mechanical Engineering from 17.01.2020 according to the resolution of the Faculty Council from 17 April 2024 Replacement of the course offering.

57 Extension in accordance with § 6 para. 6 and § 10 para. 2 Study Regulations for the Diploma degree programme in Mechanical Engineering from 17.05.2019 or Diploma-postgraduate degree programme in Mechanical Engineering from 17.01.2020 according to the resolution of the Faculty Council from 17 April 2024- will not be offered in SoSe 2024.

58 Adjustment of the semester-based SWS allocation in summer semester 2024 due to the departure of the lecturer and pending replacement of the professorship.

59 Extension in accordance with § 6 para. 6 and § 10 para. 2 Study Regulations for the Diploma degree programme in Mechanical Engineering from 17.05.2019 or Diploma-postgraduate degree programme in Mechanical Engineering from 17.01.2020 according to the resolution of the Faculty Council from 17 April 2024Replacement of the course offering in SoSe 2024 - Replacement is only offered in SoSe 2024.

60 Extension in accordance with § 6 para. 6 and § 10 para. 2 Study Regulations for the Diploma degree programme in Mechanical Engineering of 17.05.2019 or Bachelor's degree program in Mechanical Engineering dated 17 May 2019 or Diploma postgraduate degree program in Mechanical Engineering dated 17 January 2020 according to the resolution of the Faculty Council of 17 April 2024 Adjustment made in the Prerequisites for participation field and in the Teaching and learning forms field to add German and English as teaching languages due to the temporary replacement of the chair.

61 Correction of assigned courses, 17 April 2024.