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

Status: 28.03.2024

Content:

Part 1 - Compulsory modules

Part 2 - Elective

Assignment of compulsory and elective modules of the fields of study in detail (semesters 5 and 6 as well as 8 and 9)

- o Field of study General and Structural Mechanical Engineering (AKM)
- o Field of study Power Engineering (ET)
- o Field of study Automotive and Railway Vehicle Engineering (KST)
- o Field of study Lightweight Engineering (LB)
- Field of study Aerospace Engineering (LRT)
- Field of study Production Engineering (PT)
- o Field of study Simulation Methods in Mechanical Engineering (SIM)
- o Field of study Processing Machines and Textile Machines Engineering (VTMB)

<u>Annex</u>

<u>Footnotes</u>

Detailed study plan

Part 1

Modul	Module name	1 st	2 nd	3 rd	4 th	5 th	6 th	7 th	8 th	9 th	10 th	LP
e no.		Semester	Semester (M)	Semester (M)	Semester							
		V* ⁾ /Ü* ⁾ /S/]									
		P/T										
Compuls	sory 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

ene. Emerted by Business Administration MB-05 As.	Modul	Module name	1 st	2 nd	3 rd	4 th	5 th	6 th	7 th	8 th	9 th	10 th	LP
MV- MB-06 MW- Engineering Mathematics Engineering MB-05 Solorion P/T			Semester		(M)								
MW- MB-06 Production Engineering S/0/0/1 PL C/5 Pl			V* ⁾ /Ü* ⁾ /S/	1									
MB-06 MW- MB-08 Engineering Mechanics Strength of Materials Streng			P/T										
### ##################################	MW-	Production Engineering	5/0/0/1 PL	0/1/0/0/1									9
MW- MB-07			(5)										
Internship or profession all internship of profession all internship of profession all internship of tweek (4)													
MW- MB-07 Strength of Materials MW- MB-10 MB-10 MW- MB-10 MW- MB-10 MB-10 MW- MB-10 MB-10													
MW- MB-10 MW- MB-10 MW- MB-10 MW- MB-10 MW- MB-10 MB-10 MW- MB-10 MW- MB-10 MW- MB-10 MW- MB-10 MB-10 MW- MB-10 MW- MB-10 MB-10 MW- MB-10				·									
MW- Business Administration 2 2 3 5 5 6 6 6 6 6 6 6 6													
Internship (1 week)				•									
MW- MB-07													
MW- MB- Og 24- Strength of Materials Strengt													
MW-MB-07 MB-07 and Language Skills Business Administration and Language Skills 0/0/0/0/0 2 SWS SK PL (3) (3) (2) 2 SWS SK PL (2) PL (3) (3) (3) (3) (3) (3) (2) 5 MW-MB-08 4.5.7.9 36.42 Engineering Mathematics 4/2/0/1 PL (4) PL (3) (3) (3) (3) 2/1/0/0/1 PL (4) PL (3) (3) (3) 7 MW-MB-09 24 / 36.54 Pundamentals of Material Science 2/2/0/0/11 (3) (3) (3) (3) (3) 2/2/0/0/11 (3) (3) (3) (3) (3) 6 MW-MB-10 4.36.54 Big/learning Fundamentals of Electrical Engineering Fundamentals of Electrical Engineering 2/2/0/0/2/1 (2/2) (2/2) (2/2) (2/2) (2/2) (2/2) 7													
MB-07 and Language Skills 2 SWS SK PL (3) (3) (2) (2) (2) (2) (2) (2) (2) (2) (2) (3) (2) (2) (4) (2) (2) (2) (4) (2) (2) (4) (4) (2) (4) (4) (4) (4) (4) (4) (4) (4) (4) (5) (6) (6) (6) (6) (6) (6) (6) (6) (6) (6	MW-	Business Administration	0/0/0/0/0										5
PL (2) 2 SWS SK 2/1/0/0/1													
Language Competence	IVID 07	8 8											
NW- Engineering Mathematics 2/1/0/0/1 2/1/0/0/1			(2)										
Business Administration		- Language Competence	2 SWS SK										
MB-08 4.5.7.9. 36.42 Engineering Mechanics - Strength of Materials 2/2/0/0/1 (4) PL (3) MB- 09 24, 36.54 Strength of Materials (4) PL (3) MW- MB-10 4.36.54 Science 2/0/0/1/1 (3) 2xPL (3) MW- MB-11 Engineering Pundamentals of Electrical Engineering 2/2/0/2/1 2xPL (3)				2/1/0/0/1									
4.5.7.9. 36.42 Engineering Mechanics - 2/2/0/0/1 2/1/0/0/1 7 MW- MB- 09 24, 36.54 Fundamentals of Material Science 2/0/0/1/1 (3) 2/0/0/1/1 2xpL (3) 4 6 MW- MB-10 4.36.54 Fundamentals of Electrical Engineering 2/2/0/2/1 2xpL (3) 2/2/0/2/1 2xpL (3) 7	MW-	Engineering Mathematics		4/2/0/1 PL									6
36.42 Engineering Mechanics - Strength of Materials 2/2/0/0/1 (4) 2/1/0/0/1 PL (3) 7 MB- 09 24, 36.54 Fundamentals of Material Science 2/0/0/1/1 (3) 2/0/0/1/1 2xPL (3) 6 MW- MB-10 4.36.54 Fundamentals of Electrical Engineering 2/2/0/2/1 2xPL (3) 7	MB-08												
MW- MB- 09 24, 36.54 Fundamentals of Material Science 2/2/0/0/1 (4) PL (3) 2/0/0/1/1 2/0/0/1/1 2/0/0/1/1 (3) 6 MW- MB-10 4.36.54 Fundamentals of Electrical Engineering 2/2/0/2/1 2×PL 7													
MB- 09 ^{24,} 36,54 Strength of Materials (4) PL (3) PL (4) PL (4) PL (4) PL (4)<	<u>36, 42</u>												ļ
MB- 09 ^{24,} 36,54 Strength of Materials (4) PL (3) PL (4) PL (4) PL (4)<	MW-	Engineering Mechanics -		2/2/0/0/1	2/1/0/0/1								7
MW- MB-10 4, 36, 54 Fundamentals of Material Science 2/0/0/1/1 2/0/0/1/1 (3) 2xPL (3) 6 MW- MB-11 Engineering Engineering 2/2/0/2/1 2xPL 7		Strength of Materials		(4)	PL								
MW- MB-10 4, 36, 54 Fundamentals of Material Science 2/0/0/1/1 2/0/0/1/1 (3) 2xPL (3) 6 MW- MB-11 Engineering Engineering 2/2/0/2/1 2xPL 7	09 ^{24,}				(3)								
MB-10 4.36,54 Science (3) 2xPL (3) (3) (3) 2xPL (3) (3) (3) 7 (3) 7 8 8 8 8 8 8 8 8 8 8 8 </td <td>36, 54</td> <td></td>	36, 54												
MB-10 4.36,54 Science (3) 2xPL (3) (3) (3) 2xPL (3) (3) (3) 7 (3) 7 8 8 8 8 8 8 8 8 8 8 8 </td <td>MW-</td> <td>Fundamentals of Material</td> <td></td> <td>2/0/0/1/1</td> <td>2/0/0/1/1</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>6</td>	MW-	Fundamentals of Material		2/0/0/1/1	2/0/0/1/1								6
4.36.54 (3) MW- MB-11 Fundamentals of Electrical Engineering 2/2/0/2/1 2xPL					2xPL								
MB-11 Engineering 2xPL	4, 36, 54				(3)								
MB-11 Engineering 2xPL	MW-	Fundamentals of Electrical			2/2/0/2/1								7
		- -											

Modul	Module name	1 st	2 nd	3 rd	4 th	5 th	6 th	7 th	8 th	9 th	10 th	LP
e no.		Semester	Semester (M)	Semester (M)	Semester							
		V* ⁾ /Ü* ⁾ /S/	1									
		P/T										
MW- MB-12 1, 4, 6, 9,	Engineering Thermodynamics/Heat Transfer			2/2/0/1 PL (5)	2/2/0/1 PL (4)							9
42, 54	TechnicalThermodynamicsHeat Transfer			2/2/0/0/1	2/2/0/0/1							
MW- MB-13 4, 5, 36	Special Topics of Mathematics			2/2/0/0/1 (4)	2/2/0/1 PL (5)							9
<u>MW-</u> <u>MB-14</u>	Machine Elements			3/2/0/1 PL (5)	3/2/0/1 2xPL (7)							12
<u>MW-</u> <u>MB-15</u>	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
<u>MW-</u> <u>MB-19</u>	Extended Fundamentals for Mechanical Engineering					#/#/#/# PL 2)						5

Modul	Module name	1 st	2 nd	3 rd	4 th	5 th	6 th	7 th	8 th	9 th	10 th	LP
e no.		Semester	Semester (M)	Semester (M)	Semester							
		V* ⁾ /Ü* ⁾ /S/	1									
		P/T										
MW-	Subject-Related Internship						2/0/0/0/0	15-week				30
<u>MB-20</u>							(2)	Internship-				
								Project Work 270 h				
								(processing				
								time 26				
								weeks)				
								with				
								presentatio				
								n				
	December 1981							(28)	0 10 10 10 10	0.40.40.40.40		
MW-	Research Internship								0/0/0/0/0 1 SWS	0/0/0/0/0 1 SWS		16
<u>MB-21</u>									Project	Project,		
									(8)	Project		
									(-)	Work425 h		
										(processing		
										time 26		
										weeks)		
										with		
										presentatio		
										n 2xPL		
										(8)		
MW-	Interdisciplinary Technical								#/#/#/# PL	#/#/#/# PL		8
MB-22	Qualification of Mechanical								3)	3)		
	Engineering								(4)	(4)		
	sory elective area											
	ory and/or elective modules					#/#/#/# PL	#/#/#/# PL		#/#/#/# PL	#/#/#/# PL		83
	osen field of study ⁴⁾					(21)	(26)		(18)	(18)		
	g to Part 2											
Diploma											27	27
Colloqu											3	3
Credit p	oints	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	5 th Semester	6 th Semester	8 th Semester (M)	9 th Semester (M)	LP
		V* ⁾ /Ü* ⁾ /S/P/T				
	y General and Structural Mechanical I	Engineering (AKM) 4)			
Compulsory		T	I	T		
MW-MB- AKM-01 ^{17, 23,}	Fundamentals of Construction and Dynamic Dimensioning of Machines	4/2/0/1/0 2xPL				7
24, 32	- Constructive Development Process	2/0/0/1/0				
MW-MB- KST-28 ^{17, 23,} 24, 32	- Machine Dynamics	2/2/0/0/0				
MW-MB- VTMB-01 17, 23, 24, 32						
MW-MB- AKM-02	Fluid Power and Electrical Drive Systems - Basics of Fluid Power Drives and	4/2/0/0 PL				7
MW-MB-	Controls	2/1/0/0/0				
KST-01	- Electric Drives	2/1/0/0/0				
MW-MB-	Mechanical Drives	2/3/0/0 2xPL				7
<u>AKM-03</u>	- Drive Elements	2/1/0/0/0				
	- Design Document Drive Assembly	0/2/0/0/0				

Module no.	Module name	5 th Semester	6 th Semester	8 th Semester (M)	9 th Semester (M)	LP
		V* ⁾ /Ü* ⁾ /S/P/T	•			
Elective mod	dules					<u> </u>
Recommend	ation for profiling					
	[1] Development Engineer Intralogist	ics	MW-MB-AKM-04, -	-05, -07,- 09, -15, -1	6, -17, -22, -25 resp	o26
	[2] System Developer for Mobile Mad	chines	MW-MB-AKM-06, -	-07, -08, -09, -14, -1	5, -16, -23, -25 resp	ວ26
	[3] Calculation Engineer			-07, -08, -09, -13, -1	•	
	[4] Drive Design			-05, -06, -07, -13, -1		
	[5] Product Development			-05, -07, -09, -13, -1	•	
	[6] Industrial Designer			-10, -11, -12, -18, -2	•	
	[-1aaaa. = co.0e.		7	, , ,	-,,, 20.05	··
		Choice of 2 out	of 5 modules			
MW-MB-	Analysis and Dimensioning		3/1/0/1/0 PL			6
AKM-04	- Selected Analyses and Dimensioning		2/0/0/1/0			
<u> </u>	- Operational Strength		1/1/0/0/0			
MW-MB-	Fluid Power Components and Systems		4/1/0/0 PL			6
AKM-07	- Sealing Technology		2/0/0/0/0			
	- Fluid Power Components and Systems		2/1/0/0/0			
MW-MB-	Off-road Vehicle Technology - Systems		5/0/0/0 PL			6
<u>AKM-08</u>	- Construction Machinery Technology		2/0/0/0/0			
	- Recycling Technology		1/0/0/0/0			
	- Engines and Steering Systems		2/0/0/0/0			
MW-MB-	Industrial Design Methodology		2/0/0/2/0 2xPL			6
AKM-10 ²⁰	- Introduction to Design Process					
	and -Tools		2/0/0/0/0			
B 4147 B 45	- Internship Design Process and -Tools		0/0/0/2/0			
<u>MW-MB-</u>	Two-Dimensional Design Fundamentals - Colour and Material		2/0/0/3/0 PL			6
AKM-11 ²⁰	- Colour and Material - Graphic		1/0/0/1/0			
	•		1/0/0/2/0			
MW-MB-	Industrial Design Methodology in		2/0/0/2/0 2xPL			6
AKM-30 ²⁰	Product Development					
	- Introduction to Design Process		2 (0 (0 (0 (0			
	and -Tools		2/0/0/0/0			
	- Internship Design Process and -Tools		0/0/0/2/0			

Module no.	Module name	5 th Semester	6 th Semester	8 th Semester (M)	9 th Semester (M)	LP
		V* ⁾ /Ü* ⁾ /S/P/T				
MW-MB-	Two-Dimensional Design Fundamentals		2/0/0/3/0 PL			6
AKM-31 ²⁰	in Industrial Design					
	- Colour and Material		1/0/0/1/0			
	- Graphic		1/0/0/2/0			
		Choice of 2 out o	f 4 modules			
MW-MB-	Intralogistics - Fundamentals	Choice of 2 out o	3/1/0/2/0 2xPL			7
AKM-05	- Elements and Supporting Structures		1/1/0/0/0			,
VIVIALOD	- Logistics Lab		0/0/0/2/0			
	- Intralogistics Systems		2/0/0/0/0			
MW-MB-	Fundamentals of Agricultural Systems		4/2/0/0 2xPL			7
AKM-06	Technology					•
ARTIVI OO	- Basics of the Functioning of Machines		0/2/0/0/0			
	- Tractor Technology		2/0/0/0/0			
	- Agricultural Processes and Machinery		2/0/0/0/0			
MW-MB-	Tools and Methods of Product		2/4/0/0 2xPL			7
AKM-09 ⁻¹⁷ , 26	Development					
MW-MB-	- Digital MockUp in Product					
KST-29 ^{17, 26}	Development		1/2/0/0/0			
N31 23	- Designing with CAD		1/2/0/0/0			
MW-MB-	Three-Dimensional Design Fundamentals		2/0/0/4/0 PL			7
AKM-12 ²⁰	Freehand Drawing		1/0/0/2/0			
	- Plastic Design		1/0/0/2/0			
MW-MB-	Three-Dimensional Design Fundamentals		2/0/0/4/0 PL			7
AKM-32 ²⁰	in Industrial Design					
<u> </u>	- Freehand Drawing		1/0/0/2/0			
	- Plastic Design		1/0/0/2/0			
MW-MB-	Methodical Product Development and		2/4/0/0 2xPL			7
AKM-37 ^{26, 32}	Selected Tools					
MW-MB-	- Digital MockUp in Product					
KST-32 ^{26, 32}	Development		1/2/0/0/0			
1\J1-JZ	- Designing with CAD		1/2/0/0/0			

Module no.	Module name	5 th Semester	6 th Semester	8 th Semester (M)	9 th 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 o	f 9 modules			
MW-MB-	Simulation Methods in Drive Technology			3/2/0/0 PL		6
AKM-13	- CAE Applications/FEM			1/1/0/0/0		
	- Modelling and Simulation of Electromechanical Drive Systems			2/1/0/0/0		
MW-MB-	Design of Agricultural Systems			4/1/0/0 2xPL		6
<u>AKM-14</u>	Technology - Functioning of Machines - Product Development of Agricultural			1/0/0/0/0		
	Machinery			2/0/0/0/0		
	- Process Automation			1/1/0/0/0		
MW-MB-	Fluid-Mechatronics in Industrial			2/2/0/1/0 2xPL		6
AKM-15	Applications - Electrohydraulic Drive Technology in					
	Industrial Applications - Internship Fluid Power in Industrial			1/1/0/0/0		
	Applications - Control Engineering of Pneumatic			0/0/0/1/0		
	Drives			1/1/0/0/0		
MW-MB-	Product Modelling			3/2/0/0 PL		6
AKM-16 17, 32	Product Data ManagementSynthesis and Analysis of Product			1/1/0/0/0		
	Models			2/1/0/0/0		
MW-MB-	Materials and Failure Analysis			4/1/0/0 PL		6
<u>AKM-17</u>	Construction MaterialsFriction, Wear and Damage			2/1/0/0/0		
				2/0/0/0/0		
MW-MB-	Virtual Methods and Tools			2/1/0/2/0 2xPL		6
AKM-18 17, 25,	Reverse Engineering			1/1/0/0/0		
<u>32, 46</u>	and optionally			and optionally		
MW-MB-	Free-form Modelling orHybrid Modelling			1/0/0/2/0 or 1/0/0/2/0		
SIM-10 ^{17, 25,} 32, 46	, ,					

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

Module no.	Module name	5 th Semester	6 th Semester	8 th Semester (M)	9 th Semester (M)	LP
		V* ⁾ /Ü* ⁾ /S/P/T				
MW-MB- AKM-25 46	Material Handling - Hoisting Machines - Design Document main Assembly of a				1/3/0/0 2xPL 1/1/0/0/0	6
	Hoisting Machine				0/2/0/0/0	
MW-MB- AKM-26	Mobile Machinery/Off-road Vehicle Technology – Analysis				2/1/0/2/0 2xPL	6
74KW1 20	Experimental AnalysisModelling and Simulation of Off-road				0/0/0/2/0	
	Vehicle Systems				2/1/0/0/0	
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	5 th Semester	6 th Semester	8 th Semester (M)	9 th 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 stud	y Power Engineering (ET) 4)					
Compulsory	modules					
MW-MB-ET-	Fluid Mechanics and Simulation Methods	4/2/0/1/0 PVL, PL				7
01 1, 42	- Simulation Tools in Power Engineering	1/0/0/0/0				
<u> </u>	- Flow Simulation for Engineering					
	Applications	1/1/0/0/0				
	- Engineering Fluid Mechanics	2/1/0/1/0				
MW-MB-ET-	Process Thermodynamics	4/2/0/0 PL				7
02 1, 9, 54	- Process Thermodynamics	2/1/0/0/0				
	- Reaction Process Engineering	2/1/0/0				
MW-MB-ET-	Fundamentals of Heat and Mass Transfer	4/3/0/0 PL				7
03 1, 42	- Combustion Technology	2/1/0/0/0				
	- Heat and Mass Transfer	2/2/0/0/0				
MW-MB-ET-	Fundamentals of Power Machinery		4/2/0/0 2xPL			6
04 1, 9, 32, 42, 54	- Turbomachinery Basics		2/1/0/0/0			
	- Fundamentals of Piston Machines		2/1/0/0/0			
MW-MB-ET-	Fundamentals of Non-Fossil Primary		4/2/0/1/0 2xPL			7
06 ^{9, 17}	Energy Use					
	- Renewable Energy Sources		2/1/0/0/0			
	- Fundamentals of Nuclear Energy					
	Technology		2/1/0/1/0			
MW-MB-ET-	Heat Exchanger, Pipings, Pressure		5/2/0/0 2xPL			7
07	Vessels and Energy Storage		1/0/0/0/0			
	- Basics of Energy Storage Components		2/1/0/0/0			
	- Pipelines, Apparatus and Containers		2/1/0/0/0			
	- Heat Exchanger and Steam Generator					

Module no.	Module name	5 th Semester	6 th Semester	8 th Semester (M)	9 th Semester (M)	LP
		V* ⁾ /Ü* ⁾ /S/P/T				
Elective mod	lules				•	•
	-	Selection of 1 out	1		1	
MW-MB-ET- 05 ^{1, 39, 42}	Fundamentals of Refrigeration and Air Conditioning ⁸⁾		4/2/0/0 PL			6
	- Basics of Refrigeration Technology		2/2/0/0/0			
	- Basics of Air Conditioning Technology		2/0/0/0/0			
MW-MB-ET- 37 ^{39,42}	Principles of Refrigeration and Air Conditioning ⁸⁾	4/2/0/0 PL				6
	- Principles of Refrigeration	2/2/0/0/0				
	- Principles of Air Conditioning	2/0/0/0/0				
	ation for profiling		AMA/AAD ET OO OO	22 24 22 44		
	Energy Machines		MW-MB-ET-09, -20			
	Building Energy Technology and Heat Su			I, -12, -26, -15 resp		
	Refrigeration, Cryogenics and Compresso		•	7, -35 resp36, -38	, -42, -43	
	Renewable and Conventional Energy Sup		MW-MB-ET-15, -16			
[5] <i>A</i>	Analytical and Numerical Methods in Ene	ergy Technology			ell as one compuls	•
				-	Power Engineering	•
[6] H	Hydrogen and Nuclear Energy Technolog	SY	MW-MB-ET-15, -21	l, -22, -27, -32, -33		
		Choice of 3 out o	f 10 madulas			
NAVA/ NAD ET	Steam and Gas Turbines	Tribice of 3 out o	1 18 modules	4/2/0/0 2xPL		
MW-MB-ET- 08 9, 32, 53	- Steam and Gas Turbines			4/2/0/0 2XPL 4/2/0/0/0		6
				2/2/0/0 2xPL		
MW-MB-ET- 09 ^{9, 32, 46}	Turbo Pumps and Piston Working Machines			2/2/0/0 2XPL		6
09 -,,	- Turbopumps and Reciprocating					
	Machines			2/2/0/0/0		
MW-MB-ET-	Building Energy Systems			3/3/0/0 PL		6
10 ^{9,}	- Basics of Building Energy Technology			2/2/0/0/0		
<u> </u>	- Heat Pump Systems			1/1/0/0/0		
MW-MB-ET-	Air Conditioning Systems/Supply			4/2/0/0 PL		6
11 ⁹	Engineering					
<u>_</u>	- Indoor Air and Air-conditioning					
	Technology			2/1/0/0/0		
	- Gas and Sanitary Engineering			2/1/0/0/0		

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

Module no.	Module name	5 th Semester	6 th Semester	8 th Semester (M)	9 th Semester (M)	LP
		V* ⁾ /Ü* ⁾ /S/P/T	V* ⁾ /Ü* ⁾ /S/P/T	V* ⁾ /Ü* ⁾ /S/P/T	V* ⁾ /Ü* ⁾ /S/P/T	
<u>MW-MB-ET-</u> 20 ⁹	Gas Dynamics and Numerical Fluid Mechanics			4/2/0/0 PL		6
20	- Computational Fluid Dynamics - Gas Dynamics			2/1/0/0/0 2/1/0/0/0		
MW-MB-ET- 21 ^{9, 17}	Nuclear Reactor Engineering - Nuclear Reactor Technology - Radioactivity and Radiation Protection			3/1/0/1/0 2xPL 1/1/0/0/0 1/0/0/1/0		6
MW-MB-ET-	- Decommissioning of Nuclear Facilities Reactor Physics			1/0/0/0/0 3/1/0/1/0 2xPL		6
22 ⁹ MW-MB-ET- 24 ^{9, 11}	- Reactor Physics Aspects Machine Laboratory - Higher Metrology in Mechanical			3/1/0/1/0 4/0/0/2/0 PL		6
	Engineering - Machine Inspections			2/0/0/1/0 2/0/0/1/0		
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		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	5 th Semester	6 th Semester	8 th Semester (M)	9 th Semester (M)	LP
		V* ⁾ /Ü* ⁾ /S/P/T				
MW-MB-ET-	Heat Supply				3/2/0/0 PL	6
25 ³	- District Heating Supply				2/2/0/0/0	
	- Heating Technology				1/0/0/0/0	
MW-MB-ET-	Energy and Load Management				3/3/0/0 PL	6
26 ⁹	- Energy Management and Optimisation				2/2/0/0/0	
	- Load Management				1/1/0/0/0	
MW-MB-ET-	Cryogenics				3/2/0/0 PL	6
27 ⁹	- Cryogenics				3/2/0/0/0	
MW-MB-ET-	Heat Pumps, Organic Vapour Cycle				4/1/0/1/0 2xPL	6
28 3	Processes (ORC) and ORC Machines					
	- ORC - Processes and Machines				2/1/0/0/0	
	- Heat Pumps and Expansion Machines				2/0/0/1/0	
MW-MB-ET-	Innovative Energy Storage Systems				4/1/0/1/0 PL	6
29 8	- Innovative Energy Storage Applications				2/0/0/0/0	
	- Control and Optimisation of Energy					
	Storage Systems				2/1/0/1/0	
MW-MB-ET-	Process Simulation and Validation in				4/2/0/0 PL	6
30 ^{9, 17}	Power Engineering					
	- Modelling and Simulation of Energy					
	Storage Systems and Energy				2 /4 /2 /2 /2	
	Converters using MATLAB/Simulink				2/1/0/0/0	
1 4 4 4 5 5 T	- Simulation of Thermal Processes				2/1/0/0/0	
MW-MB-ET-	Process Measurement Technology and Mathematical Methods of Measurement				4/0/0/1/0 PL	6
31 ⁹						
	Data Processing - Mathematical Methods of Signal and					
	Image Data Processing					
	- Process Measurement Technology and				2/0/0/1/0	
	Sensors				2/0/0/1/0	
MW-MB-ET-	Thermo Hydraulics and Safety of Nuclear				3/1/0/1/0 2xPL	6
32 ^{9, 17}	Facilities				3/ 1/ 0/ 1/ 0 2	U
<u>32</u>	- Nuclear Safety Methods				2/1/0/1/0	
	- Thermohydraulics of Nuclear Reactors				1/0/0/0/0	
MW-MB-ET-	Hydrogen Energy Technology				3/1/0/1/0 2xPL	6
33°	- Hydrogen Energy Technology				3/1/0/1/0	•

Module no.	Module name	5 th Semester	6 th Semester	8 th Semester (M)	9 th Semester (M)	LP
		V* ⁾ /Ü* ⁾ /S/P/T				
MW-MB-ET-	Load Management of Refrigeration				2/2/0/0 PL	6
34 ^{9, 43}	Plants					
	- Demand Side of Refrigeration and Air					
	Conditioning Systems				1/1/0/0/0	
	- Components and Control for variable					
	Load Requirements				1/1/0/0/0	
MW-MB-ET-	Processes and Machines for Low				4/2/0/0 PL	6
38 ^{3, 9, 39}	Temperature and Waste Heat Utilization					
<u>50 </u>	- ORC - Processes and Machines				2/1/0/0/0	
	- Heat Pumps and Expansion Machines				2/1/0/0/0	
MW-MB-ET-	District Heating Systems				3/2/0/0 PL	6
39 ^{3, 9}	- District Heating Supply				2/2/0/0/0	
<u> </u>	- Heating Technology				1/0/0/0/0	
MW-MB-ET-	Methods and System Concepts for				4/2/0/0 PL	6
41 ^{8, 9}	Innovative Energy Storage Applications					
<u> </u>	- Hybrid Storage Systems and Sector				2/2/0/0/0	
	Coupling					
	- Innovative Energy Storage Applications				2/0/0/0/0	
MW-MB-ET-	Demand Side management of				2/2/0/0/0 PL	6
43 ⁴³	refrigeration systems and heat pumps					
<u> </u>	- Demand Side Management of					
	Refrigeration and Air Conditioning					
	Systems				1/1/0/0/0	
	- Control of Refrigeration and Heat					
	Pump Systems				1/1/0/0/0	

Module no.	Module name	5 th Semester	6 th Semester	8 th Semester (M)	9 th Semester (M)	LP
		V* ⁾ /Ü* ⁾ /S/P/T				
Field of stu	dy Automotive and Railway Vehicle Eng	gineering (KST) 4)				
Elective mo	odules					
D	deties for our filter					
	dation for profiling		MANA MAD MCT O1 C	O. O. O. O.	7 00 14 15 16	10 21
[1]	Vehicle Technology in Road Operations		MW-MB-KST-01, -0 -23, -24 , -33, -35 **		7, -0814, -15, -16	19, -21
נכז	Dail Vahiala Tashmalam				0 11 17 10 10) <u>2</u> F
[2]	Rail Vehicle Technology			J3, -U4U5, -U9, -T	0, -1117, -18, -19	125,
			-26, -27, -34**)			
		Choice of 3 out	of 5 modules			
MW-MB-	Fluid Power and Electrical Drive Systems	4/2/0/0 PL	or 5 modules			7
KST-01	- Basics of Fluid Power Drives and	= , 0, 0 . =				•
MW-MB-	Controls	2/1/0/0/0				
AKM-02	- Electric Drives	2/1/0/0/0				
MW-MB-	Fundamentals of Automotive	3/2/0/1/0 PL				7
KST-02 ²⁴	Engineering	0, 2, 0, 1, 0 1 2				•
131 02	- Advanced Fundamentals Internal					
	Combustion Engines	1/0/0/1/0				
	- Automotive I - Components and					
	Subsystems	2/2/0/0/0				
MW-MB-	Fundamentals of Internal Combustion	4/2/0/0 2xPL				7
KST-03 52	Engines and Drive Systems					
	- Drive Systems	2/0/0/0/0				
	- Fundamentals of Combustion Engines	2/0/0/0/0				
NAVA NAD	- Design Document Drive Assembly	0/2/0/0/0				
MW-MB-	Fundamentals of Rail Vehicles - Fundamentals of Rail Vehicle	4/1/0/0 PL				7
KST-04	Technology	2/1/0/0/0				
	- Basics of Traction Unit Technology	2/1/0/0/0				

Module no.	Module name	5 th Semester	6 th Semester	8 th Semester (M)	9 th Semester (M)	LP
		V* ⁾ /Ü* ⁾ /S/P/T				
MW-MB- KST-28 ^{17, 23,}	Fundamentals of Construction and Dynamic Dimensioning of Machines	4/2/0/1/0 2xPL				7
24, 32	- Constructive Development Process	2/0/0/1/0				
MW-MB-	- Machine Dynamics	2/2/0/0/0				
AKM-01 17, 23, 24, 32						
MW-MB-						
VTMB-01 ^{17,} 23, 24, 32						
		Choice of 2 out o	f 4 modules			I
MW-MB-	Construction Materials and Structural		3/1/0/0 PL			6
KST-05	Durability					
	- Construction Materials		2/0/0/0/0			
	- Operational Strength		1/1/0/0/0			
MW-MB-	Advanced Course: Internal Combustion		4/0/0/0 PL			6
KST-07	Engines		2/0/0/0/0			
	Internal Combustion Engine DesignSelected Chapters of Internal		2/0/0/0/0			
	Combustion Engines		2/0/0/0/0			
MW-MB-	Electrical Drive and Control Systems		6/0/0/0 PL			6
KST-11	- Traction Motors		4/0/0/0/0			
INST TT	- Rail Vehicle Control Technology		2/0/0/0/0			
MW-MB-	Electrical Drive and Control Systems		6/0/0/0 PL			6
KST-11 44, 58	- Electric vehicles		3/0/0/0/0			
(valid for			(optional 1 SWS			
the SoSe			exercise)			
2024)	- Traction Motors		2/0/0/0/0			
	Theory of electric traffic systems (only		(optional 2 SWS			
	part on asynchronous machine as preparation for "traction motors")		exercise) 1/0/0/0/0			
MW-MB-	Diagnostics and Acoustics		4/2/0/1/0 PL			6
<u>'</u>	Measured Value Processing and		4/2/0/1/0 PL			6
<u>KST-12</u>	Diagnostic Technology		2/1/0/0/0			
	- Machine and Vehicle Acoustics		2/1/0/1/0			

Module no.	Module name	5 th Semester	6 th Semester	8 th Semester (M)	9 th Semester (M)	LP
		V* ⁾ /Ü* ⁾ /S/P/T				
			•			
		Choice of 2 out o	f 5 modules			
MW-MB-	Connected Mechatronic Systems		4/0/0/1/0 PL			7
KST-06	- Electronic Vehicle Systems and					
	Automated Driving Functions		2/0/0/0/0			
	- Laboratory Practical Course in Vehicle					
	Electronics		0/0/0/1/0/			
	- Networked Systems and Vehicle					
	Communication		2/0/0/0/0			
MW-MB-	Full Vehicle Functions in Automotive		2/0/0/4/0 2xPL			7
KST-08 ²⁴	Engineering					
	- KFZ II - Complete Vehicle Functions		2/0/0/0/0			
	- Laboratory Practical Course					
	Automotive Engineering		0/0/0/4/0			
MW-MB-	Traction Mechanics		4/1/0/1/0 PL			7
KST-09	- Driving Dynamics		2/1/0/0/0			
	- Traction Unit Configurations		2/0/0/1/0			
MW-MB-	Traction Mechanics		4/1/0/0/0 PL			7
KST-09 44, 58	- Driving Dynamics		2/1/0/0/0			
(valid for	- Traction Unit Configurations		2/0/0/0/0			
the SoSe						
2024)						
MW-MB-	Supporting Structures of Rail Vehicles		3/1/0/0 PL			7
KST-10	- Supporting Structures		3/1/0/0/0			
MW-MB-	Tools and Methods of Product		2/4/0/0 2xPL			7
AKM-09 ^{17, 26}	Development					-
MW-MB-	- Digital MockUp in Product					
KST-29 ^{-17, 26}	Development		1/2/0/0/0			
N31=23	- Designing with CAD		1/2/0/0/0			
MW-MB-	Methodical Product Development and		2/4/0/0 2xPL			7
KST-32 ²⁶	Selected Tools					
MW-MB-	- Digital MockUp in Product					
AKM-37 26	Development		1/2/0/0/0			
AININ-37	- Designing with CAD		1/2/0/0/0			

Module no.	Module name	5 th Semester	6 th Semester	8 th Semester (M)	9 th Semester (M) V* ⁾ /Ü* ⁾ /S/P/T	LP
		V* ⁾ /Ü* ⁾ /S/P/T	V* ⁾ /Ü* ⁾ /S/P/T	V* ⁾ /Ü* ⁾ /S/P/T		
		Choice of 3 out o	f 9 modules			
MW-MB-	Dynamics of Vehicle Drives			2/2/0/2/0 PL		6
KST-13 ²⁴	- Dynamics of Vehicle Drives			2/2/0/2/0		
MW-MB- KST-14 ²⁴	Simulation and Experimental Studies on Internal Combustion Engines			2/0/4/0/0 PL		6
	- Experimental Studies on Combustion Engines			0/0/4/0/0		
	- Simulation of Combustion Engines			2/0/0/0/0		
MW-MB-	Functional Design in Automotive			4/0/0/0 PL		6
KST-15 ²⁴	EngineeringKFZ III - Functional DesignSelected Chapters of Automotive			2/0/0/0/0		
	Engineering			2/0/0/0/0		
MW-MB- KST-16 ²⁴	Operations Safety in Connected, Automated Driving			4/2/0/0 PL		6
	Vehicle Concepts in Connected,Automated DrivingHuman-machine Interaction and			2/1/0/0/0		
	Modelling			2/1/0/0/0		
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	Quality and RAMS Management - Quality and RAMS Management			2/2/0/0/0 PL 2/2/0/0/0		6
(valid for						
the SoSe 2024)						

Module no.	Module name	5 th Semester	6 th Semester	8 th Semester (M)	9 th Semester (M)	LP
		V* ⁾ /Ü* ⁾ /S/P/T				
MW-MB- KST-20 ^{-9, 24, 43}	Mobile Refrigeration and Special Cooling Tasks			3/1/0/1/0 2xPL		6
MW-MB-ET- 14 ^{-9, 24, 43}	- Mobile Refrigeration and Special Refrigeration Tasks			3/1/0/1/0		
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-	Mobile Refrigeration and Heat Pump			3/0/0/1/0 2xPL		6
KST-35 ⁴³	Technology - Mobile Refrigeration and Heat Pump Technology			3/0/0/1/0		0
MW-MB-	Brakes on rail vehicles			3/1/0/0,5/0 PL		6
KST-36 56	- Brakes on rail vehicles			3/1/0/0,5/0		•
		Choice of 3 out o	f 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				4/1/0/0 PL	6
	Energy Systems				2/0/0/0/0	
	- Design of Mechatronic Systems				2/1/0/0/0	
MW-MB-	Simulation Methods in Vehicle				2/2/0/2/0 PL	6
KST-22 19, 24,	Development					
36, 51	- Simulation Methods in Vehicle				2/2/0/0/0	
	Development				and optionally	
	and optionally					
	- Internship Vehicle Calculation KFZ or				0/0/0/2/0 or	
	- Internship Vehicle Calculation SFZ				0/0/0/2/0	
<u>MW-MB-</u>	Vehicle Safety				4/0/0/1/0 PL	6
KST-23 19, 24,	- Vehicle Safety of Automated Vehicles				2/0/0/1/0	
<u>36, 51</u>	- Integral Safety				2/0/0/0/0	

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

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

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

Module no.	Module name	5 th Semester	6 th Semester	8 th Semester (M)	9 th Semester (M)	LP
		V* ⁾ /Ü* ⁾ /S/P/T				
MW-MB-LB-	Multifunctional Structures and Function-			4/2/0/0 PL		6
24 ³⁴	Integrated Components					
MW-MB-	- Lightweight Mechanisms			2/1/0/0/0		
LRT-36 ³⁴	Multifunctional Structures			2/1/0/0/0		
		Choice of 3 out o	f 8 modules			
MW-MB-LB-	Calculation and Design with Fiber	Choice of 5 out o	1 o modules		3/2/0/0 PL	6
15	Composites				57 27 67 6 1 2	Ū
13	- Calculation of Fibre Composite				2/1/0/0/0	
	Structures 2					
	- Designing with Fibre Composites 2				1/1/0/0/0	
MW-MB-LB-	Manufacturing of Fiber Composite				3/2/0/0 PL	6
16 ³⁹	Structures					
MW-MB-	- Technologies for Thermoset					
VTMB-29 39	Composites				2/1/0/0/0	
VIIVID-23	- Technologies for Thermoplastic					
	Composites				1/1/0/0/0	
MW-MB-LB-	Adaptive Structures for Lightweight				3/2/0/0 PL	6
17 ³⁷	Design					
MW-MB-	- Active Compliant Structures				1/1/0/0/0	
VTMB-28 37	- Function-integrative Lightweight					
<u> </u>	Structures				2/1/0/0/0	
MW-MB-LB-	Quality Assurance Management				4/1/0/0 PL	6
<u>18</u>	- Process Analysis				2/0/0/0/0	
	- Quality Assurance				2/1/0/0/0	
MW-MB-LB-	Damage and Fatique of Fiber Composites				3/2/0/0 PL	6
<u>19</u>	- Fatigue in Fibre Composites				1/1/0/0/0	
	- Damage in Fibre Composites				2/1/0/0/0	
MW-MB-LB-	Designing with Polymers				4/1/0/0 PL	6
<u>20</u>	- Design Suitable for Plastics				2/1/0/0/0	
	- Special Problems in Plastics				0.10.10.10.10	
	Technology				2/0/0/0/0	

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

Module no.	Module name	5 th Semester	6 th Semester	8 th Semester (M)	9 th Semester (M)	LP
		V* ⁾ /Ü* ⁾ /S/P/T	V* ⁾ /Ü* ⁾ /S/P/T	V* ⁾ /Ü* ⁾ /S/P/T	V* ⁾ /Ü* ⁾ /S/P/T	
	ly Aerospace Engineering (LRT) 4)					
Compulsory		Γ			_	
MW-MB-	Fundamentals of Aerodynamics and	4/3/0/0 PL				7
LRT-01 ⁹	Flight Mechanics	2/2/0/0/0				
	- Aerodynamics 1	2/2/0/0/0				
	- Fundamentals of Flight Mechanics	2/1/0/0/0				_
MW-MB-	Fundamentals of Aerospace Vehicles	4/3/0/0 PL				7
LRT-02 17	- Aircraft Design	2/2/0/0/0				
	- Space Systems	2/1/0/0/0				
MW-MB-	Fundamentals of Aerospace Engineering	4/2/0/0 PL				7
LRT-03	- Aerospace Materials	2/0/0/0/0				
	- Fluid Mechanics Fundamentals of					
	Turbomachinery	2/2/0/0/0				
MW-MB-	Fundamentals of Flight Propulsion		4/2/0/0 PL			7
LRT-04	- Gas Dynamics		2/1/0/0/0			
	- Aircraft Propulsion 1		2/1/0/0/0			
MW-MB-	Numerical Methods of Fluid Mechanics		4/1/0/2/0 PVL, PL			7
LRT-05	and Structural Mechanics					
<u>LICE 05</u>	- Finite Element Method		2/0/0/1/0			
	- Computational Fluid Dynamics		2/1/0/1/0			
Elective mod		L				1
Recommend	ation for profiling					
	Aircraft Technology		MW-MB-LRT-06, -0	9 -10 -13 -14 -1	5 -16 -17 -24 -28	-29 -35 ***
	Space Technology		MW-MB-LRT-07, -0	o, 10, 15, 1 4 , 15 o _10 _12 _17 _19	2	***)
	. 63		NAVA NAD LET CO.	9, -10, -15, -17, -16	5, -19, -20, -30, -31	aa ***)
[3] /	Aircraft Engines		MW-MB-LRT-08, -0	9, -10, -21, -22, -23	3, -24, -26, -27, -32,	-33
		Choice of 2 out o	of 4 modules			
MW-MB-	Aircraft Design		2/3/0/0 2xPL			6
LRT-06 ¹⁷ , 46	- Aircraft Design 1		2/1/0/0/0			
	- Numerical Tools for Aircraft Design		0/2/0/0/0			
MW-MB-	Space Technology		4/2/0/0 PL			6
LRT-07	- Basics of Space Propulsion		2/1/0/0/0			
LICI-U/	- Satellite Technology		2/1/0/0/0			

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

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

Module no.	Module name	5 th Semester	6 th Semester	8 th Semester (M)	9 th Semester (M)	LP
		V* ⁾ /Ü* ⁾ /S/P/T				
		Choice of 3 out of	12 modules			
MW-MB-	Aeroelastics				4/1/0/0 2xPL	6
LRT-24 9, 17, 46	- Basics of Aeroelasticity				2/0/0/0/0	
MW-MB-	- Aeroelasticity Design Project				0/1/0/0/0	
SIM-22 9, 17, 46	- Structure-flow Coupling				2/0/0/0/0	
MW-MB-	Communication Navigation Surveillance				4/0/0/1 PL	6
LRT-25 9	(CNS)					
	- Communication Surveillance				2/0/0/0/1	
	- Navigation				2/0/0/0/0	
MW-MB-	Probabilistics and Robust Design				3/2/0/0 PL	6
LRT-26 ⁹	- Probabilistic and Robust Design				3/2/0/0/0	
MW-MB-	Simulation Technology in Fluid				3/1/0/1/0 2xPL	6
LRT-27 ^{9,} 46	Mechanics					
MW-MB-	- Advanced Computational Fluid					
SIM-20 9, 46	Dynamics				2/1/0/0/0	
<u> 511VI-20</u>	- Flow Simulation on Supercomputers				1/0/0/1/0	
MW-MB-	Aircraft Maintenance				4/1/0/0 PL	6
LRT-28 9	- Basics of Aircraft Maintenance				2/0/0/0/0	
	- Repair Technologies for Aircraft					
	Structures				2/1/0/0/0	
MW-MB-	Aircraft Systems				3/2/0/0 PL	6
LRT-29 9, 17	- Introduction to Aircraft Systems				2/1/0/0/0	
	- Aircraft Hydraulics				1/1/0/0/0	
MW-MB-	Space and Science				3/2/0/0 2xPL	6
LRT-30 9, 46	- Design of Scientific Space Experiments				1/1/0/0/0	
	- Seminar Space and Science				2/1/0/0/0	
MW-MB-	Energy Supply in Space				3/1/0/0 PL	6
LRT-31 ⁹	- Power Systems for Spacecraft				2/1/0/0/0	
	- Space Electronics and Software				1/0/0/0/0	
MW-MB-	Design of Jet Engines				2/2/0/0 2xPL	6
LRT-32 9, 46	- Jet Engine Design				2/1/0/0/0	
	- Design Project ZTL				0/1/0/0/0	

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

Module no.	Module name	5 th Semester	6 th Semester	8 th Semester (M)	9 th Semester (M)	LP
		V* ⁾ /Ü* ⁾ /S/P/T				
	y Production Engineering (PT) ⁴⁾					
Compulsory	modules					
MW-MB-PT-	Production Engineering - Manufacturing	4/2/0/0 2xPL				7
01 ¹	Processes					
	- Joining Technology	1/0/0/0/0				
	- Surface and Coating Technology	1/0/0/0/0				
	- Forming and Remoulding Technology	1/1/0/0/0				
	- Cutting and Removal Technology	1/1/0/0/0				
MW-MB-PT-	Production Engineering - Manufacturing	4/1/0/0 PL				7
02 54	and Planning					
<u> </u>	- Occupational Science	1/0/0/0/0				
	- Production Planning	2/1/0/0/0				
	- Production and Logistics	1/0/0/0/0				
MW-MB-PT-	Production Engineering - Machine Tools	4/2/0/0 PL				7
03	and Production Automatization					
<u>05</u>	- Production Automation	2/1/0/0/0				
	- Machine Tools - Basics	2/1/0/0/0				
Elective mod	lules	I	1	•	•	
Recommenda	ation for profiling					
[1] N	Method and Machine		MW-MB-PT- 04, -0	5, -06, -09, -10, -12,	13, -14, -15, -16, -	20, -21,
				·27, -29, -30, -31****		
21 F	Procedure and Planning		MW-MB-PT- 04, -0			24
-, .	roccadi e ana i iaining		-25 -26 -27 -	·31, -33, -34 ****)	13, 13, 13, 23,	,
31 F	Planning and Doonlo				ar ao ao aa	24 ****)
3] F	Planning and People		MW-MB-PT- 04, -0	5, -11, -17, -16, -19,	, -25, -26, -29, -35, -	34
		Selection of 2 out	of 4 modules			
MW-MB-PT-	Manufacturing Processes - Advanced		3/2/0/0 PL			7
04 47	Course					
<u> </u>	- Welding Process		2/1/0/0/0			
	- Forming Process Design		1/1/0/0/0			

Module no.	Module name	5 th Semester	6 th Semester	8 th Semester (M)	9 th 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-	Additive Manufacturing		4/2/0/0 2xPL			7
<u>05 ³¹</u>	- Additive Manufacturing of Metallic Components		1/1/0/0/0			
	- Additive Manufacturing of non-metallic		17 17 07 07 0			
	Components		1/1/0/0/0			
	- Original Mould Technology		2/0/0/0/0			
MW-MB-PT-	Development of Machine Tools		4/2/0/1/0 PL			7
06	- Building Group Design		2/1/0/1/0			•
<u>00</u>	- Controlled Drives		2/1/0/0/0			
MW-MB-PT-	Industrial Engineering		4/2/0/0 2xPL			7
07_8	Work Organisation		2/1/0/0/0			-
<u> </u>	- Ergonomics		2/1/0/0/0			
MW-MB-PT-	Industrial Engineering and Ergonomics		4/2/0/0 2xPL			7
32 ^{8, 53}	- Work Organisation		2/1/0/0/0			
	- Ergonomics		2/1/0/0/0			
MW-MB-PT-	Ergonomics and Industrial Engineering		4/2/0/0 2xPL			7
34 ⁵³	- Work Organisation		2/1/0/0/0			
	- Ergonomics		2/1/0/0/0			
		Calactica a CO and	- C 4			
NAVA/ NAD DT	Production Planning - Advanced Course	Selection of 2 out	of 4 modules 2/2/0/0-2xPL	<u> </u>	1	
MW-MB-PT- 08-47, 53	- Production Planning - Assembly		1/1/0/0/0			6
08 47,55	- Production Planning - Assembly - Production Planning - Parts Production		1/1/0/0/0 1/1/0/0/0			
MW-MB-PT-	Laser and Plasma Technology		3/2/0/0 2xPL			6
09 ^{1, 46}	- Laser Technology		2/1/0/0/0			0
09 /	- Plasma Technology		1/1/0/0/0			
MW-MB-PT-	Production Measurement Technology		4/0/0/2/0 PL			6
	- Higher Metrology in Mechanical		4/0/0/2/016			0
<u>10</u>	Thigher wed ology in weethanical					
	Fngineering		1 2/0/0/1/0			
	Engineering - Coordinate Measuring Technology		2/0/0/1/0			
MW-MR-PT-	- Coordinate Measuring Technology		2/0/0/1/0			6
MW-MB-PT-	- Coordinate Measuring Technology Production System and Intralogistics		2/0/0/1/0 4/0/0/0 PL			6
MW-MB-PT- 11 48	- Coordinate Measuring Technology		2/0/0/1/0			6
11 48	 Coordinate Measuring Technology Production System and Intralogistics Production System Planning Intralogistics Systems 		2/0/0/1/0 4/0/0/0 PL 2/0/0/0/0 2/0/0/0/0			
11 48 MW-MB-PT-	 Coordinate Measuring Technology Production System and Intralogistics Production System Planning Intralogistics Systems Production Planning - Parts Production 		2/0/0/1/0 4/0/0/0 PL 2/0/0/0/0			6
11 48	 Coordinate Measuring Technology Production System and Intralogistics Production System Planning Intralogistics Systems 		2/0/0/1/0 4/0/0/0 PL 2/0/0/0/0 2/0/0/0/0			

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

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

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

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

Module no.	Module name	5 th Semester	6 th Semester	8 th Semester (M)	9 th Semester (M)	LP
		V* ⁾ /Ü* ⁾ /S/P/T				
MW-MB-	Beam and Shell Structures		2/2/0/0 PL			6
SIM-08	- Beam and Shell Structures		2/2/0/0/0			
MW-MB-	Design with CAD-Systems/Product					6
SIM-09 17, 26	Modelling					
	- Designing with CAD Systems		1/2/0/0/0			
			and optionally			
	and optionally		1/1/0/0/0			
	- Product Data Management		or			
	or					
	- Synthesis and Analysis of Product		2/1/0/0/0			
	Models		2xPL			
MW-MB-	Product Modelling and Design with CAD-					6
SIM-25 ^{26, 32}	Systems					
	- Designing with CAD Systems		1/2/0/0/0			
	and optionally		and optionally			
	- Product Data Management		1/1/0/0/0			
	or		or			
	- Synthesis and Analysis of Product		2/1/0/0/0			
	Models		2xPL			
	Calculation of 2			Normal de la c		
		iot aiready choser	modules, from 10			
MW-MB-	Gasdynamics			2/2/0/1/0 2xPL		6
<u>SIM-06</u>	- Gas Dynamics for Simulation Methods			2/2/0/1/0		
MW-MB-	Experimental Fluid and Solid Mechanics			4/0/0/2/0 2xPL		6
<u>SIM-07</u>	- Experimental Solid Mechanics			2/0/0/1/0		
	- Experimental Fluid Mechanics			2/0/0/1/0		
MW-MB-	Beam and Shell Structures			2/2/0/0 PL		6
SIM-08	- Beam and Shell Structures			2/2/0/0/0		

Module no.	Module name	5 th Semester	6 th Semester	8 th Semester (M)	9 th 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
<u>MW-MB-</u> <u>SIM-13</u>	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
	Coloction of 2	not already chass	a modulos from 4	modulos		
MW-MB- SIM-17	Selection of 2, i Multiscale Material Modeling - Multi-scale Numerical Modelling - Damage Mechanics	not aiready chosei	n modules, from 4	modules	3/2/0/0 PL 2/1/0/0/0 1/1/0/0/0	6

Module no.	Module name	5 th Semester	6 th Semester	8 th Semester (M)	9 th Semester (M)	LP
		V* ⁾ /Ü* ⁾ /S/P/T				
MW-MB-	Coupled Multifield Problems				3/2/0/0 PL	6
SIM-18	- Discretisation in Space and Time				1/1/0/0/0	
<u>51171 10</u>	- Coupled Field Problems				2/1/0/0/0	
MW-MB-	System Dynamics and Structural				4/2/0/0 PL	6
SIM-19	Vibrations					
<u> </u>	- Vibration Theory				2/1/0/0/0	
	- System Dynamics				2/1/0/0/0	
MW-MB-	Simulation Technology in Fluid				3/1/0/1/0 2xPL	6
SIM-20 9, 46	Mechanics					
MW-MB-	- Advanced Computational Fluid					
LRT-27 9, 46	Dynamics				2/1/0/0/0	
LIVI-Z7	- Flow Simulation on Supercomputers				1/0/0/1/0	
		, not already chose	en module, from 8	modules		
MW-MB-	Multiscale Material Modeling				3/2/0/0 PL	6
<u>SIM-17</u>	- Multi-scale Numerical Modelling				2/1/0/0/0	
	- Damage Mechanics				1/1/0/0/0	
MW-MB-	Coupled Multifield Problems				3/2/0/0 PL	6
<u>SIM-18</u>	- Discretisation in Space and Time				1/1/0/0/0	
	- Coupled Field Problems				2/1/0/0/0	
MW-MB-	System Dynamics and Structural				4/2/0/0 PL	6
SIM-19	Vibrations					
	- Vibration Theory				2/1/0/0/0	
	- System Dynamics				2/1/0/0/0	
MW-MB-	Simulation Technology in Fluid				3/1/0/1/0 2xPL	6
SIM-20 9, 46	Mechanics					
MW-MB-	- Advanced Computational Fluid					
LRT-27 9, 46	Dynamics				2/1/0/0/0	
	- Flow Simulation on Supercomputers				1/0/0/1/0	
MW-MB-	Rheology				2 (2 (5 (1 (2	6
SIM-21 ⁻³⁴	- Fundamentals of Rheology				2/0/0/1/0	
	and optionally				and optionally	
	- Rheological Seminar or				0/0/0/2/0 or	
	- Magnetic Liquids or				2/0/0/0 or	
	- Polymer Theory				2/0/0/0/0	
					PL	

Module no.	Module name	5 th Semester	6 th Semester	8 th Semester (M)	9 th Semester (M)	LP
		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	6

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

Module no.	Module name	5 th Semester	6 th Semester	8 th Semester (M)	9 th Semester (M)	LP
		V* ⁾ /Ü* ⁾ /S/P/T				
Elective mod	dules		•	1		
		Selection of 1 out	of 2 modules			
MW-MB-	Machines and Technologies for High		4/1/0/2/0 PL			7
VTMB-07	Performance, Functional and Biomedical					
	Fibers					
	- High performance, Functional and					
	Biomedical Fibres		2/0/0/1/0			
	- Machines and Technologies of Fibre-					
	forming Polymer Materials		2/1/0/1/0			
MW-MB-	Processing Machines		2/2/0/0 2xPL			7
VTMB-08 46	- Basics of Processing Technology		2/0/0/0/0			
	- Processing Machines Construction		0 10 10 10 10			
	Document		0/2/0/0/0			
		6 L	60 11			
	•	Selection of 1 out	1	T	1	
MW-MB-	Machines and Technologies for Yarn		2/2/0/1/0 PL			6
VTMB-09	Structures, especially Composites					
	- Machines and Technologies for yarn					
	Constructions, especially for Composites		2/2/0/1/0			
MW-MB-	Control of Production Machines and		2/3/0/1/0 2/3/0/0 PL			6
	Plants		2/3/0/07L			0
VTMB-10	- Motion Controls (NC/MC)		0/1/0/0/0			
MW-MB-PT-	- Basics of Machine Controls		2/0/0/0/0			
<u>21</u>	- Function Controls (PLC)		0/2/0/0/0			
	1	<u> </u>		1	1	
		Choice of 2 out o	f 4 modules			
MW-MB-	Machines and Technologies for Textile			3/0/0/2/0 2xPL		6
VTMB-11	Constructions					•
VIIVID III	- Machines and Technologies for Textile					
	Constructions			3/0/0/2/0		

Module no.	Module name	5 th Semester	6 th Semester	8 th Semester (M)	9 th Semester (M)	LP
		V* ⁾ /Ü* ⁾ /S/P/T				
MW-MB- VTMB-12 ³²	Machines and Technologies of Textile Finishing and the Assembly of Textile Products			3/0/0/3/0 PL		6
	Confection Machines and TechnologiesTextile Finishing Machines and Technologies			2/0/0/1/0 1/0/0/2/0		
MW-MB-	Processing Technology			2/1/0/1/0 2xPL		6
VTMB-13 15	- Parameters/Values of the Processing			2/1/0/1/0 2XI L		O
VIIVID-13	Technology - Optimisation of Processing Operations			1/0/0/0/0 1/1/0/1/0		
MW-MB-	Planning and Optimizing of Processing			4/1/0/0 PL		6
VTMB-14 15	Lines			47 17 67 6 1 2		Ū
V TIVID-14	- Operating Behaviour			2/0/0/0/0		
	- Project Planning			2/1/0/0/0		
MW-MB-	Joining Technologies for Flexible	Choice of 3 out of	15 modules		2/1/0/2/0 PL	6
MW-MB- VTMB-15 32	Materials					6
N 414 / N 4 D	 Joining Technology of flexible Materials Development of Complex Textile 				2/1/0/2/0 0/4/0/1/0 PL	
MW-MB- VTMB-16	Constructions				0/4/0/1/0 PL	6
	- Development of complex Textile Constructions				0/4/0/1/0	
NAVA / NAD	Machines and Technologies for Technical				4/0/0/1/0 PL	6
MW-MB- VTMB-17	Textiles				4/0/0/1/07	0
VIIVID 17	- Assembly of Technical Textiles				2/0/0/0/0	
	- Technical Textiles				2/0/0/1/0	
MW-MB-	3D CAE Technology for Fiber-Based				1/2/0/2/0 PL	6
VTMB-18 ³²	Materials					
	- 3D CAE Technology for Fibre-based Materials				1/2/0/2/0	
MW-MB-	Machines and Technologies for the				4/0/0/1/0 PL	6
<u>VTMB-19</u>	Manufacture of Nonwovens, Textile				47 07 07 17 0 1 2	U
<u>v 11VID-13</u>	Recycling and Resource Efficiency					
	- Textile Recycling and Resource					
	Efficiency				2/0/0/0/0	
	- Nonwovens Technology				2/0/0/1/0	

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

Module no.	Module name	5 th Semester	6 th Semester	8 th Semester (M)	9 th Semester (M)	LP
		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	1	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.
- Alternatively, at the student's choice, Courses totalling 4 SWS according to the catalogue General and Engineering-Specific Qualifications in Mechanical Engineering.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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.

- 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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 17.01.2020 in accordance with the resolution of the Faculty Council of 21.04.2021 Adjustment in the field Usability.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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 17.01.2020 according to the resolution of the Faculty Council of 21.07.2021 Adjustment in the field responsible lecturer.

- 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.
- 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.
- 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 17.01.2020 according to the resolution of the Faculty Council dated 20.10.2021 Replacement of the course offering.
- 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.
- 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.
- 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 17.01.2020 according to the resolution of the Faculty Council dated 20.10.2021 Adjustment in the field Usability.
- 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 17.01.2020 according to the resolution of the Faculty Council dated 20.04.2022 Adjustment in the field Usability.
- 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.
- 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 17.01.2020 according to the resolution of the Faculty Council of 20.04.2022 Replacement of the course offerings.
- 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.
- 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.
- 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.
- Correction of SWS distribution and merging of courses.
- 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.
- 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.
- 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.

- 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 17.01.2020 according to the resolution of the Faculty Council dated 19.10.2022Adjustment in the field Usability.
- 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.
- Correction of assigned courses, 19.10.2022.
- 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 17.01.2020 according to the resolution of the Faculty Council of 19.04.2023 Adjustment in the field responsible lecturer.
- 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.
- 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.
- 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 17.01.2020 according to the resolution of the Faculty Council dated 19.04.2023 Adjustment in the field Usability.
- 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.
- Adjustment of the semester-wise SWS allocation in SoSe 2023 due to the departure of the lecturer and pending replacement of the professorship.
- 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.
- 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 17.01.2020 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.
- 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 17.01.2020 according to the resolution of the Faculty Council of 17.05.2023 Adjustment in the field responsible lecturer.
- 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.
- Adjustment of assigned courses, 10/18/2023.
- 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.
- 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.
- 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.
- 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.
- 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 January 2020 in accordance with the decision of the Faculty Council of 15 November 2023 Adaptation in the applicability field.
- 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.
- 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.
- 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.
- Adjustment of the semester-based SWS allocation in summer semester 2024 due to the departure of the lecturer and pending replacement of the professorship.
- 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.
- 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 in the field Prerequisites for participation.
- Correction of assigned courses, 17 April 2024.